

Personal Resilience

You, your community, your life outside of physics

Safe Space

Equalize the space

- Share stories and experiences, not names/gossip
- All knowledge and opinions are equally valid
- Give space before taking space

Check your assumptions

- No judgements (including self-judgements) or disclaimers
- Treat everyone as an individual and not a representative of a specific group
- Believe in our common best intentions

• The right to be human

- Avoid blaming people for **misinformation** taught to them
- Acknowledge emotions
- Practice forgiveness

Practice consensual dialogue

Active listening

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Opening Activity

For each statement: Thumbs up if you agree, Thumbs down if you disagree, Thumbs middle else

Clance Impostor Phenomenon Scale

Developed by Clance in 1985

What is impostor syndrome?

Some years ago, I was lucky enough invited to a gathering of great and good people: artists and scientists, writers and discoverers of things. And I felt that at any moment they would realise that I didn't qualify to be there, among these people who had really done things. On my second or third night there, I was standing at the back of the hall, while a musical entertainment happened, and I started talking to a very nice, polite, elderly gentleman about several things, including our shared first name. And then he pointed to the hall of people, and said words to the effect of, "I just look at all these people, and I think, what the heck am I doing here? They've made amazing things. I just went where I was sent." And I said, "Yes. But you were the first man on the moon. I think that counts for something." And I felt a bit better. Because if Neil **Armstrong felt like an impostor, maybe everyone did.** Maybe there weren't any grown-ups, only people who had worked hard and also got lucky and were slightly out of their depth, all of us doing the best job we could, which is all we can really hope for. -Neil Gaiman

Impostor Syndrome

A psychological pattern in which an individual doubts their accomplishments and has a persistent internalized fear of being exposed as a fraud.

The cycle: Overestimation of standards of performance, over-preparation or self-sabotage, these behaviors are invoked as arguments to support fraudulent feelings in response to others' appreciations

70% of people will experience imposter syndrome throughout their lives

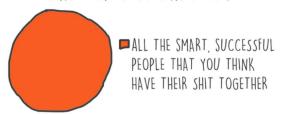
Core Symptoms

- Feeling like a **fake** and fearing that others may eventually discover their true lack of value
- Inability to acknowledge positive feedback and maladaptive feelings associated with praise and achievement
- Incapacity to attribute personal success to internal causes

You may experience ...

- Anxiety
- Depression
- Negative self-image
- Low self-esteem
- Suicidal ideation
- Neuroticism
- Perfectionism

TYPES OF PEOPLE WHO CAN HAVE IMPOSTOR SYNDROME:



Related Behaviors

- Attribute their successes to external factors
- Motivation by performance goals
- Comparison to classmates
- Doing work that specifically appeals to authorities
- Seeking approval from admired authority
- Fear of negative consequences in environment for being confident in abilities

IS and Gender

- Some studies found higher rates of impostor syndrome in Women
 - Especially true for female students in environments where society tells them they don't belong
- Men also found to have imposter syndrome
 - Sometimes worse because they don't acknowledge the feeling

Survey in Astronomy (2011)

- 1,143 students in physics and astronomy surveyed
- Mentorship:
 - Students who reported feeling mentored were less likely to experience feelings of imposter syndrome
- Gender:
 - Women were more likely than men to show characteristics of imposter syndrome

IS and Race

- "You're such an inspiration."
 - Messages of **not belonging**, or surprise at presence
 - External reinforcement of Imposter Syndrome
- The false assumption of admission because of affirmative action
 - Can particularly harm students of color and students with other unrepresented identities

Southwestern University

- 332 minority students surveyed
- Black students who dealt with significant "impostorism" also reported higher levels of anxiety, as well as depression related to discrimination they perceived
- Among Asian students, more impostor-related feelings were associated with increased depression and anxiety, but not related to any racism they perceived
- Those Latino students with more impostor-related feelings didn't suffer from much anxiety or depression. Those who did indicate they were anxious or depressed did not have many impostor-related thoughts

Implicit Bias

- the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner
- The implicit associations we hold do not necessarily align with our declared beliefs or even reflect stances we would explicitly endorse

Implicit Bias test: https://tinyurl.com/bzqq43f

Coping and moving forward

Improving existence for all of us

Coping



- Talk to others that might feel similarly
- Keep a record of positive feedback
- Fixed vs. growth mindset
- Changing ritualistic behaviors
 - go into exam saying "I am going to do well" instead of "I am going to fail"
- Recall the people you think you've fooled and imagine telling them how you've deceived them – say out loud what you think they might say
- Increase self esteem by pondering facets of your personality; write down your strengths, positive relationships with other people, and competence



Destructive Language

- "Isn't it **obvious**?"
- "You're **still** on that one?"
- "Everyone wants to be ____"
- "No that's wrong." (Full stop)"
- "I'm **not** good at this."



Constructive Language

- "What have you already tried?"
- "If you're stuck, I can show you my approach if you want."
- "I, **personally**, want to be..."
- "I found a different anwer, this is how I got there..."
- "I'm not good at this yet."



Group Activities:

First, please write down at least 5 positive and impressive things about yourself.

Then, discuss:

- Have you dealt with impostor syndrome?
- What are effective coping mechanisms you've developed?
- How can we intentionally be more inclusionary in our physics aligned spaces?
- How can we develop stronger mentorship and community in our department?



Upcoming Event:

UG Seminar with Shashank Dholakia on rapidly rotating astro-systems!

6:30, tomorrow! 375 Physics Building!



THANK YOU

References

- Clance, P. R. and Imes, S. A (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. Psychotherapy: Theory, Research & Practice, Vol 15(3), 241-247.
- Caselman, T. D., Self, P. A., and Self, A. L. (2006). Adolescent attributes contributing to the imposter phenomenon. Journal of Adolescence, Vol 29, 395-405.
- Hoang, Q. (2015). The Imposter Phenomenon: Overcoming Internalized Barriers and Recognizing Achievements. The vermont Connection: Vol. 34, Article 6.
- Jaruwan Sakulku, J., and Alexander, J. (2011). The Impostor Phenomenon. International Journal of Behavioral Science, 6 (1), 73-92.
- Kevin, C. et al. (2017). Impostor feelings as a moderator and mediator of the relationship between perceived discrimination and mental health among racial/ethnic minority college students. Journal of Counseling Psychology, 64 (2), 141–154.
- Langford, J., P. R. Clance. (1993). THE IMPOSTOR PHENOMENON: RECENT RESEARCH FINDINGS REGARDING DYNAMICS, PERSONALITY AND FAMILY PATTERNS AND THEIR IMPLICATIONS FOR TREATMENT. Psychotherapy, 30 (3).
- Sonnak, C. and Towell, T. (2001). The imposter phenomenon in British university students: Relationship between self-esteem, mental health, parental rearing style and socioeconomic status. Personality and Individual Differences, Vol 31, 863-874.
- Spinath, B. (2011). Great pretenders. Scientific American Mind, March/April, 32-37.
- Ivie, R. and Ephraim, A. (2011). Women and the Imposter Syndrome in Astronomy. Status: A Report on Women in Astronomy.

https://iopscience.iop.org/article/10.1088/2058-7058/26/10/13/pdf

http://paulineroseclance.com/pdf/IPTestandscoring.pdf

https://www.themuse.com/advice/5-different-types-of-imposter-syndrome-and-5-ways-to-battle-each-one

https://www.insidehighered.com/news/2017/04/06/study-shows-impostor-syndromes-effect-minority-students-mental-health