

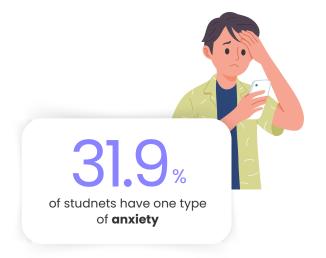


## INTRODUCTION

For educators, parents and leaders in education, understanding the nuances of stress and recognizing the often subtle signs of chronic stress can mean the difference between early intervention and long-term consequences for students. This guide delves into how teachers can spot stress in their students, differentiate between acute and chronic stress, and implement innovative, evidence-based strategies to manage stress effectively.

According to the <u>National Institute of Mental Health (NIH)</u> in their most recent published statistics (2021)





#### **Major Causes Of Stress**

A <u>review</u> of 558 full-texts, this review contained a total of 197 original articles on school education and student mental health showed the biggest factors affecting stress in middle and high school students globally include:

- **High Stakes Testing** Up to 60% of high school students in some countries report moderate to severe stress due to academic workload and exams.
- **Social Pressures -** 30-40% of students report that negative peer relationships or bullying significantly increase their stress levels.
- **Workload** Globally, about 52% of students identify the intensity of schoolwork and exams as their main source of stress.

#### **Consequences Of Chronic Stress**



# Lower Academic Performance

10-15% decrease in test scores



# Mental Health Decline

20-30% increase in depression and anxiety



Physical Health Impact

Increased headaches and digestive issues



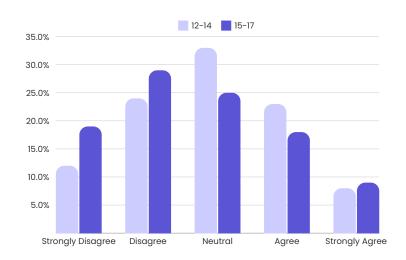
# AGE BASED STRESS INSIGHTS FROM THE EDGE

The Edge has in-built pre-module surveys used to collect diagnostic student data on how they feel about the module. These pre-module surveys not only help in prepping the student for the material to come, but also provides valuable insights into how they feel as a group. The results from 646 students showed the following.

1. I believe stress is always harmful and has no positive effects.

#### Insight

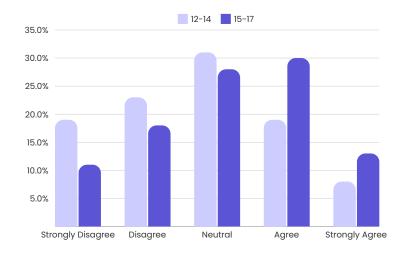
15-17-year-olds largely push back against the idea that stress is purely negative, while 12-14-year-olds see it as mostly harmful—highlighting a shift in perception with age.



2. I feel confident in my ability to deal with stress well.

#### **Insight**

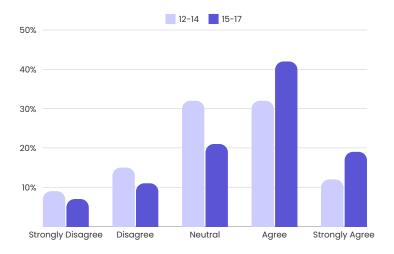
Confidence soars in 15-17-yearolds, while 12-14-year-olds are more uncertain, making early intervention essential for younger students.



3. I believe my mindset about stress affects my overall well-being.

#### **Insight**

15-17-year-olds clearly recognize the power of mindset in managing stress, while younger students are still learning this crucial link.





# UNDERSTANDING STRESS

#### Acute vs. Chronic

Stress can either be acute or chronic, and knowing the difference is crucial for addressing it in students effectively.

- **Acute Stress** is short-term response to a specific event, such as an exam or a presentation. While uncomfortable, it can sometimes enhance performance by focusing attention and energy.
- **Chronic Stress**, however, is long-term and arises from persistent issues such as family problems, bullying, or socio-economic hardships. Over time, chronic stress alters the brain's structure and functioning, especially in the prefrontal cortex (responsible for decision-making) and the hippocampus (involved in memory and learning), making it harder for students to concentrate, solve problems, or regulate emotions (McEwen & Morrison, 2013).

By understanding these two types of stress, teachers can better gauge when a student needs support for an immediate challenge versus more sustained intervention.

# THE "STRESS IS ENHANCING" MINDSET

## A Game-Changer for Student Stress Management

Research shows that how students perceive stress—whether they see it as harmful or beneficial—can dramatically impact how stress affects their health and performance. This perspective is known as the "stress-is-enhancing" mindset. Instead of viewing stress as something purely negative, students with this mindset see stress as a challenge that can help them grow, improve focus, and succeed academically.

# Key Experiment: Crum et al. (2013)

A foundational study by Crum, Salovey, and Achor (2013) tested how changing students' views on stress impacted their responses to it. In this experiment:

- Two groups of students were shown different videos.
- One group saw videos showing how stress can enhance performance (stress-is-enhancing).
- The other group saw videos showing the negative effects of stress (stress-is-debilitating).
- After watching the videos, students completed stressful tasks, such as mock interviews and public speaking.

#### **Findings**

- <u>Healthier Physiological Responses:</u> Students who saw stress as enhancing had lower cortisol levels and better heart rate control, suggesting that their bodies handled stress more effectively.
- <u>Improved Performance:</u> These students performed better on tasks, demonstrating greater focus and resilience.
- <u>Better Emotional Regulation:</u> They also reported feeling less overwhelmed and more confident in managing stress.



#### **NOTICING SIGNS OF STRESS**

How Can Teachers Spot Subtle Signs Of Students Who Are Highly Stressed?



# Micro Expressions and Body Language

Research by Sapolsky (2004), chronic stress can cause physiological changes that affect muscle tension and posture. Students under stress might not always show overt signs, but they can exhibit subtle cues through their body language.

#### What To Look For?

- Tight shoulders, clenched jaws, or restless feet.
- Fidgeting or avoiding eye contact.
- Protective postures, such as crossed arms or frequent shifting in their seat.



# Inconsistent Engagement in Class

Stressed students often experience fluctuations in cognitive function. Stress depletes energy, making it difficult for students to maintain focus, leading to periods of high engagement followed by detachment or disengagement.

#### What To Look For?

- <u>Erratic participation:</u> A student may contribute enthusiastically, then withdraw for long stretches.
- <u>Inconsistent work quality:</u> Fluctuations in homework completion or class performance.



### Hypervigilance and Feeling Angsty

Research by Davidson et al. (2012) showed that chronic stress could cause students to become hypervigilant, responding intensely to even minor classroom stimuli.

#### What To Look For?

- Overreactions to minor noises, sudden movements, or harmless classroom situations.
- **Startling** easily or excessively jumpy.
- Nervous behaviors, such as laughing at inappropriate times.



# Physical Complaints and Frequent Visits to the School Nurse

Stress is not just a psychological phenomenon—it has clear physical consequences. Chronic stress is known to manifest as physical symptoms such as headaches, stomachaches, and general malaise.

#### What To Look For?

- <u>Frequent visits</u> to the school nurse for complaints such as headaches, stomach pains, or dizziness.
- <u>Physical complaints</u> that seem to coincide with exams, presentations, or other stress-inducing events.



#### ADVANCED METHODS OF CHECKING-IN

Going Beyond "Are You Okay?"



#### **Emotional Thermometer**

Age 12-14

Visual tools like the emotional thermometer help students self-assess their stress levels. Research shows that children and adolescents benefit from such visual aids for self-regulation and emotional recognition. According to Shanker (2013), tools that foster emotional awareness are effective at helping younger students understand their feelings and promote emotional regulation.

#### **How To Implement**

Place a **laminated emotional thermometer** at the classroom entrance. As students walk in, they can adjust the marker on the scale to indicate their stress level, from "calm" to "stressed." This provides teachers with an immediate read on their emotional state.



#### **Silent Signals with Cards**

Age 12-18

Using non-verbal systems like color-coded cards for communication is supported by research on classroom management and student well-being. Jones & Bouffard (2012) found that non-verbal cues help reduce classroom disruptions while allowing students to communicate their emotional needs discreetly. This system supports **self-monitoring** and **stress management.** 

### **How To Implement**

Each student receives a set of **color-coded cards** (e.g., blue for "feeling overwhelmed," green for "calm and ready"). Students can place a card on their desk to signal their emotional state. This system allows the teacher to recognize stress levels without interrupting the lesson. <u>To make this even more effective, have personalised coded cards with each student!</u>



#### **Energy Meter Questions**

Age 15-18

Asking about energy levels rather than directly inquiring about emotions can be a powerful method to detect stress. A study by Kim et al. (2016) demonstrated that students' energy levels correlate with both emotional well-being and stress. Energy levels are often more comfortable for older students to report than direct emotions.

### **How To Implement**

Begin each class by asking, "On a scale of 1 to 10, how's your energy today?" Students can raise fingers to indicate their energy level, allowing for a quick assessment of overall mood and stress without confrontation.



#### INTERNVENTIONS THAT WORK

The Edge Helps Students Understand And Deal With Stress. Here Are A Few **Non-Traditional** Ways **Teachers** Can Help.

#### Short Term Solutions - Instant Anxiety Relief



#### **Bilateral Scribbling**

Age 12-14

Bilateral scribbling is a technique that activates both hemispheres of the brain, helping to regulate the limbic system, which governs emotional responses.

#### **Steps To Implement**

- Provide students with two markers or pencils one for each hand.
- Play soft background music to create a calming environment.
- Instruct students to scribble freely with both hands for 1-2 minutes, allowing the movement to be unstructured and organic.

#### The Science Behind It

According to Cozolino (2013), using both hands to draw or scribble simultaneously fosters brain integration, promoting emotional regulation and reducing anxiety. The rhythmic, non-dominant hand movement allows students to release stress through a creative outlet while engaging in a calming, repetitive task.



#### Ice Cube Focus Method

Age 15-18

Focusing on physical sensations, like holding an ice cube, helps interrupt anxious or overwhelming thoughts. Engaging the sensory system shifts attention away from emotional distress and brings the brain back to the present moment.

#### Steps To Implement

- During stressful periods, such as before exams or after a conflict, give each student an ice cube.
- Ask them to focus on how the ice feels in their hand its texture, temperature and how it changes as it melts.
- Let students describe the sensation either silently or aloud
- This exercise takes only a few minutes but effectively reduces emotional overwhelm by anchoring students in the present through sensory focus.

#### The Science Behind It

Research by Schneiderman et al. (2005) shows that sensory input activates areas of the brain responsible for processing external stimuli, effectively grounding the individual in reality and disrupting the body's automatic stress response.



#### Long Term Solutions - For Gradual Chronic Stress Management



Gratitude Wall Age 12-14

Gratitude helps shift focus from stressors to positive aspects of life, which over time rewires the brain to respond better to challenges.

#### **Steps To Implement**

- Dedicate a small section of your classroom as a "Gratitude Wall."
- Each week, give students sticky notes to write down one thing they're grateful for, which they can post anonymously on the wall. Make this a quick, 5-minute activity at the end of class or during homeroom.
- At the end of the month, read through a few of the gratitude notes together to reinforce positive thinking and reflect on small victories.

#### The Science Behind It

Research shows that practicing gratitude significantly reduces chronic stress and increases resilience. A study by Emmons & McCullough (2003) found that individuals who regularly reflect on things they're grateful for experience lower cortisol levels and increased emotional well-being.



Stress Jar Age 15-18

The Stress Jar concept combines this reflective practice with a time capsule element, allowing students to let go of their stressors physically, which enhances emotional distance from ongoing anxieties.



#### Steps To Implement

- Set up a "Stress Jar" in the classroom where students can write down their current stressors on small pieces of paper, fold them, and place them in the jar. Explain once their stress is in the jar, it stays there—symbolizing a release.
- Choose a specific date (e.g., the end of the semester or after exams) when students can revisit their "stress notes" and reflect on how they felt then versus how they feel now. This creates a sense of accomplishment and shows them that stressors can be temporary.

#### The Science Behind It

Reflecting on and compartmentalizing stressors helps students better manage chronic stress. According to Pennington (2014), writing down worries and revisiting them later can significantly reduce anxiety.



#### **Teacher Tip!**

"I've realized the only way to get students to be vulnerable is for you to first be vulnerable. Show them you also have stress and anxiety. Doing this will make any activity around SEL you do feel more authentic!"

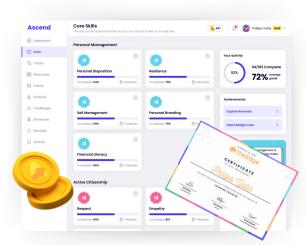
Ruchi, IB Examiner



# Stress Management Is Just 1 Out Of **115 Modules** Focused On Student Skill Building On **The Edge.**

The Edge, powered by Ascend Now, is an innovative self-learning platform designed for students aged 13-19. This comprehensive platform merges essential life skills with practical abilities, providing a unique blend of soft and hard skills beyond traditional education.

Students embark on a journey of self-discovery, preparing them for success in college and their future careers.



Our Partners Include

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# A Global, Comprehensive and Adaptable Framework

The Life Readiness Playbook has 24 skills and 115 modules and aligns with all the major skills frameworks globally.

- ✓ Diverse, inclusive and student-first Content
- Over 1,000 resources for MTSS Support
- Custom implementation to fit your school
- Hard Skill tracks Entrepreneurship & Internship



I think is the most comprehensive and beneficial tool I have seen in 30 years of experience that covers social and emotional learning.

Haroot Hakopian
Assistant Dean, Georgetown SCS



# **Explore The Edge**

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