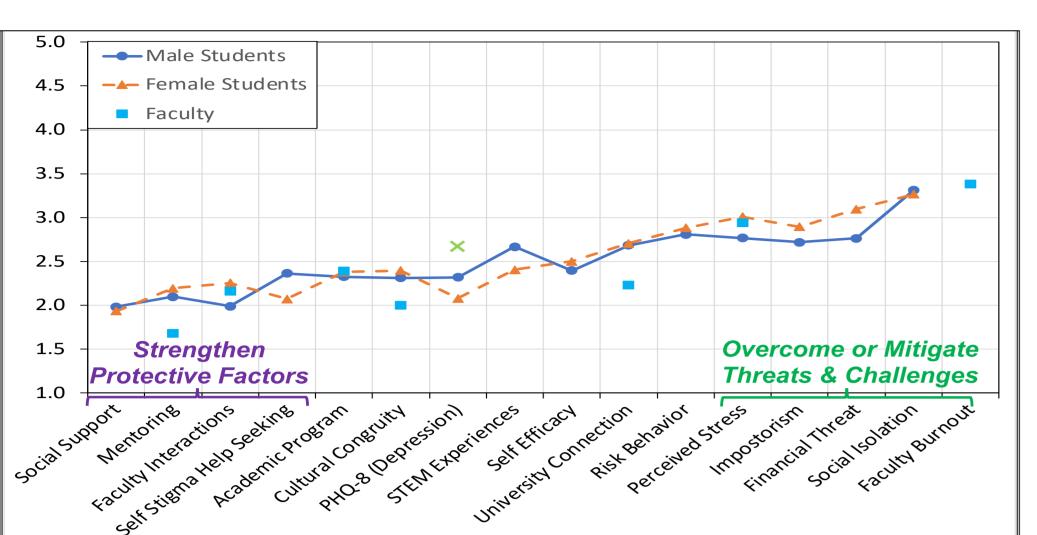
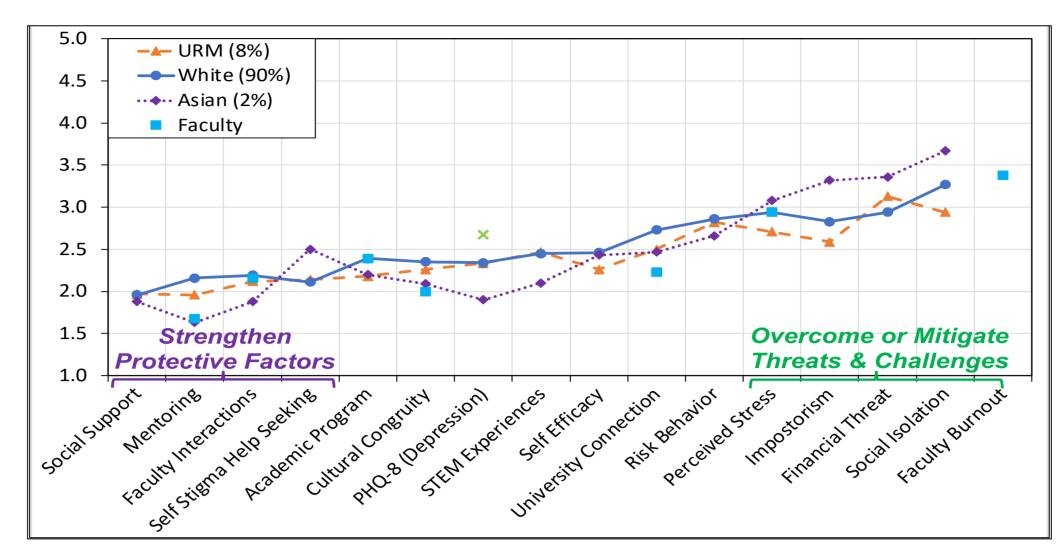
## Strategies for Supporting Graduate Student Well-Being: Insights from the Montana University System M-HOPES Grant

Ashby Kinch (University of Montana) & Beverly Karplus Hartline (Montana Technological University)

## Student Mental Health Challenges Drive M-HOPES Design





Baseline survey means. Normalized scale 1 (good) to 5 (bad). Student N~300,~70% female; Faculty N~90, ~65% male. Green X marks "threshold" for depression screening.

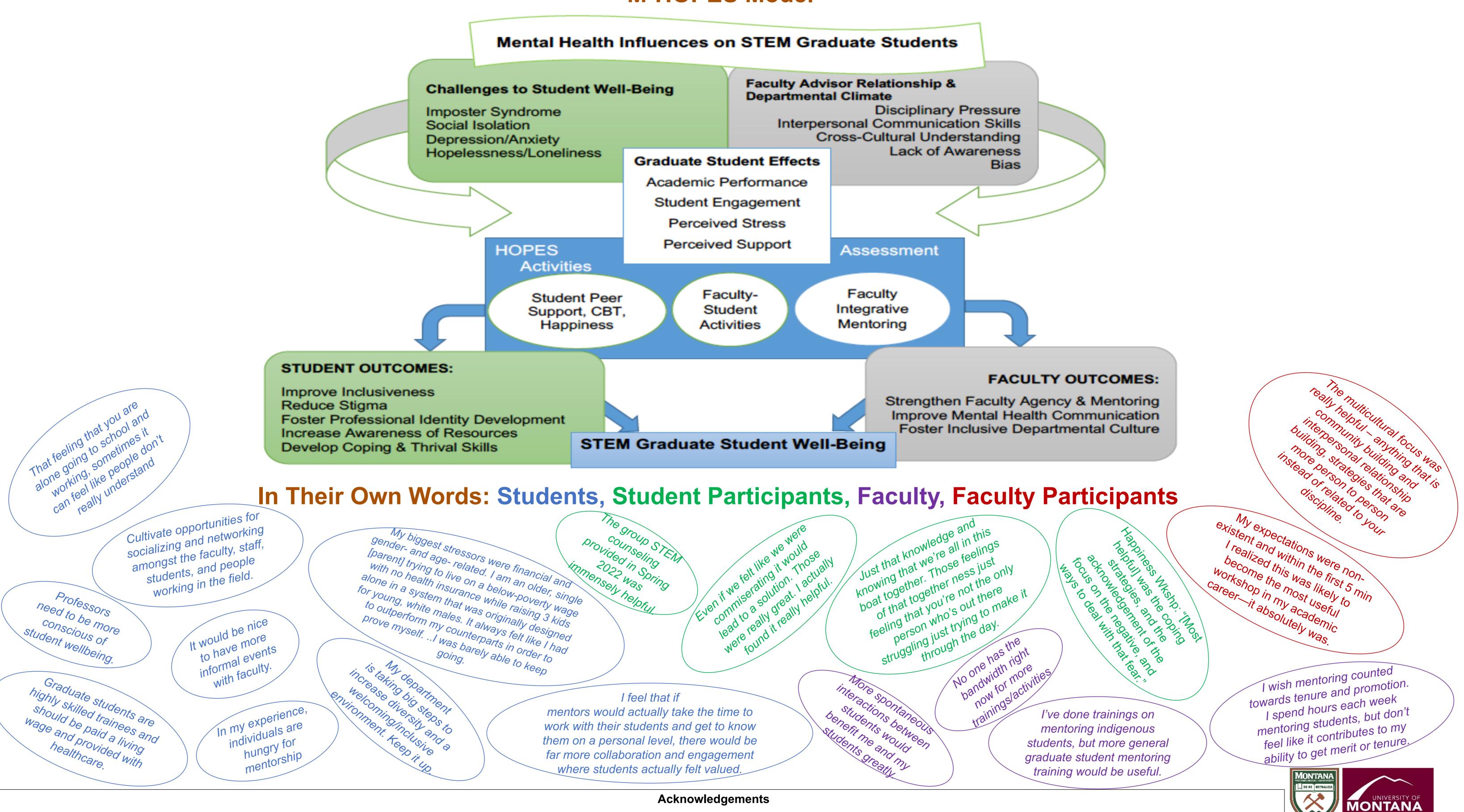
- In Year 1 (2021/22) issues were amplified by COVID-19, social turmoil, & career uncertainty.
  - In Year 2 survey, Social Isolation improved by 0.32 and Social Support improved by 0.21, perhaps due to end of COVID restrictions.
- Greater challenges for women, racial/ethnic minorities, veterans, students with disabilities, & international students.
- STEM students had significantly higher impostorism (+0.3;  $\alpha$ =.05) than non-STEM students.
- Faculty recognize student stresses & need for well-being support; desire mentoring skills to engage diverse students well.
- ❖ Over 60% of faculty respondents had referred a student for mental health assistance.

## **M-HOPES Activities & Timeline**

Activities	Year 1									Year 2								Year 3							
	G	Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4	
Experiences for STEM Grad Students				С	Р	Р			Н	С		Р	Р												
Experiences for STEM Faculty Mentors				1	М	Ε				ı		М	Ε												
Experiences for STEM Students + Mentors																									
Scale-Up & Expansion		ntaı Dal		•																					
Assessment																									
C = Cognitive Behavioral Therapy Skills (4 sessions)  I = Narrative Peer Support Groups (6 sessions)  M											FACULTY EXPERIENCES I = Indigenous/multicultural Mentoring Workshops M = Mental Health Awareness (3 Sessions) E = Equity/Climate (1 Session)														
Legend		aseli Des			Pilo	t	Α	sses	SS	R	efin	e		ecor erie				Up and					on to bilit		

- Participation is a major challenge.
  - Students and faculty have too little "free time."
  - "Stigma" may also be a factor.
- Only about half of registrants attend.
- Only about a third complete a multi-session activity.
- ❖ Participants in M-HOPES pilot activities had small improvements in STEM Experiences & Mentoring scales.
- Huge appreciation for visible attention to wellness.

## **M-HOPES Model**



Mental Health Opportunities for Professional Empowerment in STEM (M-HOPES) is a collaboration of UM, MTech, and MSU Billings (MSUB) to design, pilot, assess, and implement evidence-based, sustainable, and replicable strategies to enhance graduate-student mental health. We thank project team members for their efforts. UM Team: Jayna Mumbauer-Pisano, Bryan Cochran, Anna Sala & Holly Schleicher. MTech Team: Scott Risser, Sue Schrader & Charie Faught. MSUB Team: Sarah Keller & Jana Marcette. M-HOPES is supported by the National Science Foundation's Innovations in Graduate Education Program under awards 2105251 and 2105254. Opinions, findings, conclusions, & recommendations are those of the authors, and do not necessarily reflect the views of the National Science Foundation. For more information, please contact Ashby.Kinch@mso.umt.edu or bhartline@mtech.edu.