



Mental Health and Mental Hygiene: Developing Tools to Thrive while earning a Physics PhD

(originally from Charlotte Olsen, adapted by James Minock and Irene Moskowitz)



Outline

- Motivation: Prevalence of poor mental health in graduate programs
 - Motivation for this talk
 - Data and statistics
- Symptoms & Triggers
 - Common Symptoms of Anxiety & Depression
 - Recognizing Triggers
- Resources available to students
 - Day to day habits
 - Time Management
 - Professional help
- Imposter Syndrome
- Continuing the Conversation
 - Self Care vs. Community Care: what's the difference
 - Crisis prevention through communication
 - Discussion

Why am I giving this talk?

- I am very familiar with importance of mental health
- Caveat: Just because I struggle with balancing my own mental health issues **does not** make me an expert! What works for me may not work for you. We are all individuals!
- For me, undergrad & grad school forced me to be proactive about my mental health
- Sharing my story, I've found many people have similar experiences which we do not talk about.
- I don't want any of us to be Karen or Joseph.



Arun Durvasula
@arundurvasula

is karen a grad student



Joel Franco @OfficialJoelF · 2d

Karen is now a tropical depression and could fall apart "at any time," according to the NHC. Not expected to get very far.

[Show this thread](#)





Why this talk is needed

- Grad school is a stressful job
 - There are a lot of demands being placed on you and additional stresses
 - Some people placing these stresses on you may not be kind about it
- On top of academic stresses that can be triggering, things have happened in the last few years
 - Too many to list. Just too many
- It seems as though once in a century social, medical, political, and environmental upheavals happen daily.
 - We're all thinking of something different right now
- The fact that the extreme has become the mundane is emotionally exhausting.



What this talk is:

- An incomplete overview of resources available to you.
- A workshop in techniques preventing, identifying, and managing stress.
- A brief introduction to best practices in developing good mental hygiene
- A list of new things to try!
- The opportunity to have an honest conversation about stresses in grad school



What this talk is not:

- A diagnostic tool
- An outline of “the right way” to handle your mental health needs
- Judgement on your mental hygiene. You’re already doing great!
- An explicit endorsement of any or all of the techniques, practices, or resources listed. You do what’s best for you.
- A passing of the blame onto you. There are systemic problems that we have to work on together in order to fix



Statistics

Symptom	Prevalence (%)
Felt under constant strain	41
Unhappy and depressed	30
Lost sleep over worry	28
Lost confidence in self	24
Felt worthless	16
Could not make decisions	15
Reported at least two symptoms	51
Reported at least four symptoms	32

Many of the nearly 3700 PhD students surveyed recently in Belgium reported symptoms associated with mental health problems. Source: K. Levecque et al., *Research Policy* **46**, 868, 2017.

Common Symptoms of Depression and Anxiety

Many Grad Students report some of the following symptoms.

These symptoms can be triggered by stressors in graduate school even without underlying mental health problems.

Stressors can aggravate existing mental health struggles.

The following list is incomplete and is not meant as a self-diagnostic tool.



Symptoms of **Anxiety** & **Depression**

- Feeling nervous or restless
- Rapid breathing/hyperventilation
- Shaking or trembling
- Difficulty sleeping
- Stomach cramps or GI problems
- Numbness in limbs
- Catastrophic feelings (i.e. feeling like you are dying or something terrible is about to happen)
- Feelings of avoidance and procrastination
- Inability to relax or enjoy quiet time
- No tolerance for uncertainty
- Choking feelings
- Feeling overwhelmed
- Procrastination
- Disordered sleep (insomnia or too much sleep)
- Disordered eating (not eating or bingeing)
- Indecision, feeling distracted
- Low self esteem
- Chronic fatigue
- Aches, pains, and/or headaches
- Stomach Pain
- Feeling empty or unable to feel
- Feeling as though you no longer find pleasure in things you used to enjoy

Acknowledging Feelings of Stress

- It's likely that you have felt one or two (or more) of the symptoms as related to a stressful time in your life
- This is because these symptoms are part of a natural human response
- Please wave or thumbs up if you have felt symptoms of stress

Grab some pen and paper for what's next.

- Question: Do you remember a time when you were under stress?
- Question: How does your body respond when you are feeling stressed?
- Question: Is it easy for you to be aware of when you are feeling stressed?

ANXIETY HOTSPOTS

Scan your body for tension in these common holding areas, then let go and release.



text by @journey_to_wellness
drawing by holland andrews



Acknowledging Feelings of Stress

We're about to go through a series of resources and prevention techniques. There will be a lot. Some of these may be useful for you, and some may not.

You likely already have techniques in place to handle stress, anxiety, and feelings of isolation.

Think back to the last exercise.

Question: Can you think of what coping mechanisms you use to deal with stresses in your life?



Mental Hygiene: Creating a baseline of good mental health

- Maintenance is important for everything.
 - If you don't perform routine maintenance on your car it will break down!
- Mental Hygiene is preventative
 - Proper nutrition
 - Proper sleep
 - Exercise
 - Relaxation
 - Adherence to existing medication
- Having good mental hygiene does not guarantee good mental health, but having consistently poor mental hygiene is a recipe for poor mental health



Time Management

- Plan a schedule
 - Rigid
 - Flexible
 - If...else statements
 - etc.
- Reserve time for yourself
- Rest is often productive
 - Ex. would you run on a sprained ankle?



Emotional and Biochemical Wellbeing

- Vitamin D levels in particular (because we're all deficient..)
 - [1] Patients taking high doses saw an improvement in their depressive symptoms.
 - [2] "The results of this large population-based study show an association of depression status and severity with decreased serum 25(OH)D levels..."
- Caffeine is great for boosting cognitive performance and enhancing memory [3], and might make you live longer [4], however...
 - "The moderate and high consumer groups combined reported significantly higher trait anxiety and depression scores when compared with abstainers. The high consumer group also reported significantly higher frequency of psychophysiological disorders, and lower academic performance." [5]

1) Vieth et al. 2004, Nutrition journal doi: 10.1186/1475-2891-3-8

2) Witte et al. 2008, Archives of General Psychiatry doi: 10.1001/archpsyc.65.5.508

3) Borota et al, 2014, Nature Neuroscience doi: 10.1038/nn.3623

4) Lofffield et al. 2018, JAMA Internal Medicine doi:10.1001/jamainternmed.2018.2425

5) Gilliland et al. 1981, American Journal of Psychiatry doi: 10.1176/ajp.138.4.512



Make your own endorphins

- Exercise
 - “The presented evidence suggests that exercise and physical activity have beneficial effects on depression symptoms that are comparable to those of antidepressant treatments.” [1]
- Yoga / Meditation
 - The stress-reduction in yoga may be due to endorphin release. Research shows a reduction in stress markers[2]
- Laughter
 - Arguably the best medicine: a 2017 study found that social laughter releases endorphins in the brain [3]

1) Dinas et al. 2011, Irish Journal of Medical Science doi: 10.1007/s11845-010-0633-9

2) Kumar et al. 2015 JACM [doi: 10.1089/acm.2014.0298](https://doi.org/10.1089/acm.2014.0298)

3) Manninen et al 2017 *The Journal of Neuroscience*, 2017; 0688-16 DOI: [10.1523/JNEUROSCI.0688-16.2017](https://doi.org/10.1523/JNEUROSCI.0688-16.2017)

More Mental Hygiene

- Maintaining healthy social interaction
- Breaking large projects into small tasks
 - Lists and productivity techniques
- Taking time for things which make you happy (self care)
 - Make a list NOW of things that you like to do, and use it when you start feeling overwhelmed
 - Question: Can you think of 2 things which you could add to a list of distractions for when you're stressed?

stressful day TO-DO LIST



Dani DiPiero '17

Productivity Hacks

- Keep a **todo** and a **done** list to show progress
- Bullet journal or Panda Planner
- Celebrate achievements through gratitude lists (even when you don't want to)
- Take frequent breaks
- Pomodoro technique
 - 25 minutes of work
 - 5 minute break





There's an App for that: Free mental health apps

- **Pacifica**
 - Very involved. Allows you to journal along with tracking your mood.
- **Moodpath**
 - Prompts you with simple questions and mood trackers 3 times a day and allows you to track
- **Calm Harm**
 - Designed for self harm, but really good for anxiety or any heightened emotional state!
- **Insight Timer**
 - Meditation and Breathing
- **Habitica**
 - Rack up XP by completing daily tasks.
- **Breathe+**
 - Breathing exercises for when you're stressed.



Talk Therapy

- According to the American Psychological Association, psychotherapy can help:
 - Identify negative or **distorted thinking patterns** that often lead to feelings of hopelessness and helplessness.
 - Identify specific life problems that contribute to depression and help patients understand how to solve or improve on those problems.
 - Develop options for the future and set realistic goals to **improve mental and emotional well-being**.
- Therapy has been shown to change the way the brain processes threats [1]
- Needn't be long term. Many people have long lasting results after 15-20 sessions.[2]



Talk Therapy

- Therapy can be individual or group therapy
- The most important thing is that you find a therapist that is effective for **you**
- Ex. Physical injuries get treatment, right?
 - Very normal to not know how to handle things yourself
 - If going for help, why not go for a trained professional?
- How to find:
 - CAPS (Free)
 - Psychology Today/Health Insurance provider (depends on health insurance)

Medication

- Sometimes mental hygiene is not enough! And that's okay!
- If your brain isn't making the right chemicals, there's no shame in getting them pharmaceutically.
- Some people need meds to achieve a good baseline of mental health (and I should know).
- Medication can be temporary while having a permanent effect. By targeting neurotransmitters, antidepressants rebuild connections between nerve cells in the brain which have been destroyed by stress.[1][2]
- Certain disorders require long term medication.





Medication

Medication requires a diagnosis.

It can be prescribed by a psychiatrist or a medical doctor.

There are many many types of meds out there, and many may not work for you.

It's important to have a medical professional who is attentive to your needs and who will work carefully to find what's right for you.

You will need to be proactive in your medical care. Communicate all concerns to your doctor. If they are anything less than 100% supportive you can take your business elsewhere.



Resources available to graduate students for free or cheap

Counseling, ADAP, and Psychiatric Services (CAPS)

Phone: (848) 932-7884

Graduate School of Applied and Professional Psychology GSAPP

Phone: (848) 445-6111

<https://gsapp.rutgers.edu/centers-clinical-services/CPS/clinical-services>

Other grad students! (GSLC's, GSO members, union reps for systemic sources of stress)



Resources available to graduate students through health insurance

Therapists (\$15 - \$40 per session)

PsychologyToday

Your health insurance list of providers

Princeton House inpatient or outpatient services:

<https://www.princetonhcs.org/care-services/princeton-house-behavioral-health>

INPATIENT ADMISSIONS

[800.242.2550](tel:800.242.2550)

OUTPATIENT ADMISSIONS

[888.437.1610](tel:888.437.1610)



Crisis Resolution

- Suicide Helpline: 1-800-273-8255
 - [NJ Suicide Prevention Hotline](#) at 1-855-654-6735.
 - [Acute Psychiatric Emergency Services](#) at 732-235-5700.
- Rutgers Specific Crisis
 - For patient service requests for any level of care (intensive outpatient, outpatient, partial hospital, crisis prevention, in-patient services, etc.), call 1-800-969-5300
 - Peer Support lines: go to https://ubhc.rutgers.edu/call_center/peer_support/index.html



Imposter Syndrome

Definition: description of high-achieving individuals who, despite their objective successes, fail to internalize their accomplishments and have persistent self-doubt and fear of being exposed as a fraud or impostor [1]

- Moderate to strong positive correlation with “depression” and “stress” in PhD students [2]
- Professors feel it/have felt it too
- Nobody REALLY knows what they’re doing at their current point
 - Be honest with yourself and others
- My 2 cents: No ethical violations, no problem!

1) Bravata et al. 2020, Journal of General Internal Medicine doi: 10.1007/s11606-019-05364-1

2) Sverdlik et al. 2020, International Journal of Doctoral Studies doi: <https://doi.org/10.28945/4670>



Imposter Syndrome: What worked for me

- Many of us have been students of some kind for almost the entirety of our rememberable lives
- Most important for me: developing an identity totally disconnected from being a student
 - Gap years were really helpful for this
 - Everybody should thru hike the Appalachian Trail!
- Counterintuitively: rejections
 - I got rejected from all the grad programs I applied to in the first cycle
 - Reapplying meant that at least some little voice in my head thought it was a mistake, and I still deserved to be in grad school→listen to that one!



Self Care vs. Community Care

Everyone's needs are different when it comes to maintaining good mental health practices.

Self care:

The practice of taking an active role in protecting one's own well-being and happiness, in particular during periods of stress.

Community care:

A situation where individuals in a community are supported by one another during times of collective stress.



Self Care vs. Community Care

By now you've probably realized that the feelings of stress you've felt before are shared by many around you.

Question: Would having a means to communicate your mental health needs without discomfort or shame be beneficial?

Question: Can you think of a time when you may have wanted to communicate what you needed to a colleague during a time of stress.?

Discussion

KEEP GOING, NOT IN THE "DON'T TAKE A BREAK" SENSE BECAUSE BREAKS ARE IMPORTANT, BUT KEEP SHOWING UP FOR WHAT MATTERS TO YOU, KEEP DOING GOOD IN THE WORLD, AND KEEP MAKING IT THROUGH NO MATTER HOW SLOWLY OR IMPERFECTLY YOU GO. KEEP GOING. YOU CAN DO THIS.

