

Introduction to Psychology

APA IPI Tags: Theme #1

Content Area Tags: Mental & Physical Health

Estimated Time: at least 25 minutes (25-60 min)

What do we know about stress?

Activity Instructions (instructor led discussion, student discussion and discovery)

- Discussion Board/Class Discussion
 - What do you know about stress?
 - If discussion board, suggest a minimum word count or number of concepts to discuss
 - *Instructor suggestion:* from discussion, identify student misconceptions and clarify concepts. Suggest you prompt and have key concepts in mind for discussion. Goal of discussion is orientation and review from pre-work (reading chapter)
- Ask students to identify and reflect on personal example(s) of stress.
 - *Instructor suggestion:* Give them 5-min to write out a stressful event/stressor that happened to them within the past week, month, and/or year-- selection of their choice. Encourage connection and application of topics.
 - Share/Identify a personal example
 - Identify primary appraisal & secondary appraisal
 - Other factors (context, temperament)
 - *Instructor suggestion:* could prompt students or have them reflect back after what we know now research activity described below)
 - Ask students: is there a possibility of reframing the stressor (is there a lesson learned, is there something a student can do if stress comes up again?)
 - *Instructor suggestion:* could revisit this after the what we know now/new research activity described below)
- Discover new research regarding stress (**see table in Activity Notes**)
 - Introduce or mention the tie of APA goal
 - Share gathered resources (see table in Activity Notes)
 - *Instructor suggestion:* Have students work in groups. Give groups at least 15-min to work through activity (for 1 topic). Depending on instructor goals and timing, could have groups work through more than 1 topic.
 - From information shared, have students:
 - identify “old” information
 - identify “new” research
 - reflect on changes (technology driven, method driven, etc)
 - *Instructors:* see table below for some information shared about the “old” and “new”
- Ask groups to share out recent research to class or instructor group new findings (3-5 min per group)
 - *Instructor suggestion:* If doing this, ask groups to have a presenter and share a time limit. Other option is for each group to share 2 sentences in shared space (Padlet, white board) and then instructor reviews with class.

- Discussion or writing: Each student to reflect on the APA theme and how it is represented in Health Psychology (Table examples) (5-min writing activity)
 - prompt students during reflection to:
 - Review key concepts
 - Review how our knowledge has changed
 - Identify a WOW moment from the class time this week

Student Learning Objectives

By completing this assignment, you will be able to...

- Define stress, how we perceive stress, and at least two factors associated with perceiving stress.
- Identify examples in how psychological science can change with new data in the context of stress/mind & body
- Identify connections between psychological, biological, social, and cultural factors that influence behavior and mental processes in relation to stress
- Identify psychological principles can change our lives in positive ways

Post-Activity Discussion Questions

- Ask students to write about/create an action plan based on what they learned.
 - Reflection from learning about stress
 - What are the key takeaways that can help you when you are stressed? when you come across stressors? How can you explain what happens when we are stressed to...
 - a friend?
 - a co-worker?
 - a child?
 - How will you change your approach to stressful situations in your own life?
 - Identify at least 1 way of coping that you could adapt.
 - Share your plan of action. Choose who you will share this out with and how you want to share.
- *Instructor suggestion:* This would be a take-home assignment following a wrap-up discussion in class to prepare students for this assignment. This could be connected as a theme for summative assessment. This connects to APA goal 6 to identify psychological principles that can change our lives in positive ways.

Activity Notes (for Instructors Only)

The table below shares some examples of what we first knew about stress and then how that has evolved. The What we know gives basic information. The What we know now gives some more information we have learned over the past 20 or so years. The Resources section is short friendly videos and readings that share more of the updated research/knowledge that we have. The Research column shares more intricate readings about the updated research.

- Table for Discover new research regarding stress (examples below)
 - Pick and choose from ideas below

o Could consider [jigsaw like activity](#) for coverage of multiple connected topics

What we knew (basic topics to share - can have them watch these clips)	What we know now (for students to discover using resources) (gist of the materials)	Research (optional resource for you--if you want to read further)	Resources (student friendly resources to share out)
Stress is connected to brain Fight - Flight - Freeze(Cannon): Psychology Concepts: Stress as a psychological process (4 min): https://youtu.be/Y7FMbda05tY Learn about fight-flight-freeze but now we know more about mind-body connection with stress	1. Stress affects your brain (includes epigenetics) A lifespan example: Toxic stress high alert - Early toxic stress impacts neural development 2. Vagus Nerve/ Gut-brain axis: microbiome and mental health 3. Exercise - Brain (coping option)	2 & 3: Foster, J. A., & Neufeld, K. A. M. (2013). Gut–brain axis: how the microbiome influences anxiety and depression. <i>Trends in neurosciences</i>, 36(5), 305-312. https://www.researchednutritionals.com/wp-content/uploads/2017/04/gut-brain-axis-how-the-microbiome-influences-anxiety-and-depression.pdf Madison, A., & Kiecolt-Glaser, J. K. (2019). Stress, depression, diet, and the gut microbiota: human–bacteria interactions at the core of psychoneuroimmunology and nutrition. <i>Current opinion in behavioral sciences</i>, 28, 105-110. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7213601/	1. TED-Ed How stress affects your brain - Madhumita Murgia (4 min): https://youtu.be/WuyPuH9ojCE Harvard video (2 min) that explain the affect of toxic stress on the body:https://youtu.be/rVwFkcOZHJw 2. Vagus Nerve (1.5 min): https://youtu.be/ZVbZOeqgwE0 Gut-Brain link (9.5 min - up to minute 7): https://youtu.be/ZeT_v881niY 3. TED talk: Brain changing benefits of exercise - Wendy Suzuki (13 min, shares research 6:15): https://www.youtube.com/watch?v=BHY0FxzoKZE
More details for mind-body with stress...	Dynamics across the lifespan: Dysregulation of cortisol	Young, E. S., Farrell, A. K., Carlson, E. A., Englund, M. M., Miller,	https://www.psychologicalscience.org/news/releases/childhood-stress-a

Cortisol and stress encountered across lifespan	when stressed Early stress exposure leads to unhealthy patterns of cortisol release and with high stress in adult leads to more unhealthy cortisol	G. E., Gunnar, M. R., ... & Simpson, J. A. (2019). The dual impact of early and concurrent life stress on adults' diurnal cortisol patterns: A prospective study. <i>Psychological Science</i> , 30(5), 739-747. https://journals.sagepub.com/doi/abs/10.1177/0956797619833664?journalCode=pssa	dulthood-stress-hormones-health.html (Stress in Childhood and Adulthood Have Combined Impact on Hormones and Health)
Perception of stressor Primary & secondary appraisals Individual differences	Factors that shape perception & interpretation of events • Environment one is in • If personal resources outweigh situational demand • Social context • Features of event • Ind. diff. (temperament, genetics, previous life history)	Smith, K. E., & Pollak, S. D. (2021). Rethinking concepts and categories for understanding the neurodevelopmental effects of childhood adversity. <i>Perspectives on Psychological Science</i> , 16(1), 67–93. https://doi.org/10.1177/1745691620920725 https://journals.sagepub.com/doi/10.1177/1745691620920725	Yale School of Medicine: Why stress is different for everyone (2-min): https://medicine.yale.edu/news-article/18792/ TED talk (McGonigal) How to Make Stress Your Friend (14.5 min) Could also do clip from Portrait of Killer & Nagoski TED conversation (links below)
Ulcers - due to stress	Due to bacterial disorder (1980s) Ind. diff. with bacteria and stress (shut down immune and stomach bacteria uncontrolled - body can't heal self)		Portrait of a Killer documentary (27 min - ulcers around 9:15 - 15 min; then goes into chronic stress and brain)
Stress - Body - Burnout Stress response cycle Burnout was first with workplace -- we now generalize that to other areas of life	Burnout extended to other aspects of life Gender differences in burnout Burnout(condition) vs other things/mental health (anxiety,	Yaribeygi, H., Panahi, Y., Sahraei, H., Johnston, T. P., & Sahebkar, A. (2017). The impact of stress on body function: A review.	Ted conversation with Nagoski & Nagoski (identical twins) (18-min): https://youtu.be/PrJAX-iQ-O4

	depression, rage) How to deal with stress response cycle (changing physiological state)	<i>EXCLI journal</i> , 16, 1057. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5579396/	
Stress & Mental Health *would need to identify a direct connection (PTSD, depression, anxiety) *this might be a revisit topic with mental health	Stress-Diathesis Model <i>Could connect different disorders</i>		Analogy example for stress-diathesis (1.5 min): https://youtu.be/1ZmSDpZAdNQ
Application of psychology research in other areas (GAS has been contextualized in exercise science for example) *do not have student resource	Example: exercise scientists had used to in relation to periodization/fitness training at a more (abstract for Robinson, 2018 also mentions other areas connected and General Adaptation Syndrome)	Cunanan, A. J., DeWeese, B. H., Wagle, J. P., Carroll, K. M., Sausaman, R., Hornsby, W. G., ... & Stone, M. H. (2018). The general adaptation syndrome: a foundation for the concept of periodization. <i>Sports Medicine</i> , 48(4), 787-797. https://umh1617.edu.umh.es/wp-content/uploads/sites/546/2016/05/SGA.pdf	

- [Portrait of a Killer documentary](#) (this version is 27 min)
 - a. instructor note: 27-min clip topics covered: what is stress; body stress response; what are qualities of good stress; ulcers then and now (starts at 9:30 until 15 min and then shares stress on brain) -- for full documentary (57 min) key concepts/concepts: stress & animal research; impact of stress on bodies; stress response; adrenaline & glucocorticoids; stress perception with humans; aging & chronic stress; stress reduction; humor; compassion & caring; telomerase
- Assessment considerations for this part of the activity: Explaining main concepts, Identifying new research/how information has changed, Action plan/reflection for stress reduction applies knowledge learned (post activity/discussion)

Other resources

Credit to: S. Gokce Gungor Munoz, Alisa Beyer, Christine Cardone, Cory Eno, Amie Muldong

TED-Ed Lesson connected: video (linked above) <https://youtu.be/v-t1Z5-oPtU> and TED-Ed activity (watch, think, dig deeper (connects to McGonigal TED talk):

<https://ed.ted.com/lessons/how-stress-affects-your-body-sharon-horesh-bergquist#watch>

TED-Ed Lesson connected: video (linked above) <https://youtu.be/WuyPuH9ojCE> and TED-Ed activity (watch, think, dig deeper shares Psychology Today article and interactive simulation of being a rat mom with epigenetic lesson): <https://ed.ted.com/lessons/how-stress-affects-your-brain-madhumita-murgia>

Other TED-Ed on stress lessons: ed.ted.com/search?q=stress

Robinson, A. M. (2018). Let's talk about stress: History of stress research. *Review of General Psychology*, 22(3), 334-342. {Alisa requested ILL 6/17}

Completer: Alisa Beyer

Reviewer: Annie S. Ditta