FRESH SCHOOL HEALTH AND NUTRITION WEBINAR| JULY 2019

UNDERSTANDING THE ENABLING ENVIRONMENT FOR TEACHING AND LEARNING: RECENT ADVANCES

Elizabeth Spier, PhD

MAKING
RESEARCH
RELEVANT

AIR®

Main Points

Social, emotional and cognitive activity are deeply interconnected in the brain.[1]

Through the interplay of biological, relational, and contextual factors, educators and students both shape and are shaped by a school's conditions for teaching and learning.

By reducing the prevalence of psychosocial stress in classroom, we can free up brain activity among educators and students so they can focus on teaching and learning.

Psychosocial Conditions Matter

Psychosocial Conditions Matter

We have long known that when students and educators feel safe, connected, supported, engaged and challenged, they build their capacity for effective teaching, learning, development, and social engagement.

We are starting to learn more about *why* based on major advances in the scientific understanding of learning and development across multiple disciplines.[2, 3]

In the face of stress, brain function moves *away* from higher-order thinking, thoughtful decision-making and empathy.[4, 5]

What Can Happen?

Supportive, minimizes student stress, models coping

Responds to student distress calmly, empathetically

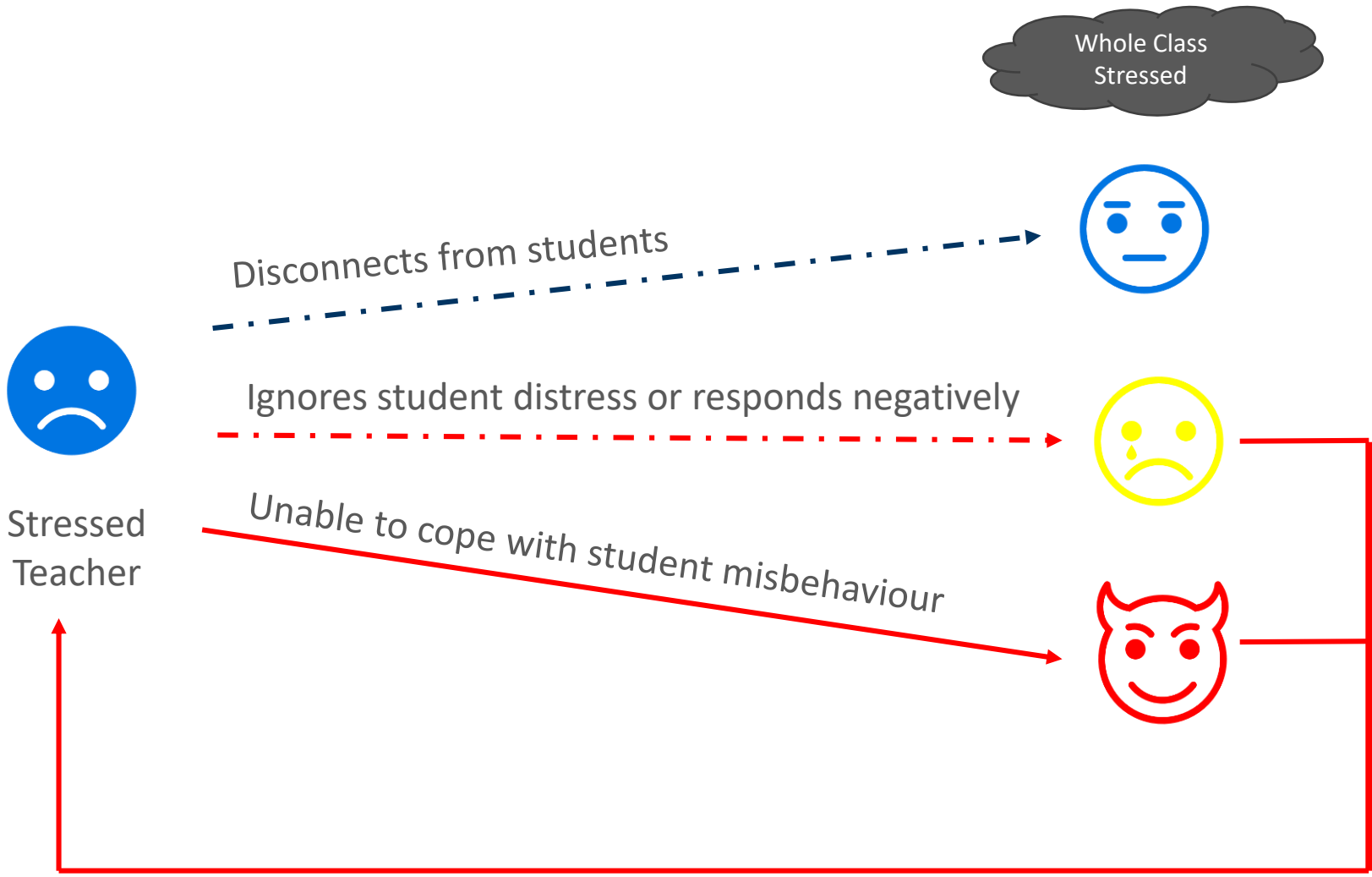Able to cope with student misbehaviour

Non-Stressed
Teacher

What Else Can Happen?

Psychosocial stress reduces both educator and student capacities for coping, learning, engagement, and good decision making, creating a negative environment that can be mutually reinforcing.

Whole Class Stressed

Stressed Teacher

Disconnects from students

Ignores student distress or responds negatively

Unable to cope with student misbehaviour

Increased student distress and misbehaviour further stresses teacher

Implications for Vulnerable Students

And for vulnerable students…

Teachers who feel responsible for creating the psychosocial conditions in class are more likely to monitor student interactions and to notice and intervene when vulnerable students are being poorly treated by peers.[6]

Students who have been marginalized or experience difficulties functioning well in a classroom benefit more than others from positive and supportive environments.[7]

Students who have experienced adversity are both more likely to be challenging for educators *and* are more vulnerable to negative or unsupportive environments.[8]

For example, students who have experienced complex trauma may be particularly sensitive to direct or indirect aggression… and are *more* likely to face negative classroom experiences than are their peers.[9, 10]

Psychosocial stress among educators may increase the influence of implicit bias in decision-making as the brain shortcuts to responses.[11]

When teachers display higher levels of indirect and/or direct aggression against a student, classmates will replicate this behavior.[12, 13]

Where do we go from here?

Poor conditions for learning for students very often reflect poor working conditions for educators. Overall, educators report high stress levels.

At the same time, many students arrive at school with their own psychosocial stress due to issues such as family problems, poverty, marginalization, and experiences of trauma. These stressors can make it more difficult for students to cope in the classroom, challenging educators.

One cannot simply tell educators or students to reduce their stress, or override their neurobiological responses to stress.

What to do?

❖ Improve working conditions and support for educators.

❖ Make the school a safe haven with predictable rules and routines, respect and safety for all, fair and consistent discipline, and extra supports for students who require them to function well in a classroom.

❖ Help make educators aware of how dynamics of stress work (e.g., trauma-informed schools), and give them effective strategies to cope with and minimize psychosocial stress in the classroom.

❖ Give teachers resources to help reduce the extent to which they bring their own stress into the classroom, and help them cope with secondary trauma and distress from the issues their students bring.

References

References

1. Jones, S. M. & Kahn, J. (2017). The evidence base for how learning happens: Supporting students' social, emotional and academic development. *Consensus statement of evidence from the Council of Distinguished Scientists, National Commission on Social, Emotional, and Academic Development*. Washington, DC: National Commission on Social, Emotional, and Academic Development.

2. National Academies of Sciences, Engineering, and Medicine (2018). *How people learn II: Learners, contexts, and cultures*. Washington, DC: National Academies.

3. Pellegrino, J. W. (2018). The sciences of learning and development: Some thoughts from the learning sciences. *Applied Developmental Science*, DOI: 10.1080/10888691.2017.1421427

4. D'Angiulli, A., & Schibli, S. (2016). How neuroendocrinology can contribute to early childhood education and care: Cortisol as a supplementary indicator of quality. *Quarterly Review of Comparative Education, 46,* 281–299.

References

5. Buruck, G., Wendsche, J., Melzer, M., Strobel, A., & Dörfel, D. (2014). Acute psychosocial stress and emotion regulation skills modulate empathic reactions to pain in others. *Frontiers in Psychology, 30*. https://doi.org/10.3389/fpsyg.2014.00517

6. Kearney, W. S., & Smith, P. (2018). Student bullying, teacher protection, and administrator role ambiguity: A multi-level analysis of elementary schools. *Journal of School Leadership, 28*, 374–400.

7. Osher, D., Kidron, Y., DeCandia, C. J., Kendziora, K., & Weissberg, R. P. (2016). Interventions to promote safe and supportive school climate. In K. R. Wentzel & G. B. Ramani (Eds). *Handbook of Social Influences in School Contexts* (pp. 384–404). New York, NY: Routledge.

8. Osher, D., Penkoff, C., Sidana, A., & Kelly, P. (2016). *Improving conditions for learning for youth who are neglected or delinquent* (2nd ed.). Washington, DC: National Evaluation and Technical Assistance Center for the Education of Children and Youth Who Are Delinquent, Neglected, or at Risk (NDTAC).

References

9. Osher, D., Kidron, Y., DeCandia, C. J., Kendziora, K., & Weissberg, R. P. (2016). Interventions to promote safe and supportive school climate. In K. R. Wentzel & G. B. Ramani (Eds). *Handbook of Social Influences in School Contexts* (pp. 384–404). New York, NY: Routledge.

10. Poirier, J. M., Berman, I., Guarino, K., López, F. A., & Osher, D. (2018). Creating respectful and inclusive schools. In Osher, D., Moroney, D., & Williamson, S. (Eds.), *Creating Safe, Equitable, Engaging Schools: A Comprehensive, Evidence-Based Approach to Supporting Students*. Cambridge, MA: Harvard Education.

11. Yu, R. (2016). Stress potentiates decision biases: A stress induced deliberation-to-intuition (SIDI) model. *Neurobiology of Stress, 3*, 83–95. http://dx.doi.org/10.1016/j.ynstr.2015.12.006

12. Lucas-Molina, B., Williamson, A., Pulido, R. & Pérez-Albéniz, A. (2015). Effects of teacher-student relationships on peer harassment: A multilevel study. *Psychology in the Schools, 15*, 298–315.

13. Murray-Harvey, R., & Slee, P. T. (2010). School and home relationships and their impact on school bullying. *School Psychology International, 31*(3), 271–295.

ELIZABETH SPIER, PHD

PRINCIPAL RESEARCHER

+1 650.376-6426

ESPIER@AIR.ORG

MAKING
RESEARCH
RELEVANT

THANK YOU

AIR®