



Stigma of Mental Health Conditions as a Barrier to Addressing the Mental Health Crisis in Engineering

November 16, 2023

1:00 PM – 2:00 PM, ET

This webinar is part of a larger series on building community and reflecting to re-envision in engineering education.



This material is based on work supported by the National Science Foundation under Grant No. EEC-1733004.

Upcoming Webinars

- Enhancing Reflection & Narrative Development through E-Portfolios (Nov. 28 at 2 PM, ET) — <https://bit.ly/46oXae5>
- Reframing Neurodiversity in Higher Education (Nov. 30 at 1 PM, ET) — <https://bit.ly/3QbEMzn>
- Good Communication in Engineering: What Does It Mean? (Dec. 1 at 2 PM, ET) — <https://bit.ly/473N2aD>
- Learning from Black Women in Engineering Before & During the Pandemic to Re-envision an Inclusive Doctoral Experience (Dec. 5 at 1 PM, ET) — <https://bit.ly/46UQuUI>
- The Art & Science of Building Community (Dec. 7 at 1 PM, ET) — <https://bit.ly/3LWALMT>
- Re-Envisioning Robotics in Engineering Education: A Partnership between e4usa & FIRST (Dec. 12 at 2 PM, ET)— <https://bit.ly/3Fi7Ajq>

Before We Begin



Interact with us and each other...



Complete our survey and access webinar materials.

Questions?



Use Q&A pod at any time
or...



Wait for the Q&A at the end of the
webinar.

Today's Speakers



Mathilde Sánchez-Peña

Assistant Professor, Engineering
Education

The University at Buffalo – SUNY



Nichole Ramirez

Assistant Director, Vertically
Integrated Projects (VIP) Program

Purdue University



Stigma of mental health conditions as a barrier to addressing the mental health crisis in engineering

Matilde Sanchez-Pena
Nichole Ramirez
Nov 16, 2023

Introductions & Motivation

Matilde Sanchez-Pena ^{PhD}



Assistant Professor
Teaching Area: Engineering Education
[School of Engineering and Applied Sciences](#)

Specialty/Research Focus

Cultures of wellbeing, institutional diversity, faculty advancement, equity and inclusion assessment, Data Science teaching and learning, social responsibility, social justice

Nichole Ramirez ^{Ph.D.}



Assistant Director
Vertically Integrated Projects
Purdue University

About VIP

The VIP Model

In VIP, teams of undergraduate students from various years, disciplines and backgrounds work with faculty and graduate students on their efforts in scholarship and exploration. The teams are: interdisciplinary - drawing students from the disciplines needed by each project; vertically-integrated - maintaining a mix of undergraduate students from different cohorts; large-scale - often with 10 to 20+ undergraduates per team; and long-term - undergraduates can earn academic credit in VIP for up to four years, and the projects last for many years, even decades.

Award Abstract # 2147193

Collaborative Research: Research: Stigma of mental health conditions in engineering and its relationship with help-seeking attitudes of undergraduates and early professionals

NSF Org:	EEC Div Of Engineering Education and Centers
Awardee:	RESEARCH FOUNDATION FOR THE STATE UNIVERSITY OF NEW YORK, THE
Initial Amendment Date:	April 25, 2022

At the end of the session, participants will be able to:

- Describe the role of stigma of mental health condition (MHC) as a factor to tackle the mental health crisis in engineering
- Reflect on their current stigma-driven or stigma-free practices in supporting students with MHCs
- Explore potential research areas to advance the understanding of the complex problem of developing a culture of care in engineering.

Session Plan

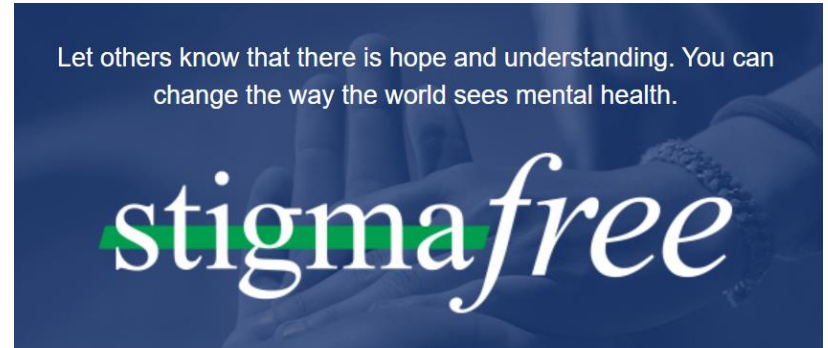
- Stigma of MHCs (5)
- Engineering Identity and MHCs (5)
- Interactive Narrative Case (20)
- Wrap up and Q&A (10)

Poll Question 1

What comes to mind first, when you think about someone with a Mental Health Condition?

Stigma of MHCs

Stigma refers to a strong feeling of disapproval about a particular characteristic and can be targeted to a variety of voluntary or involuntary traits of someone (Corrigan & Watson, 2002)



P. W. Corrigan and A. C. Watson, "Understanding the impact of stigma on people with mental illness," *World Psychiatry*, vol. 1, no. 1, pp. 16–20, Feb. 2002.

Different types of stigma

Social Stigma

PUBLIC

Discrimination
and Devaluation
by Others

SYSTEMIC

Reduced Access
to Care and
Resources Due
to Policies

SELF

Internalization
of Negative
Stereotypes



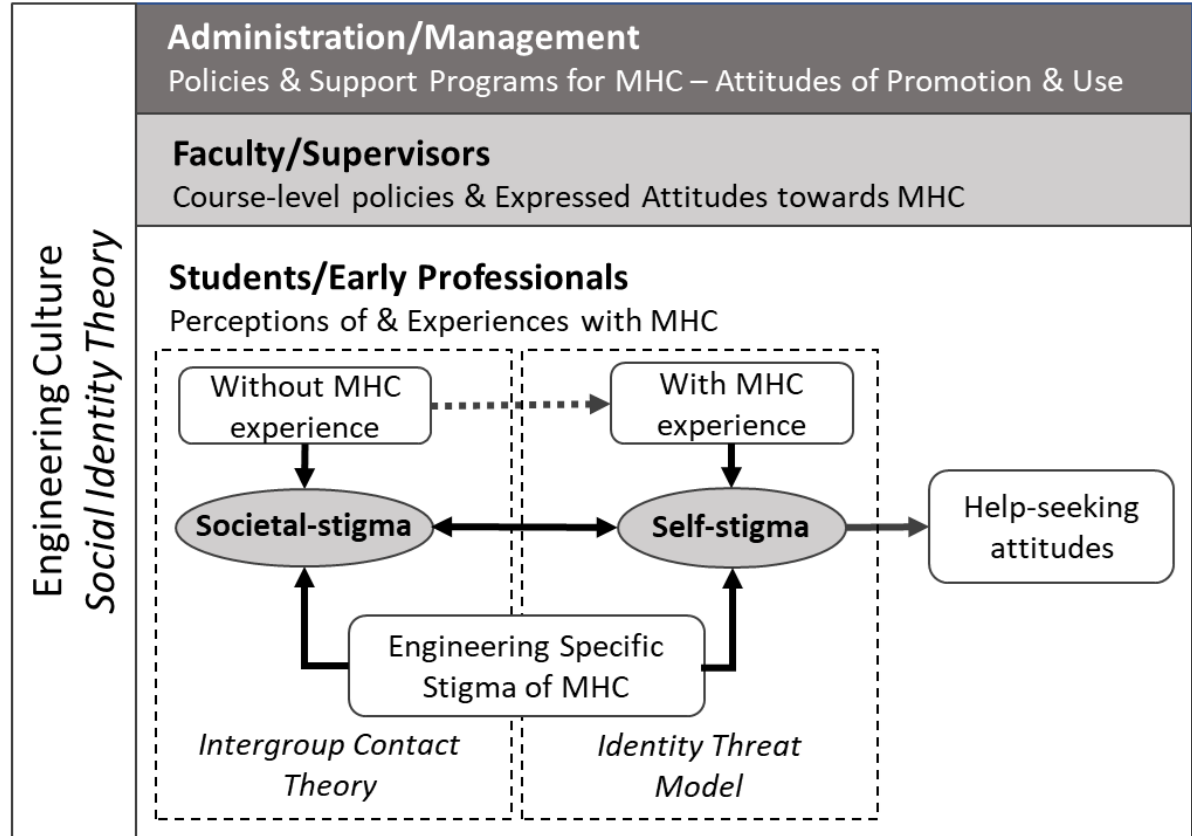
Poll Question 2

What are our assumptions about what people with a MHC
can/can't do?

mental health stigma looks like



What we want to understand



Exploratory Study

- In partnership with the National Alliance for Mental Illness (NAMI)
- 3 participants
- US Midwest
- Participants involved in NAMI programming
- Narrative Inquiry
- Depth not breadth



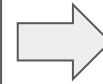
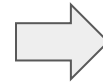
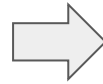
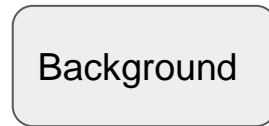
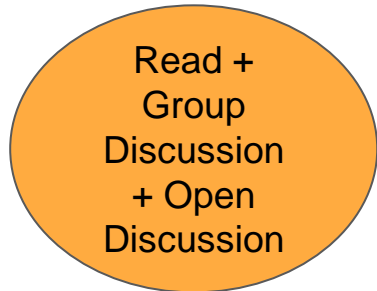
Narratives Activity

- Using your handout
 - Jane
 - Undergraduate engineering student
 - Jack
 - Late career

Pick One



<https://www.mentalhealthtoday.co.uk/>



Part 1 - Onset/Background (5 min)

- Read through case then discuss in groups
- Examine the following:
 - Attitudes about MHC before/after diagnosis
 - Sources of stigma
 - Individual (self)
 - Others
 - Reactions (emotion)
 - Actions (behaviors)



<https://www.greatschools.org/gk/articles/step-by-step-guide-to-choosing-a-high-school/>

Which elements are (or are not) surprising?

Part 2 - Context (5 mins)

- Individual development within engineering culture
 - Which elements of the engineering culture were referred to?
- Interactions between:
 - Stigma
 - Mental Illness/MHC
 - Engineering Culture
- Identify triggers and coping mechanisms



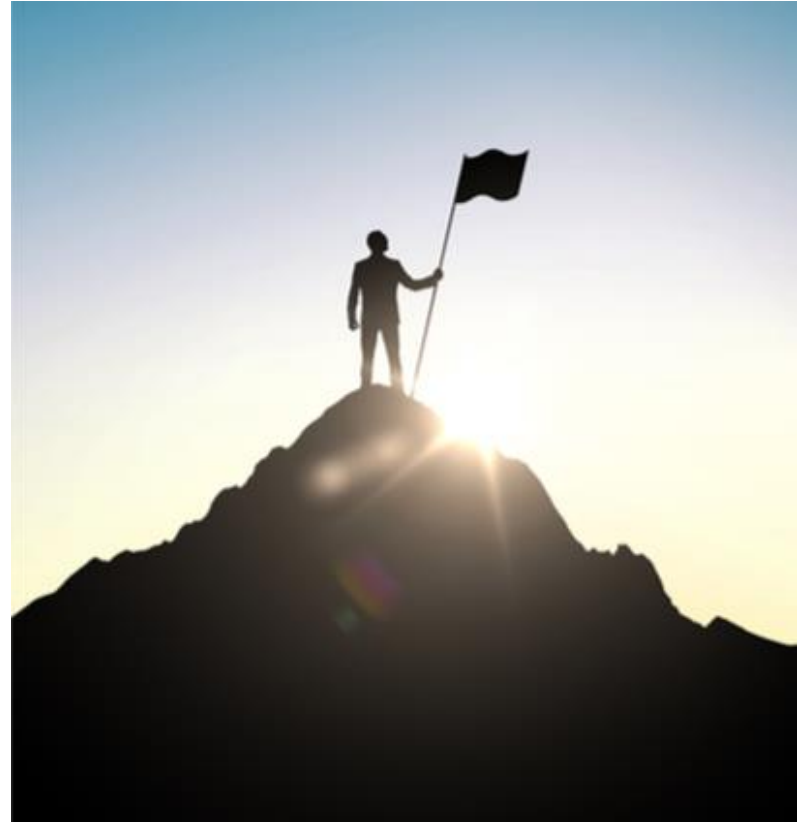
Part 3 - Support Structures (5 mins)

- Identify sources of support
- Potential sources of additional support
 - **Where was support lacking?**
 - Brainstorm other ways individual could have been supported
 - Engineering
 - College
 - Workplace
 - Other



Part 4 - Living with MHC (2 mins)

- Identify coping strategies, if any
- Sources of ongoing support
- Managing MHC and engineering identity



Takeaways



- Social and Self stigma influenced their experiences getting diagnosis and treatment.
- Elements of the engineering culture contributed to the development of additional challenges while navigating their illness.
- Support systems were critical for them to accept their conditions and learn how to navigate them better.
- They learned to live with their illness and achieve successful fulfilling lives.

Wrap Up

- Revisit outcomes from workshop
 - Identifying stigma
 - Ways to support students with MHCs
 - Ideas for incorporating into current or new research

**What
would
YOU
DO?**

erral Services

ostering trusting
e work to strengthen the
each individual within
our holistic approach to
ncial, emotional, cultural,
additional offices on

idential advocacy and
assault, domestic violence,

rt for alcohol, tobacco and
ial assault prevention; and
vents and resources is also
Learn more at buffalo.edu/

resources are available
nd personal goals. | Learn

ills and tools to help you
th. | Learn more at buffalo.
elf-help-resources

rkshops that support
e at buffalo.edu/

services, initial and on-gaing
international students. | 210

ademic policies and access
829-5586

art academic and personal
71

Understanding of diversity by
onalties through classes,
%, 716-645-2434

ation, support and assistance
onations based on
r status, Title IX reporting
-645-2286

he Registrar, Financial Aid,
rd Office and UB Medical

Education

o.edu/undergrad

Here IS HOW

WE PROMOTE HEALTHY ENGINEERS AND SCIENTISTS



University at Buffalo
School of Engineering
and Applied Sciences

YOUR NETWORK OF COMMUNITY SUPPORT



CAPS offers multiple services beyond what is listed here. Emergency services are and still will be offered by CAPS.

For more info
purdue.edu/caps



Next Steps

- Our longitudinal research project
 - Expanding scope,
 - All undergraduate engineering students
 - Stigma
 - Help seeking behaviors
 - Focus on quant and qual data collection
 - Launching survey and conducting interviews
 - 3-year longitudinal study w/students and early career professionals



<https://www.istockphoto.com/photos/q-and-a>



Contact info:

Matilde Sanchez-Pena: matildes@buffalo.edu

Nichole Ramirez: nramire@purdue.edu

Questions?

Next Steps



Share your feedback...



Access webinar materials.

Thank you!