

RSA[®]Conference2019

San Francisco | March 4–8 | Moscone Center



BETTER.

SESSION ID: LAB1-R03

Mental Health in Cybersecurity: Preventing Burnout, Building Resilience

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Let's ask Dr. Google: security



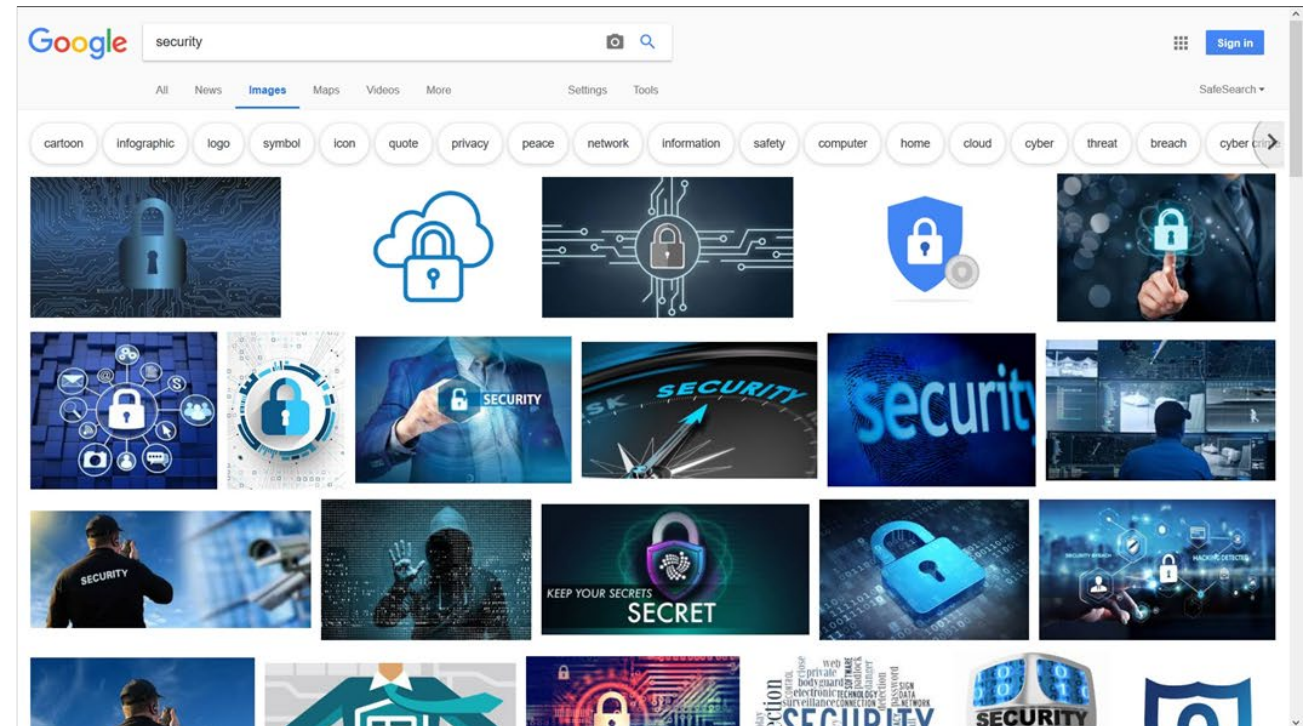
security

security
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Google Search

I'm Feeling Lucky

[Report inappropriate predictions](#)

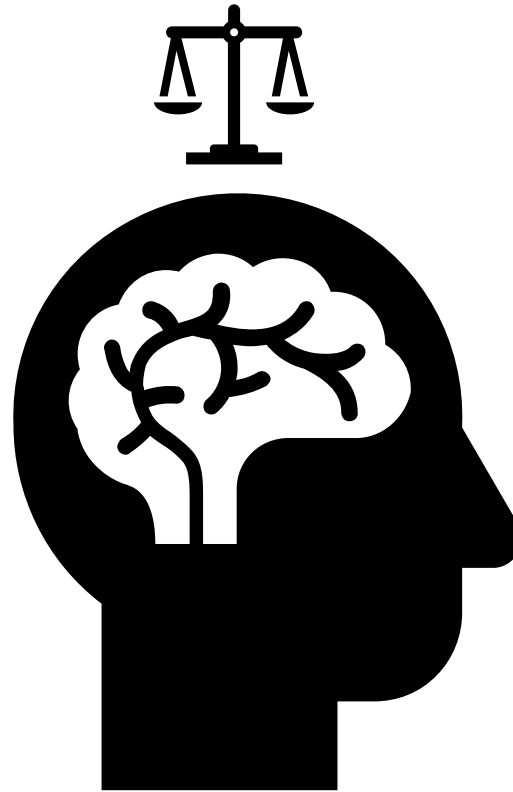


Parallels between different fields

Medical Professions  and Security Professions  both involve:

- High stress work environments that are constantly changing
- Information that cannot be shared
- Making decisions with incomplete or unknown information
- Keeping up with new and more complex knowledge
- Always on alert
- Pressures from limited time and resources, team dynamics

Balance of the outside and the inside:



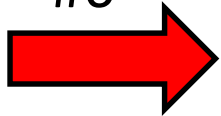
CDC Study: Suicide Rates by Occupation

TABLE 2. Rates of suicide per 100,000 population, by sex, and ranked overall by Standard Occupation Classification (SOC) group — 17 states, 2012*

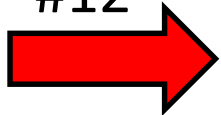
[Return](#) [Top](#)

| SOC code | Occupational group | Overall | Male | Female |
|----------|--|---------|------|--------|
| 45 | Farming, fishing, and forestry | 84.5 | 90.5 | —† |
| 47 | Construction and extraction | 53.3 | 52.5 | — |
| 49 | Installation, maintenance, and repair | 47.9 | 47.5 | — |
| 51 | Production | 34.5 | 39.5 | 10.8 |
| 17 | Architecture and engineering | 32.2 | 36.3 | — |
| 33 | Protective service | 30.5 | 34.1 | 14.1 |
| 27 | Arts, design, entertainment, sports, and media | 24.3 | 32.9 | 12.4 |
| 15 | Computer and mathematical | 23.3 | 32.8 | 12.5 |
| 53 | Transportation and material moving | 22.3 | 30.2 | 4.8 |
| 11 | Management | 20.3 | 27.4 | 8.4 |
| 23 | Legal | 18.8 | 24.2 | 13.9 |
| 29 | Healthcare practitioners and technical | 17.4 | 31.6 | 13.3 |
| 19 | Life, physical, and social science | 16.7 | 23.7 | — |
| 13 | Business and financial operations | 15.9 | 20.4 | 10.3 |
| 31 | Health care support | 14.6 | 32.9 | 11.8 |

#6



#12



<https://www.cdc.gov/mmwr/volumes/65/wr/mm6525a1.htm>

Mental Health Stress and Cybersecurity

Challenges of the Profession:

- High expectations as first responders
- Words of thanks are rare
- Feelings of guilt when things are missed
- “Badge of Honor” to take on more responsibilities
- Finding holes and filling them

<https://published-prd.lanyonevents.com/published/rsaus18/sessionsFiles/9378/P2P4-T07-Cybersecurity-Impact-on-Mental-Health-Managing-Stress-Building-Resilience.pdf>

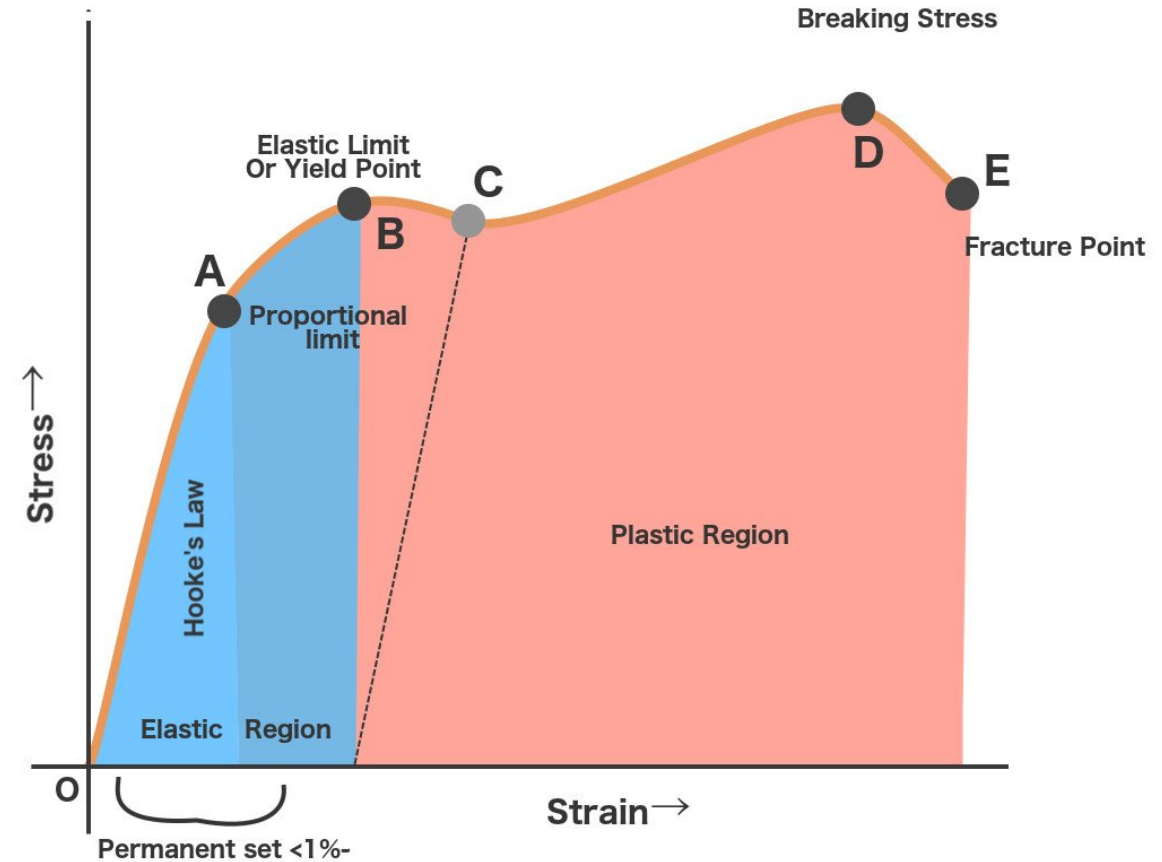
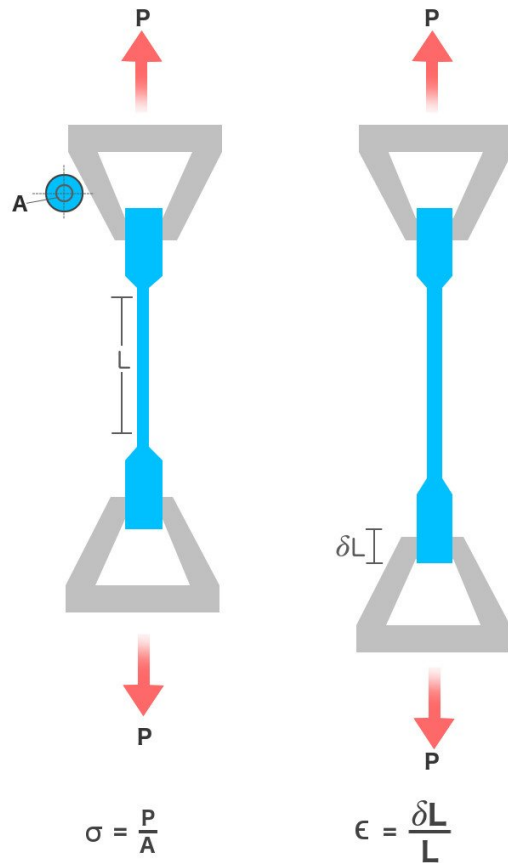
Mental Health Stress and Cybersecurity

Impact on Individuals:

- Can't "turn off" / Difficult to "get away" from work
- Limited social support
- Boundaries
- Work expectations and team dynamics

<https://published-prd.lanyonevents.com/published/rsaus18/sessionsFiles/9378/P2P4-T07-Cybersecurity-Impact-on-Mental-Health-Managing-Stress-Building-Resilience.pdf>

Stress - Strain Curve: Physics



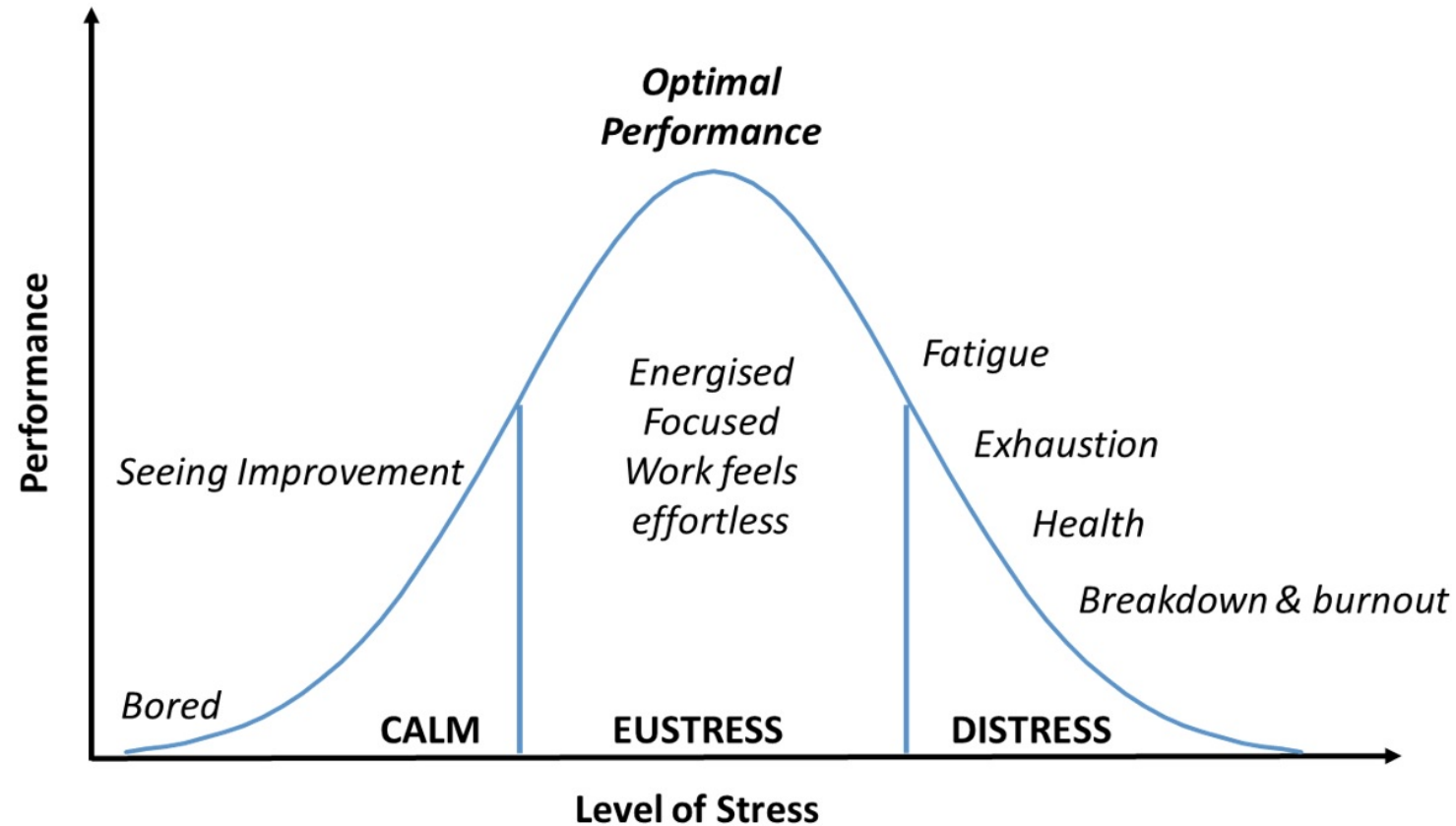
<https://www.scienceabc.com/innovation/what-is-the-stress-strain-curve.html>

Stress - Strain Curve: What about for humans?

Mental Stress is

- Difficult to measure
- Different meanings for different people
- “Invisible”
- Stigmatized

Yerkes - Dodson Curve



<https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/Well-being-and-Burnout/APA-Well-being-Ambassador-Toolkit-Challenges-and-Opportunities.pptx>

Burnout

- Emotional Depletion
- Detachment & Cynicism
- Low Personal Achievement
- Depersonalization

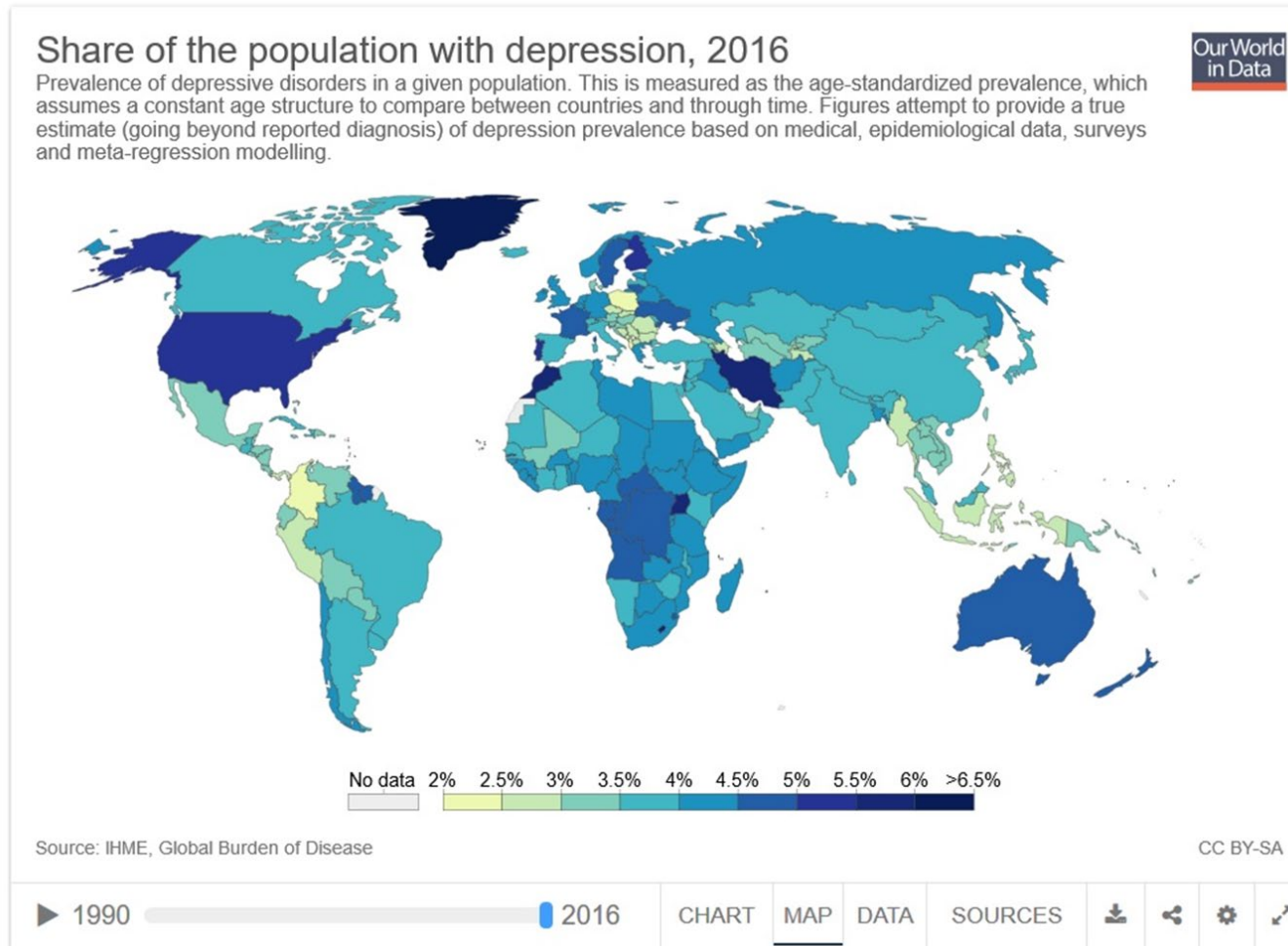
<https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/Well-being-and-Burnout/APA-Well-being-Ambassador-Toolkit-Challenges-and-Opportunities.pptx>

DEPRESSION – DSM-5



- 5 or more of the following symptoms for ≥ 2 weeks:
 - Depressed mood most of the day
 - Diminished interest or pleasure
 - Significant weight loss or gain
 - Insomnia or hypersomnia nearly every day
 - Psychomotor agitation or retardation
 - Fatigue or loss of energy
 - Feelings of worthlessness or excessive guilt
 - Diminished ability to concentrate
 - Recurrent thoughts of death or suicidal ideation with or without a plan

Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), American Psychiatric Association 2013.
<https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/Well-being-and-Burnout/APA-Well-being-Ambassador-Toolkit-Challenges-and-Opportunities.pptx>



<https://ourworldindata.org/mental-health>

Global Impact of Mental Health

| Disorder | Share of global population with disorder (2016) [difference across countries] | Number of people with the disorder (2016) | Share of males:females with disorder (2016) |
|---|--|---|---|
| Any mental or substance use disorder | 15.5% [13-22%] | 1.1 billion | 16% males 15% females |
| Depression | 4% [2-6%] | 268 million | 3% males 4.5% females |
| Anxiety disorders | 4% [2.5-6.5%] | 275 million | 3% males 4.7% females |
| Bipolar disorder | 0.6% [0.4-1.5%] | 40 million | 0.55% males 0.65% females |
| Eating disorders (clinical anorexia & bulimia) | 0.14% [0.05-0.55%] | 10.5 million | 0.07% males 0.2% females |
| Schizophrenia | 0.3% [0.2-0.45%] | 21 million | 0.29% males 0.28% females |
| Alcohol use disorder | 1.4% [0.5-5%] | 100 million | 1.9% males 0.8% females |
| Drug use disorder (excluding alcohol) | 0.9% [0.4-3.3%] | 62 million | 1.1% males 0.5% females |

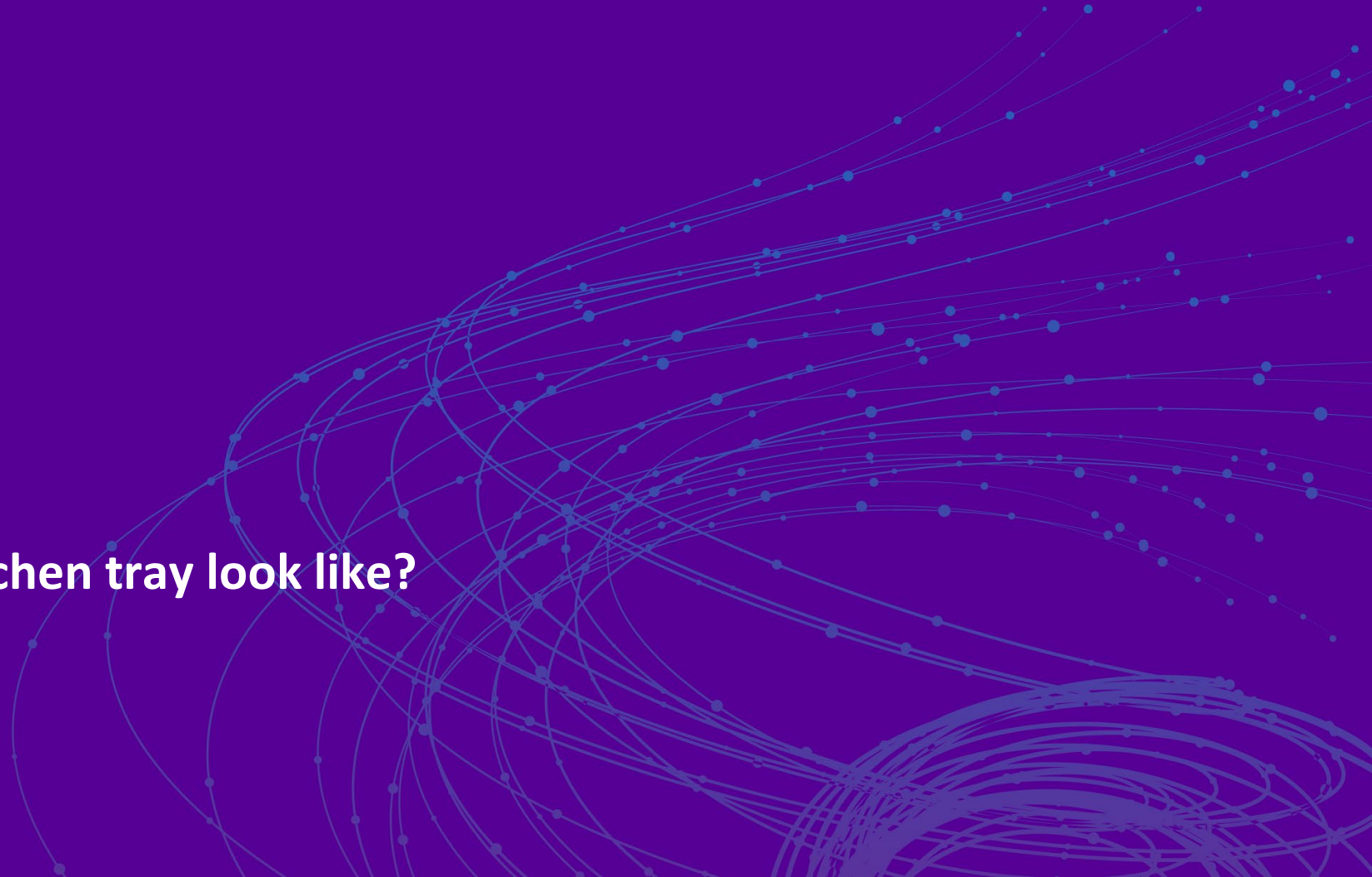
<https://ourworldindata.org/mental-health>

Outside vs. Inside: Tension from Both



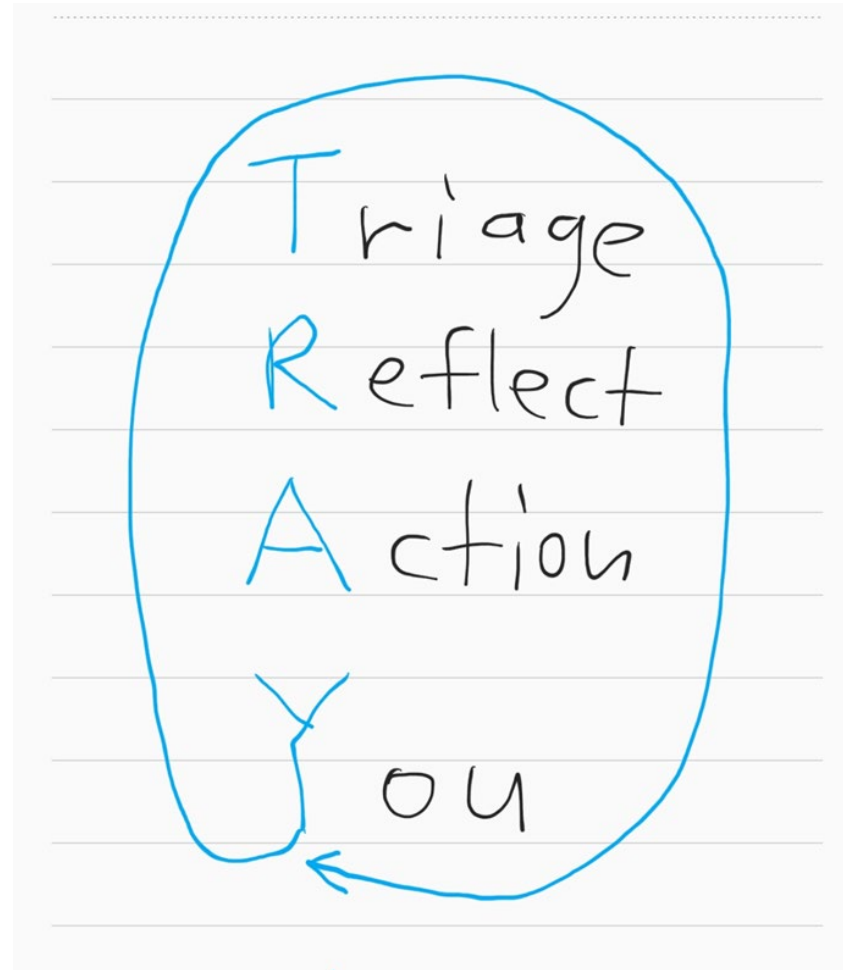
An Exercise:

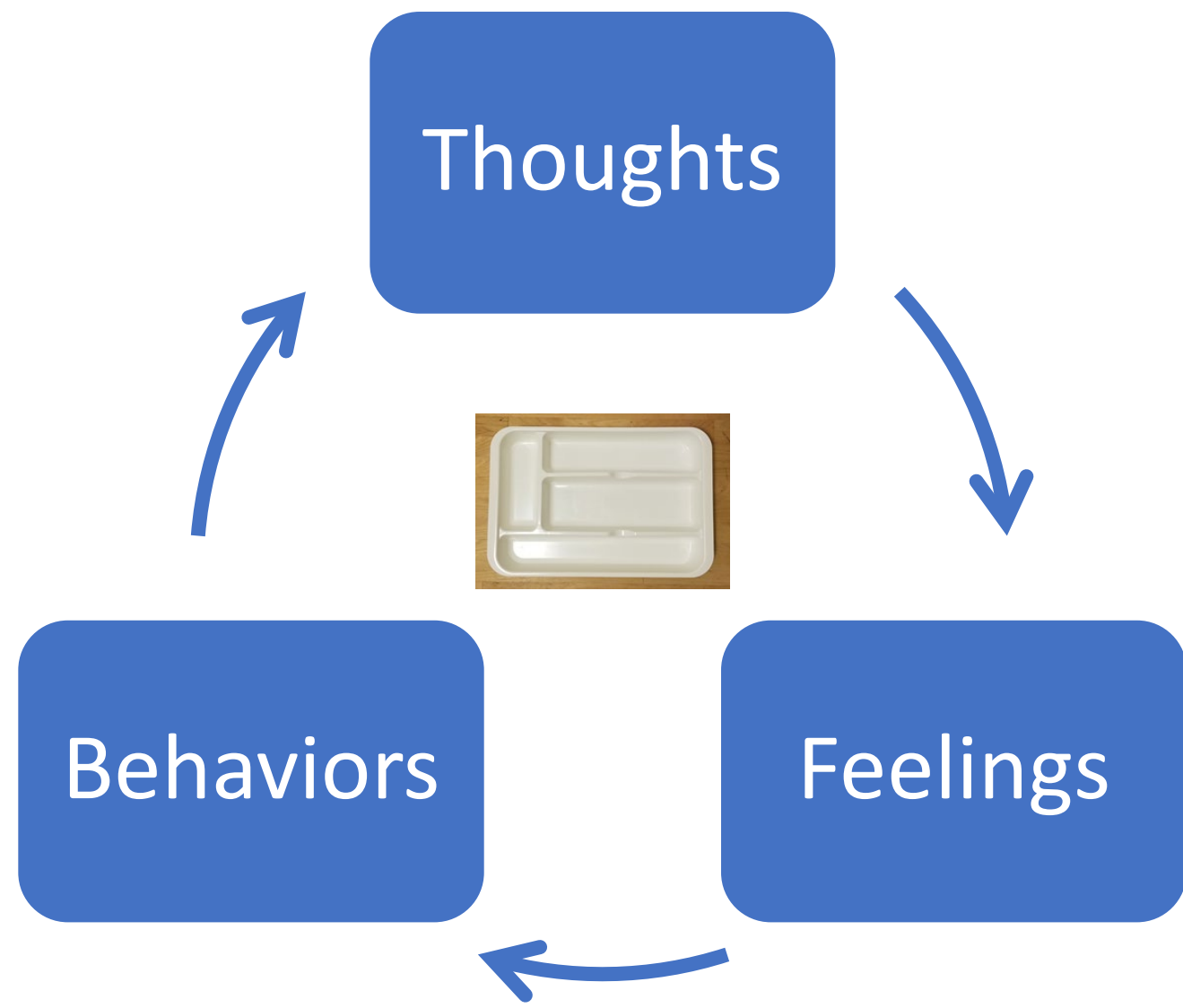
What does your kitchen tray look like?



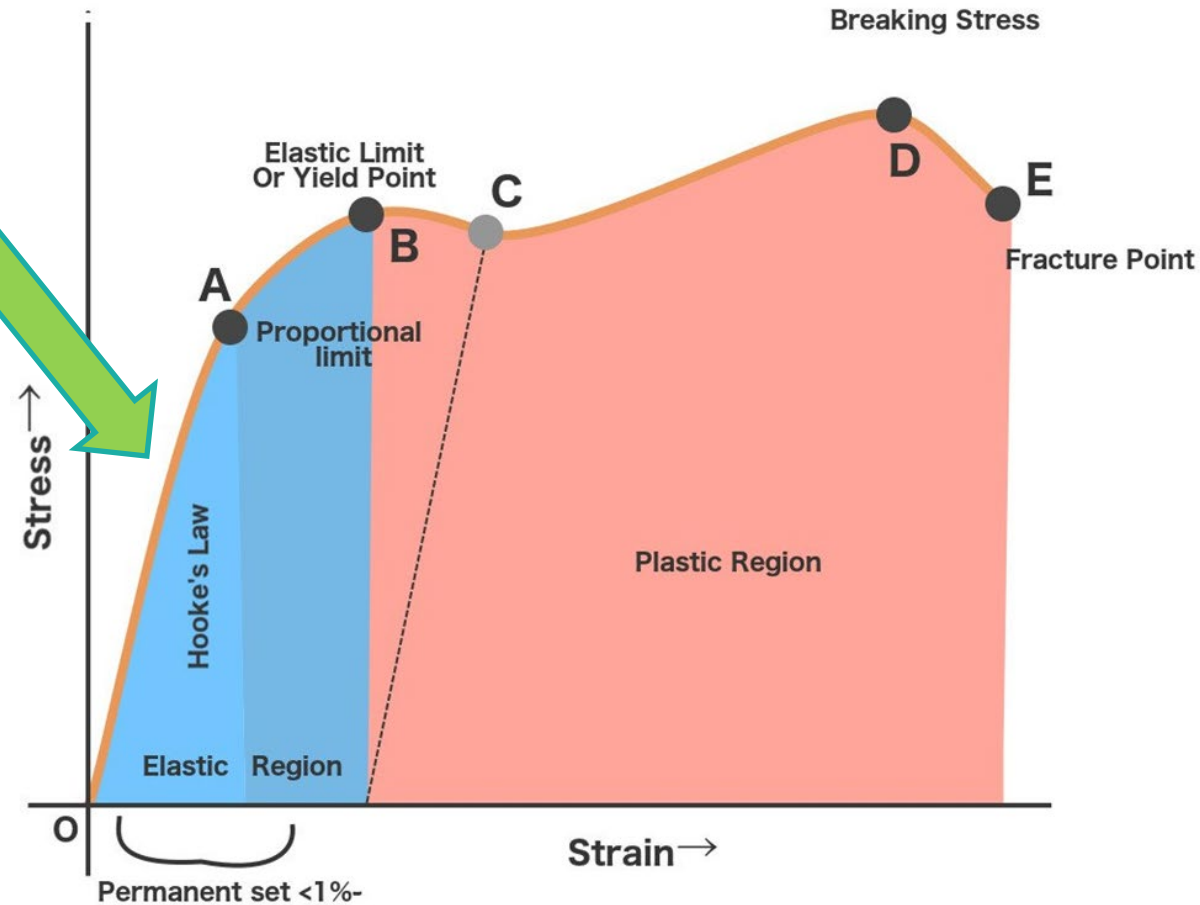
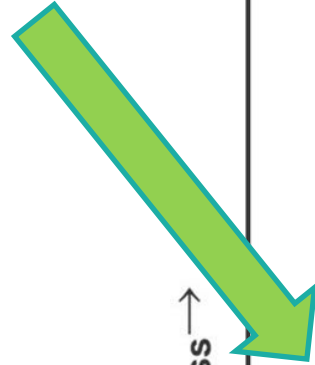


Your mental T-R-A-Y to manage stress





Resilience:



<https://www.scienceabc.com/innovation/what-is-the-stress-strain-curve.html>

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Interactive Session and Discussion



Personal Activity: “Where are you?”

- To yourself, think of a time when the situation was very stressful. What happened? How did you feel? What did you do? What was the outcome?

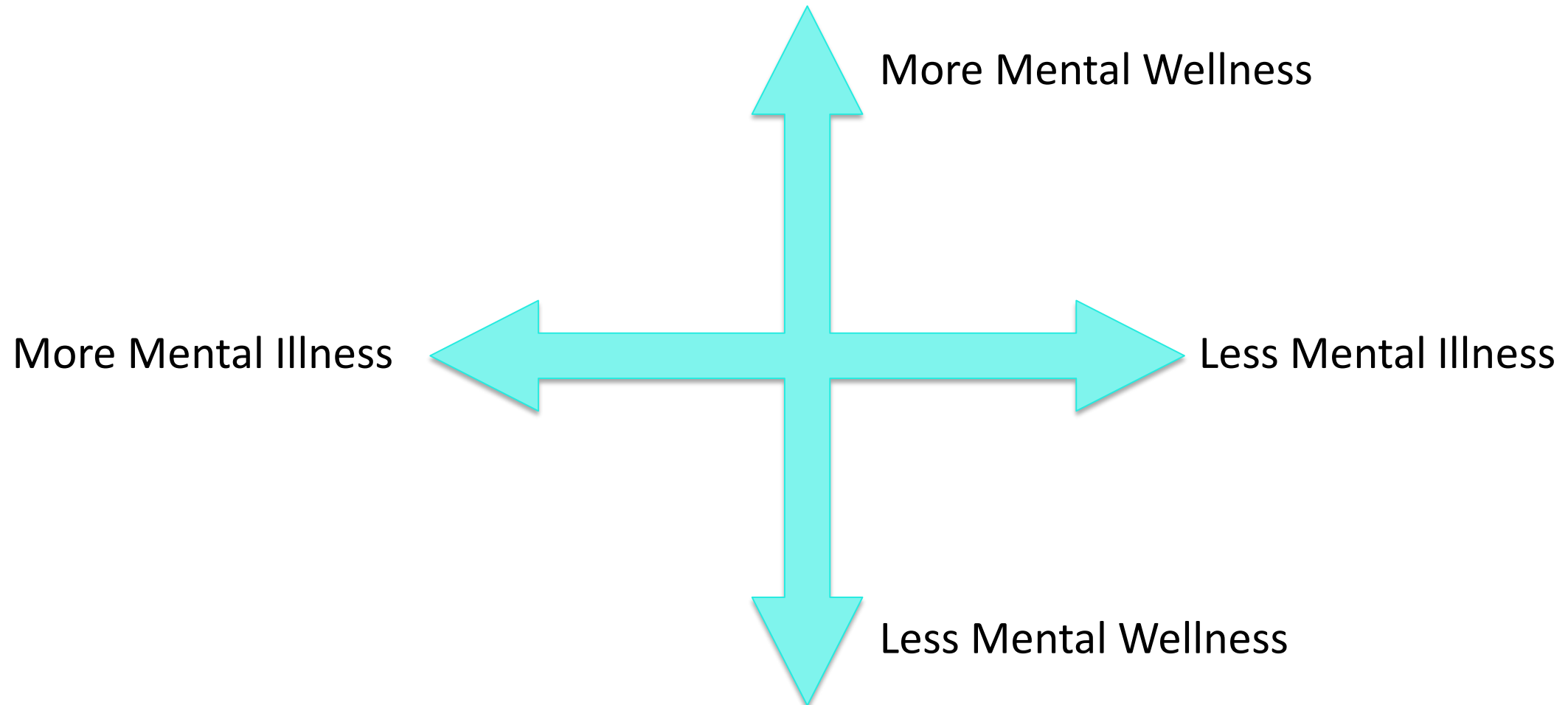
Personal Activity: “Where are you?”

- To yourself, think of a time when the situation was very stressful. What happened? How did you feel? What did you do? What was the outcome?
- Now ask yourself the same questions, but for a situation that went very well.

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- Now ask yourself the same questions, but for a situation that went very well.
- Mark down these 2 points on the chart of “Where are you?”

Personal Activity: “Where are you?”



Based on diagram from Keith Tudor “Mental Health Promotion: Paradigms and Practice”. 1996.

Personal Activity: “Where are you?”

- To yourself, think of a time when the situation was very stressful. What happened? How did you feel? What did you do? What was the outcome?
- Now ask yourself the same questions, but for a situation that went very well.
- Mark down these 2 points on the chart of “Where are you?”
- Mark down how you are feeling now at this moment.

Group Discussion on Mental Health in Cybersecurity

Topic Areas:

- Psychological Safety
- Stressors at the organizational level
- Stressors at the personal level
- Issues Unique to Cybersecurity
- Good Stress vs. Bad Stress
- Boundaries
- Work-Life Balance
- What has worked well? What has not?
- Managing Stress

T-R-A-Y

Take daily situations, and apply them to the T-R-A-Y:

- Triage
- Reflect
- Action
- You

Situation - Thoughts - Feelings - Behavior

| Situation: | Thoughts: | Feelings: | Behavior: |
|------------|-----------|-----------|-----------|
| | | | |
| | | | |
| | | | |
| | | | |

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Building your own pathway forward:



Things You Can Do:

- Dedicate time for self: times for fun, hobbies, activities not related to work.
- Taking moments for self reflection: taking a walk, journaling, mindfulness.
- Keeping open communication with people you trust, and look out for each other.
- Learning about mental health, and to get help and care when needed.
- Driving cultural change through leadership emphasizing mental health as a key priority.
- Having people from different fields and backgrounds to come together and learn from one another.

Apply to Action

After this session:

- Think about your own mental T-R-A-Y, and how you can use it.
- Meet 3 new people at the RSA Conference with whom you can start a conversation about mental health.

Next week:

- Create a mental stress inventory of yourself, and of your organization. Identify what is working well, and what is not. Make a pledge to be better.

In 3 months:

- Work on your personal prioritized inventory list. Track progress.
- Find a colleague who shares enthusiasm for mental health at the workplace, and co-organize an event where people feel safe to chat and share.

Physical, Cyber, and all Security: Starts with Mental Security

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Resources

- American Psychiatric Association
<https://www.psychiatry.org/patients-families>
- National Institute of Mental Health
<https://www.nimh.nih.gov/health/find-help/index.shtml>
- World Health Organization
http://www.who.int/mental_health/en/

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