

August 2022

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### Recommended Citation

Campbell, Kate and Mathew, Shalini (2022) "Trauma-Informed Practices for Test-Taking Anxiety at the Elementary Grade Level," *Journal of Research Initiatives*: Vol. 6: Iss. 3, Article 1.  
Available at: <https://digitalcommons.uncfsu.edu/jri/vol6/iss3/1>

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# Trauma-Informed Practices for Test-Taking Anxiety at the Elementary Grade Level

## About the Author(s)

First author is a graduate student in School Counseling, very passionate about Trauma Informed Care for children.

Second author is a school counseling faculty member.

## Keywords

trauma-informed counseling, adverse childhood experiences (ACEs), mindfulness, test anxiety, meditation, body awareness, elementary school.

## Cover Page Footnote

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## **Trauma-Informed Practices for Test-Taking Anxiety at the Elementary Grade Level**

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### **Abstract**

Test -Taking Anxiety (TTA) is a challenging experience for children of all ages. Childhood exposure to trauma and adverse experience has been increasing. Fortunately, trauma-informed practices, such as mindfulness activities have become more widespread in schools throughout the last few years. Existing school counseling literature offers limited perspectives on how school counselors can support elementary students for TTA. This conceptual article explores the effects of trauma-informed practices on elementary-age students' test anxiety and overall academic success in schools and offers implications for practice.

Keywords: Test-taking anxiety, school counseling, mindfulness, trauma-informed practices, elementary-age students

### **Introduction**

The world is going through a post-pandemic era. Children who started schooling in the last two years, had to go through a challenging time. There is a high prevalence of emotional and behavioral difficulties among elementary aged students, of which Test-Taking Anxiety (TTA) is considered huge (Talbot, 2016). Transitioning to regular school hours has led to increased anxiety in children (Wang et al, 2021). However, there is limited professional literature discussing support services for elementary aged children. Due to trauma and Adverse Childhood Experiences (ACEs), mental health disorders have become more prevalent in elementary age children. The onset of symptoms could be due to a combination of environmental stress and genetic vulnerability (Nelson et al., 2020). Common forms of environmental stress otherwise

known as ACE's include domestic violence, abuse or neglect, family member death by suicide, divorce, substance use problems, mental health problems, and parental separation or incarceration. (Thomas, et al., 2019). Whether the ACE is physical, psychological, historical, vicarious, secondary, or ongoing, it can impact a child's brain development.

Interventions and support services are not sufficient to meet the increasing needs of children. This article discusses the effects of trauma-informed practices on elementary-age students' test anxiety and overall academic success in schools. Trauma-informed practices and more holistic methods can allow children who experience trauma to learn healthy coping skills that can be used throughout their lives. The goal of trauma-informed practice is to support safety, choice, and control to promote healing and healthy environments. Children spend a large majority of their time in the school; therefore, it is important to have a trauma-informed environment in schools. As evidenced in previous research, trauma informed approaches have been shown to improve memory, concentration, and mood by reducing anxiety.

### **Test-Taking Anxiety**

Test-Taking Anxiety is one of the most commonly experienced anxieties among elementary aged children. In fact, more than one-third of the students in US schools experience test anxiety, and the number of students who experience this anxiety has increased due to the increase in testing and testing requirements in the United States (Lowe et al., 2008). Previous studies indicate that there is a high number of elementary school students, who are not able to perform to their highest potential due to test anxiety (Segool et al, 2013).

Test-taking anxiety is defined as the general worry of performance or evaluation. Symptoms of this type of anxiety may be physical, somatic, and/or behavioral. Common symptomology includes gastrointestinal issues, dizziness, headaches, increased heart rate, sweating, irritability, and difficulty concentrating (Bays & Hartig, 2016). These may be worsened due to time restrictions and/or unpreparedness which correlates to higher dropout rates and low scores. A team of researchers led by Segool (2013), further compared the test anxiety in both high-stakes and typical testing conditions in elementary grade students. Results revealed that elementary grade students experienced greater test anxiety about high stakes testing in comparison

to typical classroom testing. The most common recommendations for TTA are relaxation strategies and mindfulness activities, which can reduce worrying focused on academics (Johnstone, 2020). A systematic literature review of studies from ten years on test-anxiety interventions revealed techniques like cognitive behavior therapy, priming competency, biofeedback, and mixed approaches gave positive results (von der Embse et al, 2013). Another systematic review of seven studies (Martinez-Escribano et al, 2017) specifically focused on mindfulness-based intervention for anxiety concluded that children and adolescents benefitted by showing a decrease in symptoms of anxiety and an improvement in the overall functioning.

### **Trauma-Informed Mindfulness**

There have been recent breakthroughs in the understanding of how mindfulness practices such as yoga, meditation, or controlled systematic breathing exercises affect people and their levels of anxiety, depression, and emotional burnout. Although this is important for the at-risk population of students in a trauma-informed school, it could also benefit students who may not have exposure to trauma and anxiety. Previous literature has reported that students suffer from test anxiety which can be detrimental to their performance, learning experience, and self-esteem (Hyseni & Hoxha, 2018). Researchers Carsley and Heath used a mindfulness-based coloring activity for test anxiety in children (2019), adolescents (2018) and university students (2020).

Participants in all the three groups reported significant decrease in TTA. According to researchers, mindfulness is the state of being conscious or aware of your living reality and attempting to maintain that from moment to moment. The goal is to stray away from automatic habitual type living and embrace each moment to its fullest. Along with awareness, openheartedness and a lack of judgment must be implemented to achieve a full mindfulness state (Ricarte et. al., 2015). This state is very effective for humans as there are proven benefits of mindfulness for both physical and mental health. In fact, many studies have shown that mindfulness interventions can reduce symptoms of anxiety, depression, and PTSD (Creswell, 2017).

It is for these health reasons; that this skill has become increasingly more popular in school settings all over the world. Fifty percent of teachers are incorporating mindfulness

practice into their school curriculum (Ager et.al., 2015). Another study at the elementary level found that mindfulness enhanced student well-being, and development of body, mind, and emotional awareness. Additionally, Calma-Birling & Gurung (2017), found that mindfulness practice enhanced concentration, working memory (short-term), as well as lowered anxiety levels in students. Wall (2021), investigated the efficacy of trauma informed approaches in elementary schools and found that trauma informed approaches improved test scores, decreased emotional dysregulation, improved self-advocacy and confidence, and resulted in strong relationships.

### **Trauma-Informed Mindfulness for Test Anxiety**

When it comes to thinking about implementing trauma-informed practices into a scholastic setting, it becomes obvious that there are several factors to consider in deciding what type of technique is going to be used. Other considerations include, determining who it will benefit, what the curriculum has time for, and what the school can financially support. Therefore, brief trauma-informed practices that focus on mindfulness are one simple way to teach children about personal awareness and the significance of healthy coping skills. Research shows that techniques such as mindfulness coloring for fifteen minutes before testing have been effective in improving test anxiety at the elementary school level. A structured mandala coloring exercise has shown significant decrease in student anxiety in both males and females (Carsley et. al., 2015). Mandalas are made using intricate designs that would require more effort than other designs or patterns. Other trauma-informed practices such as yoga work similarly, benefitting the student.

Mindfulness practices such as yoga create positive effects such as “reduced test anxiety, increased academic performance, concentration, coping ability with stress, reduced aggression, improved ability to handle pressure from academia, lowered levels of rumination, less intrusive thoughts, and increased emotional regulation” (Bays & Hartig, 2016, p. 3). In addition to this, researchers have shown that children have lower levels of the stress hormone cortisol when using yoga techniques. Specific yoga techniques that have been used to reduce anxiety include unilateral nostril breathing, diaphragm/belly breathing, hand mudras/positions, tree pose, ‘A Quiet Place’ (involving slow deep breaths), and positive mantras/affirmations (Bays & Hartig, 2016).

The importance of studying mindfulness can be seen through how it has proven to be effective in several, peer-reviewed, case studies (Kallapiran et al, 2015). Both qualitative and quantitative methods were used in measuring the effectiveness of mindfulness. The practicing of mindfulness is hypothesized to improve the following five competencies: thinking, managing self, participating, contributing, and relating to people. These are areas that are considered necessary for proper functioning within a school. Mindfulness aims to promote autonomy and improve critical thinking, kindness, and curiosity. There is also a strong correlation between mindfulness and self-efficacy, self-esteem, and self-regulation.

The benefits of mindfulness also extend beyond the individual scope and foster global points of view. The ability to understand the wants and needs of people and to be able to envision life through diverse points of view is said to be enhanced from mindfulness (Rix & Bernay, 2014). Students who are engaged in mindfulness practices, experience a difference in their day-to-day level of peace and calmness. Even in the face of outside disruptions and stimuli that would normally sidetrack an entire class of elementary school kids, the schools reported that their students maintained their focus, had noted behavioral changes and were able to pay attention to the tasks they were given. After four weeks of mindfulness training, students were starting to display behaviors of fostering kindness. In the follow-up surveys the one mindfulness technique that was acknowledged as the most beneficial was the mindfulness breathing technique implemented through the study.

Aside from the qualitative research already discussed, there have been significant quantitative findings in mindfulness research as well. In another quantitative study, statistical analysis techniques were applied to determine if there was a statistically significant difference in student emotional and psychosocial quality of life after practicing yoga as a mindfulness technique (Bazzano et. al., 2018). ANOVA tests were conducted on the control group versus the test group and the predictor emotional PedsQL had a significant effect with a p-value of 0.001 and the psychosocial PedsQL predictor was significant with a p-value of 0.01 (Bazzano et. al., 2018). Ultimately, a mindfulness curriculum will provide children who are at-risk of severe anxiety with skills they need to enable them to improve their psychosocial, emotional, and

academic quality of life. Additionally, a study by Razza et al (2019), suggested significant increase in behavioral and attention regulation in children who practiced trauma-informed mindful yoga. A review of literature on mindfulness-based interventions to support self-regulation in young children revealed that with integration and practice of mindfulness-based programs there are potential academic benefits in young children through cognitive, emotional and behavioral self-regulation (Bockmann & Yu, 2022).

### **Trauma Informed Mindfulness Based Classroom Guidance Activities for TTA**

This section provides suggestion for some trauma-informed mindfulness activities that could be incorporated into classroom guidance or small group counseling in elementary school students. These are based on Substance Abuse and Mental Health Services Administration, Treatment Improvement Protocol, manual fifty-seven (SAMHSA TIP 57, 2014). These activities are based on the principle of promoting understanding and awareness of trauma and creating age-appropriate coping skills that are tailor made for individuals who need support.

#### **‘Worry-Berry’**

Worries are like berries, they come in different colors and shapes. And just like how each berry has its own flavor; worries are connected to certain emotions. Identifying these emotions, is a primary step in trauma-informed mindfulness approach. This involves helping children identify their feelings and emotions associated with TTA. Let the children verbally talk out their feelings, using small statements like – “I am feeling anxious”, instead of “I am anxious”, provide them opportunities to draw, color, if they have difficulties with verbal expression. Then compare these emotions to different berries, they are familiar with. This activity helps children to separate their emotions from their identity and understand that it is a passing emotion, that is not going to stay forever.

### **‘Worry-Bury**

The second activity focuses on burying the worries. Once the worries are identified, these needs to be de-escalated through reality checking. This could be done by asking questions that can rationalize the fears associated with the emotions. Questions and/statements like “what is the worst possible thing that can happen during the test, what is it’s possibility of happening?”. Help the students bury their worries using statements like “remember, this test is not the determinant of your worth, intelligence or future.” By helping children to answer these questions and repeat these statements in a calm atmosphere can help them rationalize their fears. This could be played as a game by finding the answers and burying them in trash. Deep breathing exercises can also be incorporated into this game. Additionally small groups for discussing and processing the worries associated with TTA, can help children understand that they are not alone in this process.

### **‘Hope-Pop’**

The third activity focused on coping strategies. Now that the children have identified and separated their fears from their identity and rationalized their fears, they need some coping strategies that can be helpful. These coping strategies could also act as ‘safety-nets’ for future resilience. Using positive self-talk, doing a short yoga, using fidgets, glitter water bottles, or stress balls, taking deep breaths, and taking short breaks are all helpful strategies. Teachers or school counselors can provide options and help students pick and choose which ‘hope-pop’ works for them.

### **Implications for School Staff**

In the educational system, it is easy to focus solely on the performance and well-being of the students and forget to look at the roles the educators and counselors play and the toll their jobs take on them. There seems to be a significant effect between the level of mindfulness and the level of stress experienced by educators such that those practiced mindfulness had a lower level of emotional exhaustion (Abenavoli et. al., 2013). There also appears to be a compounding effect of mindfulness in that the higher the level of ambition or stress that is experienced by the

educator, the more the mindfulness practice can help in protecting against burnout (Abenavoli et al., 2013). By being aware of the benefits of mindfulness, these individuals can be more informed and understanding of their students.

The first step schools can take to help their staff gain this knowledge is by implementing a professional development training opportunity. This training would require staff to realize the prevalence of trauma in childhood, the effects, and the implications it has for children in school. Additionally, understanding test anxiety and common anxieties that students experience in the classroom setting is helpful. Next, the training should focus on recognizing symptomology that correlates with anxiety and trauma. Last, the student support staff should learn how to respond to these issues with the trauma-informed mindfulness practice. As they have been deemed reliable and consistent in their effectiveness.

### **Implications for School Counselors**

School Counselors are trauma-informed professionals within the school setting who can assist with these practices. Due to their expertise in trauma and mental health, they can help identify students who may be at risk for childhood trauma or anxiety. Peer-to-peer tutoring and mentoring is a useful program for this population of students because it helps children create and maintain healthy relationships while focusing on academic success. These programs provide positive improvements on emotional/psychological, problem/high-risk behavior, social competence, academic/ educational, and career/employment outcomes, especially when used with kids with adverse childhood experiences (Rumsey & Milsom, 2019). Individual counseling is a more adaptable technique, as it changes based on the needs of the individual. This may be especially useful if they need intensive assistance with any of the following topics: study skills, coping skills, self-regulation, organizational skills, and/or social and emotional concerns. By being a reliable and structured student support resource, School Counselors have the ability to help these students be successful.

Overall, it is evident that there has been a lot of research done regarding the effectiveness of mindfulness on student success. By using these practices and being trauma-informed, school staff can make a positive impact on their students. The students who experience trauma and/or

anxieties during the school day need extra support. A greater number of these students are capable of academic success, but don't have the necessary skills needed to cope with their overwhelming feelings. Teaching these skills in a classroom, group, or individual setting has the potential to reach those who would benefit from it the most. Fortunately, mindfulness can be implemented into the classroom curriculum easily and without financial burden. Fifteen minutes of deep breathing, yoga, or other mindfulness before a lesson can make a difference in the student academically and emotionally. While mindfulness-based activities are effective in increasing test scores, it can also increase self-esteem. An increase in self-esteem can make an extreme difference in overall mental health and future endeavors regardless of support at home, for children of elementary grade level. Future research can focus on using some of the activities suggested in this manuscript to check their effectiveness and ease to use with elementary grade students.

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