Mindfulness-Based Stress Reduction:

Is it time to try with students with emotional and behavioral disabilities?

Ernest Solar

George Mason University

Spring 2010

Mindfulness Based Stress Reduction:

Is it time to try with students with emotional and behavioral disabilities?

 Conservative estimates from educators and mental health professionals indicate that approximately 10% of school-aged children experience emotional and behavioral problems that are serious enough to require professional attention (Kauffman, 2005). Many of these students are identified in schools and receive special education services due to their emotional or behavioral disability. The Individuals with Disabilities Education Act (IDEA) defines an emotional or behavioral disorder (disability) (EBD) as at least one defined characteristic exhibited over a long period of time that adversely affects a child’s educational performance. The defined characteristics outlined in IDEA are: (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behavior or feelings under normal circumstances; (d) a general pervasive mood of unhappiness or depression; (e) a tendency to develop physical symptoms or fears associated with personal or school problems (Bartick-Ericson, 2006; Kauffman, 2005; U.S. Department of Education, 1998).

 According to the U.S. Department of Education (2010) more than 442,000 students between the ages of 6 and 21, in 2007-08, received special education services related to (EBD). Of those students identified with EBD, 81% of those students participate in some portion of general education classes in regular public schools, while receiving behavior supports and academic accommodations. The number of students with EBD being served in public schools has increased by 64% since 1976-77; however, specific learning disabilities, other health impairments, and autism have also increased significantly over the past thirty years; which can be attributed to many of the federal statutes that have been passed during that timeframe. In consequence, the increased percentage of students with disabilities being served has created a strain on the public school systems to serve these student populations. This is evident by the increase in the number of emergency and provisional special education licenses distributed throughout the country (Bullock & Gable, 2006).

 With regards to students with EBD, over the past fifty years several advocacy organizations have come into existences to provide support for students, families, teachers, and administrators that work with these students. Two of these major organizations are the Council for Exceptional Children (CEC) and the subdivision, Council for Children with Behavioral Disorders. Both of these organizations have been instrumental in advocating and assisting legislators in crafting laws that protect and support the needs of students with EBD. Besides national organizations the federal government has also completed several longitudinal studies that have helped to identify characteristics and outcomes of students with EBD.

 The National Longitudinal Transition Study-2 (NLTS2) and the National Adolescent and Child Treatment Study (NACTS) have acted as baseline data for educators and researchers to develop evidence-based practices that could potentially assist students with EBD. The current research and organizations, such as CEC, outline evidence-based practices that are effective for students with EBD. Unfortunately, as pointed out by these surveys students with EBD still have a difficult time performing successfully in school environments. In Bradley, Doolittle, and Bartolotta (2008) literature review, they pointed out that these studies have also shown that only small gains have been made for these students in regards to academic achievement, social behavior, and long-term adult success. Therefore, the question needs to be asked, is it time to try a different approach?

 Due to the overwhelming number of interventions used with students with EBD, this paper will briefly highlight, (a) current international interventions, (b) the effectiveness of social skills training with secondary students with EBD, (c) the effects of meditation and relaxation techniques on students with anxiety related to their behaviors and academic performance, and (d) the importance of teacher preparedness. Lastly, this paper will also examine the possibility of incorporating an alternative approach to managing students with EBD through the use of a medically proven therapy known at Mindfulness Based Stress Reduction (MBSR).

Emotional and Behavior Disability Interventions

 Students with EBD are a concern for school systems and educators in America, but also around the world. The United Kingdom, Australia, Canada, and Latin America all report a growing concern for students with emotional or behavioral problems. In 2007, Gulchak and Lopes completed a meta-analysis on research-based interventions on an international scale. They found that research-based interventions predominately come from the United States. Gulchak and Lopes (2007) also summarized research-based interventions that are commonly used in the United States. These interventions included; (a) positive reinforcement, (b) student participation, (c) positive behavior supports (PBS) and functional behavioral assessments (FBA), (d) social skills instruction, (e) self-management, (f) school-wide systems of positive behavior support (SW-PBS), and (g) token economies. This is by no means a comprehensive list of the multitude of interventions used on a daily basis in the classroom, but it is a good representation of what educators in the United States use to help students with EBD.

 In Gulchak and Lopes (2007) international meta-analysis they only found eight interventions using a quantitative design treatment to measure the effects of the interventions. Of those eight studies; (a) three used a form of psychotherapy, massage, and holistic interventions, (b) three studies used social skills training, (c) one study assessed language and communication skills, (d) and the last study employed direct observation of displayed behaviors. Through their analysis, Gulchak and Lopes (2007) found that other countries based behavior interventions on the use of holistic and therapeutic treatments to change undesirable behaviors. While the United States uses more of an analytic approach with the use of functional behavior assessments, applied behavior analysis, and positive behavior support plans.

Cook, Gresham, Kern, Barrera, Thornton, and Crews (2008) completed a “mega-analysis” (2008, p. 134) of five meta-analyses related to social skills training (SST) for secondary students with EBD. The five meta-analyses used in their review contained “77 studies, which involved approximately 5,000 student participants” (2008, p. 137). Through their analysis they found that SST is an effective intervention tool with an effect size of *r* = .32, which falls in the medium effect range, which in turn means a change in behavior could be seen in everyday life. They also found that the internal and external validity of SST has an effect size of *r* = .32, which indicates that the changes in behavior displayed by the participants is related to the SST and the results can be generalized beyond the conditions of the research study.

Students with EBD are a multi-faceted group of individuals with an array of dysfunctional behavioral, social, and academic skills. One student may benefit from SST, but another student may have such severe anxiety that their social and academic performance diminishes due to their level of stress (Schoenfeld & Janney, 2008; Epply, Abrams, and Shear, 1989). Eppley et al. (1989) completed a meta-analysis of relaxation techniques used to reduce the effects of stress and improving overall health. Through their analysis they examined 110 studies with non-psychiatric patients who had never experienced relaxation or meditation practices and found the following effect sizes: (a) progressive relaxation, *r* = .38, and (b) Transcendental meditation, *r* = .70. Even though the study is out-dated, the findings are still relevant due to the high effect size of using a meditative practice to reduce the effects of anxiety.

Both the Cook et al. and Eppley et al. studies outline positive effects in helping students with disabilities. However, there is a still a large concern that schools are having a difficult time implementing adequate supports for students with EBD (Bullock & Gable, 2006). Bullock and Gable acknowledge that a large array of research-based interventions have been developed to help students with EBD if they are used appropriately; however, “the ultimate goal is to teach the students skills that will enable them to regulate their own behavior” (p. 9). Through mindfulness-based stress reduction all age groups can learn how to regulate their own behavior, which would complement many of the research-based interventions being used in schools to help students with EBD.

Mindfulness-Based Stress Reduction: Current research-based practices

 Mindfulness-Based Stress Reduction (MBSR) is a structured meditation practice that is used in the medical and health care field to reduce stress, increase relaxation, elevate pain, and improve self-esteem (“Stress Reduction Program”, n.d.). Over the past thirty-years MBSR has been researched by the medical and health care community to document its many positive effects patients experience. For example, a clinical study showed a reduction in anxiety and depression in patients who engaged in a MBSR program (Miller, Fletcher, & Kabat-Zinn, 1995). Another study showed positive results in 174 patients who engaged in a MBSR program in reducing stress-related problems, anxiety, and chronic pain (Carmody and Baer, 2008). Reibel, Greeson, Brainard, and Rosenzweig (2001) reported a 44% reduction of anxiety and 34% reduction of depression in 136 heterogeneous patients. Barnes, Bauza, and Treiber (2001) used a similar meditation program with inner-city African-American adolescents between the ages of 15 to 18 years old and found lower rates in absenteeism and school suspensions in the population of students engaged in a meditation program. Lastly, Agee, Danoff-Burg, & Grant study (2009) there was a 94.7% completion rate of the mindfulness meditation intervention among participants. This is comparable to completion rates of similar MBSR programs, which the researchers feel confirms that the intervention is accepted by participants.

 In 2005, the Garrison Institute released the Garrison Institute Report on Contemplation and Education; which was a survey of contemplative practices used in K-12 educational settings. This report defines contemplation practices as meditation practices that are not related to religious organizations. The report organized programs into two categories: contemplative programs or contemplative techniques. In defining a contemplative program, the Garrison Report based its definition on the structure of the MBSR program. A contemplative program specifically emphasizes mindfulness and improving a students’ capacity for self-awareness. Contemplative techniques use methods (not related to a program) that include teaching students how to pay better attention. The report outlined sixteen contemplation programs, seventeen programs that use contemplation techniques, and five teacher training programs that train teachers to use contemplation in the education system.

 The Garrison Report (2005) equates that the MBSR model is appropriate for educational settings by stating, “whereas pain and stress can be symptomatic of disease, trauma or other health-related causes, academic failure and anti-social behaviors at school often indicate systemic problems within the school community” (p. 7). The Center for Mindfulness at the University of Massachusetts Medical School “believes that students, teachers and other members of the school community can benefit from mindfulness and other contemplative techniques in an effort to become more responsive and less reactive, more focused and less distracted, more calm and less stressed” (Garrison Institute, 2005, p. 7-8). The assumption of these statements is if teachers, administrators, school staff, and students incorporate MBSR practices and principles the school community in general will be calmer, less distracted, and respond more appropriate to each other. In essence, it would create a better and more efficient learning and working environment for everyone.

Conclusion

 Bradley et al (2008) summarized from the NLTS2 that early intervention and prevention programs show promise for improving student behavior; however, as students with EBD move through the school system their behavioral, social, and academic deficits become increasingly resistant to interventions. Furthermore, school systems are interested in reducing negative school behaviors, but they have a difficult time identifying programs that are effective and easy to implement on a broad scale in the classroom or school environment that will bring about the change they desire (Everett, Kann, & McReynolds, 1997). One approach to the growing problem of school-related conduct and behavior problems may be to provide training in stress reduction. (Barnes, Bauza, & Treiber, 2003).

 The medical and psychiatric research communities have documented the effectiveness of MBSR interventions in various heterogeneous and homogenous populations. The research has been conducted across a multitude of medical, psychiatric, and healthy populations, related to stress, behavior, and anxiety disorders, and have consistently shown positive effects in helping individuals with stress and anxiety related disorders. The research has also shown that MBSR is well-received by participants and has a high completion rate.

 Dr. Sibinga (personal communication, July 20, 2010) has developed a model that shows how mindfulness training can improve the appraisal and coping mechanisms, reflection, and self-regulation processes; in order to positively change a person’s psychological symptoms, mood states, and interpersonal functioning (Figure 1). This model is supported by Reibel et al.’s findings that MBSR contains therapeutic elements that improve the physical and mental health of participants.

 Maybe the time has come for a paradigm shift in how schools provide interventions to students with EBD, and switch to a therapeutic application of MBSR in school and classroom settings. The Garrison Report (2005) and medical research has shown, MBSR is becoming more prevalent in educational, medical, and therapeutic settings as a successful intervention in helping all different types of individuals across various age groups. Gulchak and Lopes (2007) have also shown the difference between United States interventions and international interventions in the respect that other countries have shown effective results in the use of therapeutic strategies in helping students with EBD.

 It is clear that more research needs to be conducted in school settings with general education and special education students in the use of MBSR practices. However, there is enough research to suggest that MBSR can be used as an extension of self-management interventions, which would empower students to control their own behaviors in an academic setting (King-Sears, 2006).

**References**

Agee, J., Danoff-Burg, S., & Grant, C. (2009). Comparing brief stress management courses in a community sample: Mindfulness skills and progressive muscle relaxation. *Explore, 5*(2), 104-109.

Barnes, V., Bauza, L., & Treiber, F. (2003). Impact of stress reduction on negative school behavior in adolescents. *Health and Quality of Life Outcomes*, *1*(10), 1-7.

Bartick-Ericson, C. (2006). Attachment security and the school experience for emotionally disturbed adolescents in special education. *Emotional and Behavioral Difficulties, 11*(1), 49-60.

Bradley, R., Doolittle, J., & Bartolotta, R. (2008). Building on the data and adding to the discussion: The experiences and outcomes of students with emotional disturbance. *Journal of Behavioral Education, 17*, 4-23.

Bullock, L. & Gable, R. (2006). Program for children and adolescents with emotional and behavioral disorders in the united states: A historical overview, current perspectives, and future directions. *Preventing School Failure, 50*(2), 7-13.

Carmody, J. & Baer, R. (2008). Relationship between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of Behavioral Medicine*, *31*, 23-33.

Cook, C., Gresham, F., Kern, L., Barreras, R., Thornton, S., & Crews, S. (2008). Social skills training for secondary students with emotional and/or behavioral disorders: A review and analysis of the meta-analytic literature. *Journal of Emotional and Behavioral Disorders, 16*(3), 131-144.

Eppley, K., Abrams, A., & Shear, J. (1989). Differential effects of relaxation techniques on trait anxiety: A meta-analysis. *Journal of Clinical Psychology, 45*(6), 957-974.

Everett, S., Kann, L., & McReynolds, L. (1997). The youth risk behavior surveillance system: Policy and program applications. *Journal of School Health, 67*(8), 333-335.

Garrison Institute. (2005). Garrison institute report: Contemplation and education: A survey of programs using contemplative techniques in K-12 educational settings: A mapping report. New York: Garrison Institute.

Gulchak, D. & Lopes, J. (2007). Interventions for students with behavioral disorders: An international literature review. *Behavioral Disorders, 32*(4), 267-281.

Hart, T. (2004). Opening the contemplative mind in the classroom. *Journal of Transformative Education, 2*(1), 28-46.

Kauffman, J. (2005). *Characteristics of emotional and behavioral disorders of children and youth* (8thed.)*.* Upper Saddle River, NJ. Pearson Prentice Hall.

King-Sears, M. (2006). Self-management for students with disabilities: The importance of teacher follow-up. *International Journal of Special Education, 21*(2), 94-108.

Miller, J., Fletcher, K., & Kabat-Zinn, J. (1995). Three-year follow-up and clinical implications of a mindfulness meditation-based stressed reduction intervention in the treatment of anxiety disorders. *General Hospital Psychiatry*, *17*, 192-200.

Reibel, D., Greeson, J., Brainard, G., & Rosenzweig, S. (2001). Mindfulness-based stress reduction and health-related quality of life in a heterogeneous patient population. *General Hospital Psychiatry*, *23*, 183-192.

Rosenzeig, S., Reibel, D., Greeson, J., Brainard, G., & Hojat, M. (2003). Mindfulness-based stress reduction lowers psychological distress in medical students. *Teaching and Learning in Medicine,* *15*(2), 88-92.

Schoenfeld, N. & Janney, D. (2008). Identification and treatment of anxiety in students with emotional or behavioral disorders: A review of the literature. *Education and Treatment of Children, 31*(4), 583-610.

Stress reduction program (n.d.). Retrieved from http://www.umassmed.edu/ uploadedFiles/cfm2/SRP\_for\_desktop\_printing.pdf

U.S. Department of Education. (1998). *Twentieth annual report to Congress on the implementation of the Individuals with Disabilities Education Act.* Washington, DC: Author.

U.S. Department of Education, National Center for Education Statistics (2010). *Digest of Education Statistics, 2009* (NCES 2010-013), Chapter 2. Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=64

Figure 1: Sibinga’s Mindfulness Model

Appraisal, Coping, & Self-Regulatory Processes

* Improved appraisal and coping mechanisms
* Increased reflection
* Enhanced self-regulation

Psychological & Interpersonal Functioning

* Psychological symptomatology
* Mood states
* Interpersonal functioning

Mindfulness