Building Academic Tenacity in Students for Improved Wellbeing, Deeper Learning and Increased Success **MECH 221 - Introduction of a Mental Health Literacy Curriculum** Agnes d'Entremont, Jocelyn Micallef, Gabriel Smith, Juan Abelló & Diana Jung

Faculty lead-Agnes d'Entremont Our research question

A key focus of Agnes' work as an instructor, and the coordinator for Mech 2, is student learning and curriculum development. She has conducted research, such as exploring student motivation for enrolling in an engineering program, that plays a key role to understanding how to increase diversity in engineering programs.



In the literature

In recent research, post-secondary students at a Canadian institution reported:

- Negative attitudes towards help-seeking.
- Interest in learning about symptoms and coping strategies (Armstrong & Young, 2015).

Mental Health Literacy (MHL) programming is context dependent (Kutcher et al., 2016) & there is value in embedding

content in regular classes, delivered by the regular teacher (Kutcher et al., 2015).

Coping strategies are key for:

Students in navigating stress.



Cognitive motivation and achievement (Hsieh et al., 2012).



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Over the course of a second-year program for mechanical engineering students, a variety of mental health literacy components were embedded in their course curriculum through multiple modes of instruction (i.e., online activities, in-person workshops). These embedded activities are an opportunity for students to learn more about the stress response, strategies for coping with stress and resources on campus.

This research asks: How does introducing a mental health literacy session relate to students ability to recognize stress, seek help and employ coping strategies?

Educational strategy



Preliminary findings



Students generally found the workshop content very useful for their personal and academic lives, with the most common response to both questions being a 6 out of 7 ("Moderately Useful" or "Very Useful"), and only a small portion of students answering with a 4 out of 7 ("Neither Useful nor Useless" or lower; n=99). About half of student respondents viewed learning about stress management as beneficial for academics, and about 1/3 expected it may help improve academic performance.

References

Armstrong, L. L., & Young, K. (2015). Mind the gap: Person-centred delivery of mental health information to post-secondary students. Psychosocial Intervention, 24(2), 83-87. Hsieh, P. H., Sullivan, J. R., Sass, D. A., & Guerra, N. S. (2012). Undergraduate engineering students' beliefs, coping strategies, and academic performance: An evaluation of theoretical models. The Journal of Experimental Education, 80(2), 196-218. Kutcher, S., Wei, Y., & Coniglio, C. (2016). Mental health literacy: Past, present, and future. The Canadian Journal of Psychiatry, 61(3).

Kutcher, S., Wei, Y., & Morgan, C. (2015). Successful application of a Canadian mental health curriculum resource by usual classroom teachers in significantly and sustainably improving student mental health literacy. Canadian Journal of Psychiatry ,60(12), 580-586.

Martin, A. J., & Marsh, H. W. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. Journal of School Psychology, 46(1), 53-83. Pintrich, P. R., Smith, A. F., Duncan, T. & Mckeachie, W. J. (1991). A manual for the use of the motivated strategies for learning questionnaire (MSLQ). Ann Arbor, MI: The University of Michigan. The University of British Columbia. (2018). The undergraduate experience survey 2018.

Evaluation

Students were invited to complete surveys at the start of term 1 and the end of term 2. Surveys included items from:

Undergraduate Experience Survey (UBC, 2018) Academic Buoyancy Scale (Martin & Marsh, 2008) The Motivated Strategies for Learning Questionnaire (Pintrich et al., 1993)

Additionally, students were invited to complete a survey following the workshop, and another at the end of term 1, to offer feedback on their experience with the program.

Next steps

Develop resources for faculty members who would like to explore embedding MHL activities in their context. Assess impact of embedding MHL activities in additional contexts.