# Innovative Perspectives on University Student Mental Health:

## *Student & Patient-Orientated Research Project Updates (CIHR-SPOR Collaboration Grants)*

CACUSS

June 17, 2019

CIHR IRSC
Canadian Institutes of Health Research | Instituts de recherche en santé du Canada

Strategy for Patient-Oriented Research
SPOR
Putting Patients First

Fondation de la famille Rossy
Rossy Family Foundation

# Territorial Acknowledgement

- Mount Royal University is located in the traditional territories of the Niitsitapi (Blackfoot) and the people of the Treaty 7 which includes the Siksika, the Piikani, the Kainai, the Tsuut'ina, and the Iyarhe Nakoda.

- We are situated on land where the Bow River meets the Elbow River, and that the traditional Blackfoot name of this place is "Mohkinstsis" which we now call the City of Calgary.

- The City of Calgary is also home to the Métis Nation.

# Today's Presenters

- Stephen Czarnuch & Peter Cornish, Memorial University of Newfoundland
- Stephanie Zito & Lina Di Genova, McGill University
- Anne Duffy, Queen's University
- Bonnie Kirsh, University of Toronto
- Jennifer Thannhauser & Melinda Coetzee, University of Calgary

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# Overview

- Why CIHR-SPOR Collaboration Grants at CACUSS?

- Each institution will present for 12 minutes followed by 3 min Q&A:
  - Memorial University
  - McGill University
  - Queen's University
  - University of Toronto
  - University of Calgary

- Group activity and discussion: Back to your campus activity

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# Learning Outcomes:

1) Current state of student mental health research relating to well-being, and academic success
2) Theoretical frameworks of student resilience
3) New approaches to enhancing university student mental health service delivery (e.g., utilizing technology, and occupation-based approaches)
4) Methodologies to evaluate student mental health service delivery and programs, and
5) Advantages to including students and partner advocates in the research process.

# What is SPOR?

- Strategy for Patient-Oriented Research
- Main Principles:
  - Patient involvement in all aspects of research to ensure relevance of questions and results
  - Inclusion of decision-makers and clinicians throughout process for integration into policy and practice
  - Outcome-driven
  - Multidisciplinary approach
- Connection to post-secondary student mental health
  - 1-1 matching with Rossy Foundation

## Reflection Question:

How can you use what you have learned today in your work?

# Stepping Up Care:
## Responding to Student Need

Stephen Czarnuch, PhD; Peter Cornish, PhD; Rose Ricciardelli, PhD

Memorial University


# Disclosures

- Stephen Czarnuch, PhD
  - Assistant Professor, Biomedical Engineering; Faculty of Engineering and Applied Science / Faculty of Medicine
  - CIPSRT Researcher in Residence (Technology and Innovation)
  - No relationships with commercial interests / no conflicts of interest to declare
  - Research support
    - Canadian Institutes of Health Research (CIHR)
    - The Rossy Family Foundation
    - Canadian Institute for Public Safety Research and Treatment (CIPSRT)
    - Natural Sciences and Engineering Research Council of Canada (NSERC)
    - Mitacs Accelerate
    - Memorial University (MUN)

CIHR IRSC Canadian Institutes of Health Research / Instituts de recherche en santé du Canada
NSERC CRSNG
CIPSRT Canadian Institute for Public Safety Research and Treatment
ICRTSP Institut canadien de recherche et de traitement en sécurité publique
Mitacs
MEMORIAL UNIVERSITY

# Disclosures

- Peter Cornish, PhD
  - Associate Professor; SWCC
  - Former director SWCC (2003-2018)
  - No relationships with commercial interests / no conflicts of interest to declare
  - *Perceived* conflict of interest as consultant, but this is at cost (and loss), not for profit
  - Research & program development support
    - Canadian Institutes of Health Research (CIHR)
    - The Rossy Family Foundation
    - Mental Health Commission of Canada
    - Government of Newfoundland and Labrador
    - Medavie Health Foundation

CIHR IRSC Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

Mental Health Commission of Canada

MEDAVIE HEALTH FOUNDATION

Newfoundland Labrador

MEMORIAL UNIVERSITY

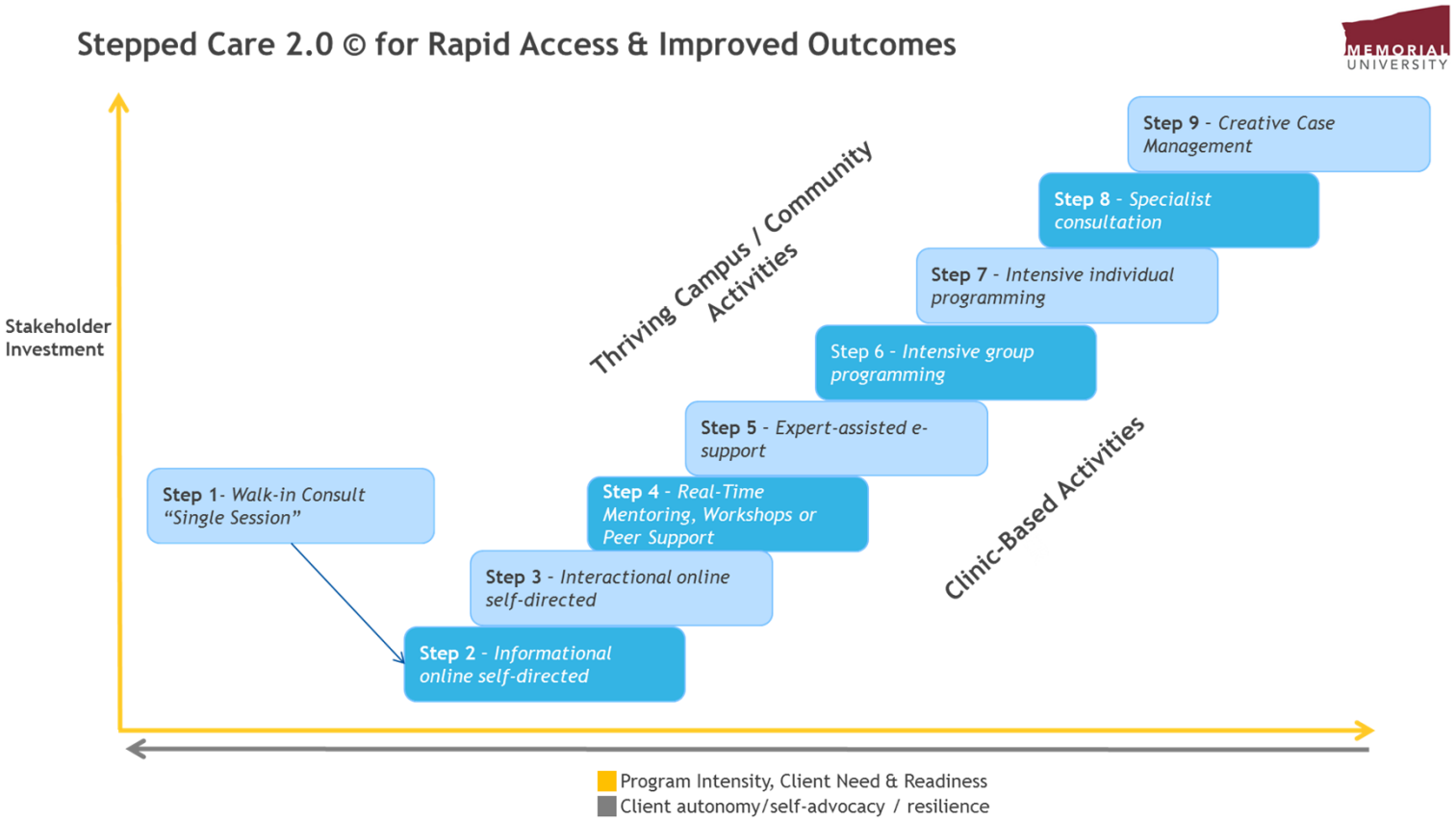
# Current Study

- Project Team:
  - S. Czarnuch (NPI, Memorial); P. Cornish (co-PI, Memorial)
  - R. Ricciardelli (CI, Memorial); T. Rashid (CI, UofT); H. Nguyen (CI, Memorial); R. Krausz (CI, UBC)

- Objective:
  - To re-centre the Stepped Care 2.0 model currently implemented at the Memorial University SWCC on the patient

- Considerations:
  - Supported by a diverse, multidisciplinary team including:
    - patients, providers, researchers and decision makers
  - Directly elicit experiences of youth and providers who have experienced Stepped Care 2.0 at Memorial

# What is Stepped Care 2.0?



# Study Background

- Stepped care models are suggested to be an effective way to improve mental health outcomes for patients
  - The models also have the potential to reduce the cost of services

- Stepped Care 2.0 was implemented at the Memorial gradually from **2013 – 2015** (walk-in intake started in 2013, stepping principles in 2014, e-Mental Health in 2015)

# Methodology

- The research design is represented in three main phases:

1. Stepped Care model evaluation and identification of misalignments with patients;

2. Realignment of Stepped Care model on patients; and

3. Investigation of methods of adapting patient-centred Stepped Care to an online platform.

-

# Methods: Phase 1

Stepped Care model evaluation and identification of misalignments with patients

- Two to three focus groups with student users of the SWCC
  - Must be familiar (i.e., have used) Stepped Care 2.0
- Up to 10 students per focus group
- Focus groups will be recorded and transcribed verbatim
- Data will be coded independently by two research team members using:
  - A version of constructed (Charmaz, 2006) and semi-grounded (see Glaser & Strauss, 1967) theories; and
  - The Atlas coding program

# Methods: Phase 2

## Realignment of Stepped Care model on patients

- Interviews with providers of the SWCC
  - Faculty and residents with experience delivering Stepped Care 2.0

- Use of a semi-structured interview guide covering a broad range of topics:
  - Opinions of stepped care models from the literature and experience;
  - Recommendations on program access points;
  - Suitable and effective intervention steps;
  - Appropriate degree of face-to-face contact versus online content;
  - Level and quality of communication among providers and with patients;
  - The locus of decision making;
  - Best methods for assessment and monitoring; and
  - Plan for revising the model to address the issues identified in Phase 1

- Analyzed similar to Phase 1

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# Methods: Phase 2

## Realignment of Stepped Care model on patients

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# Preliminary Results: Phase 1

- Recruitment underway for participants

- Challenges obtaining ethics approvals
  - The appropriate methods of identifying and contacting students who have used the centre
  - Preserving the privacy of students during focus groups
  - Ensuring recruitment pool is free of bias

- Current student population is using a slightly modified version of Stepped Care 2.0
  - Need to be creative in how we recruit

- Focus groups are anticipated to take place in August, 2019
  - Facilitated by student volunteers who are part of the project to avoid bias and influence

# Preliminary Results: Phase 2

- **Implementation – Data (Czarnuch)**
  - Initially focused largely on Therapist Assisted Online counselling and Well Track self-help
  - Not enough time during intake (only 30 minutes)
  - Perception that providers were too strongly encouraged to use it
    - Not enough consideration for how it fit into their practice

**Implementation – Comment (Cornish)**

- Focus was on all steps
- 50% of providers found that there was enough time in 30 minutes
- The only requirement for providers was to treat all clients who attended their walk-ins (mean=3.1 week)
  - No requirement to use anything new; the resources were there as an option to use to help manage their caseloads

# Preliminary Results: Phase 2

- **Benefits – Data (Czarnuch)**
  - Majority of providers agreed that it empowered some patients
  - Offered providers potentially useful tools
  - Reminded providers about many different options of care

**Benefits – Comment (Cornish)**

- Providers misinterpreted stepped care as focused exclusively on e-mental health
- Providers were encouraged to expand their toolsets however they wished

# Preliminary Results: Phase 2

- **Disadvantages – Data (Czarnuch)**
  - Challenging to use with clients with chronic or complex presentations, or those at high risk
  - Restricts providers' abilities to directly offer one-on-one longer term therapy
  - Pressure to introduce an "extra step" through online therapies when considered unnecessary

**Disadvantages – Comment (Cornish)**

- There was no expectation to use anything specific with clients unless clients were interested or ready. Providers did not attend optional training on e-MH tools or Stepped Care
- There was no restriction on one-on-one therapy; providers were free to practice however they wanted (only requirement was ½ day of walk-in per week)

# Preliminary Results: Phase 2

- **Overall opinions – Data (Czarnuch)**
  - Most suitable for clients with mild symptoms and uncomplicated presentations
  - A lot of students have complex presentations
    - These clients require the most attention
    - Stepped Care is not ideal for these students

**Overall opinions – Comments (Cornish)**

- Published research indicates low intensity program can be useful adjunct to therapy for clients irrespective of complexity or severity
- SWCC's own data indicate a small minority of students have complex presentations
  - Stepped Care encompasses all conceivable programming (low and high intensity)

# Preliminary Results: Phase 2

- **Overall opinions – Data (Czarnuch)**
  - Promoted as a way of compensating for insufficient number of providers
    - Stepped Care is not filling the gap
  - Some students have paid out of pocket to avoid using Stepped Care
  - Stepped Care is considered a hierarchy of care by majority of providers at the MUN SWCC

**Overall opinions – Comment (Cornish)**

- **Perceived** as a way of compensating for insufficient number of providers
  - Stepped Care simply adds options
  - Visiting observers from Trent University: "MUN providers are not practicing the model as recommended"
- This is anecdotal; now data to support this
- Stepped Care 2.0 distinguishes itself from UK model as being flexible, a buffet to for clients to choose whatever options fit their needs

# Preliminary Results: Phase 2

- **Overall opinions – Data (Czarnuch)**
  - Stepped Care is considered a hierarchy of care by majority of providers at the MUN SWCC
  - "… I think it's basically just a hierarchy of care right? Kind of going from the least intensive to sort of most intensive care um where you can step people kind of up or down … Depending on uh need and also like they're own um preferences and expectations I guess"
  - "nine different areas of where kind of like the needs are for what the client needs at the time and where they are and we also use readiness for change"

**Overall opinions – Comment (Cornish)**

- Stepped Care 2.0 is a flexible model that is misunderstood
  - These bullets **do** describe the model *as it is*
  - Does not have to be a hierarchy when communicated to students
  - The dimensions (hierarchies) encourage policy-makers and providers to consider factors like time, cost, autonomy/empowerment needs of clients as well as readiness – necessary to be accountable to the entire population
  - The dozens of universities and communities that have implemented the model, arrange the steps in a variety of ways

# Preliminary Results: Phase 2

**Recommendations moving forward**
**Data (Czarnuch)**

- Changing intake sessions to one hour (already implemented)
- Transitioning away from a strict approach
  - Viewing Stepped Care 2.0 as a toolbox rather than a protocol

- **Changes implemented since September 2018**
  **Comment (Cornish)**
  - Changing intake sessions to one hour (already implemented)
  - It was always meant to be flexible
  - It is designed to be a guiding flexible protocol and a toolbox
  - Intakes are now scheduled
  - Wait times for intakes went from same-day to 5 weeks
  - Same-day walk-ins are only conducted by students

# Next Steps

- Phase 1:
  - Conduct focus groups with students
  - Analyze data
- Phase 2:
  - Finish interviews with remaining providers
  - Finish data analyses
- Phase 3:
  - Synthesize data from Phase 1 and 2 into design criteria
  - Complete technology review
  - Develop prototype online Stepped Care 2.0 implementation

# Thanks!

- Questions?

Stephen Czarnuch, PhD

sczarnuch@mun.ca

Peter Cornish, PhD

pcornish@mun.ca

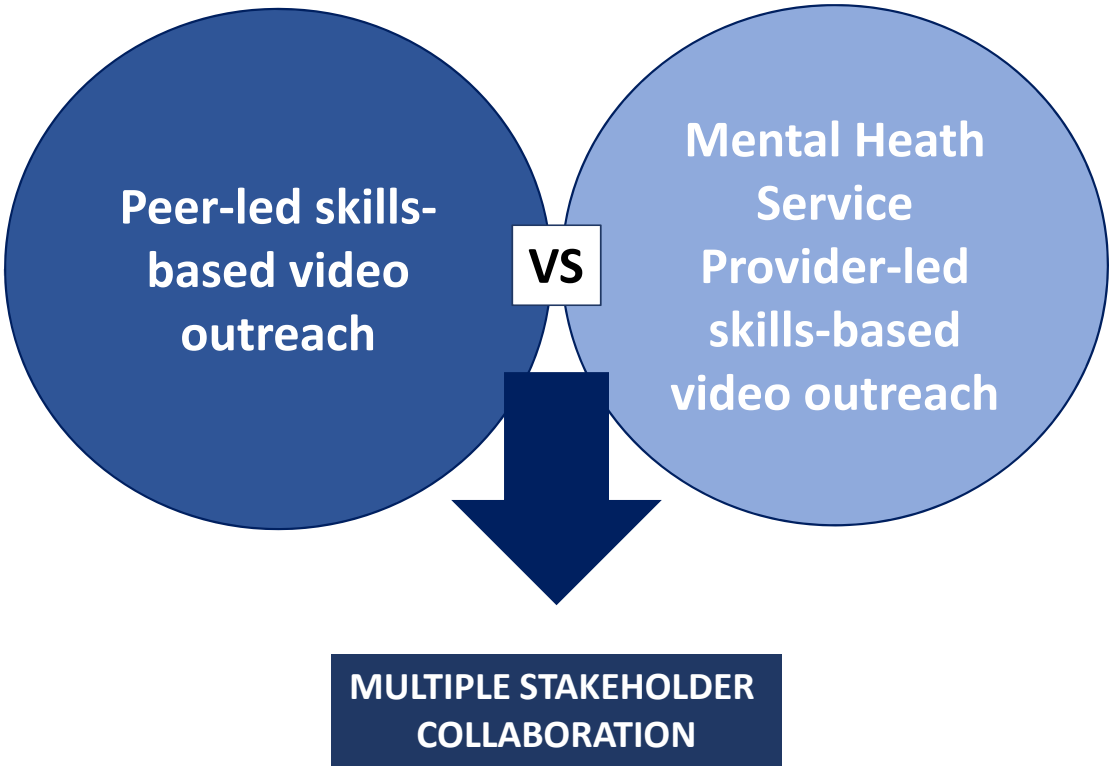
# Peer versus Professional Video Outreach to Enhance Mental Health Resilience in University Students

**CIHR-SPOR Patient-Oriented Research Collaboration**

Di Genova, L., Ph.D., Romano, V., Ph.D., Zito, S., B.A., Bastien, L., B.A., Mettler, J., M.A., & Heath, N., Ph.D.

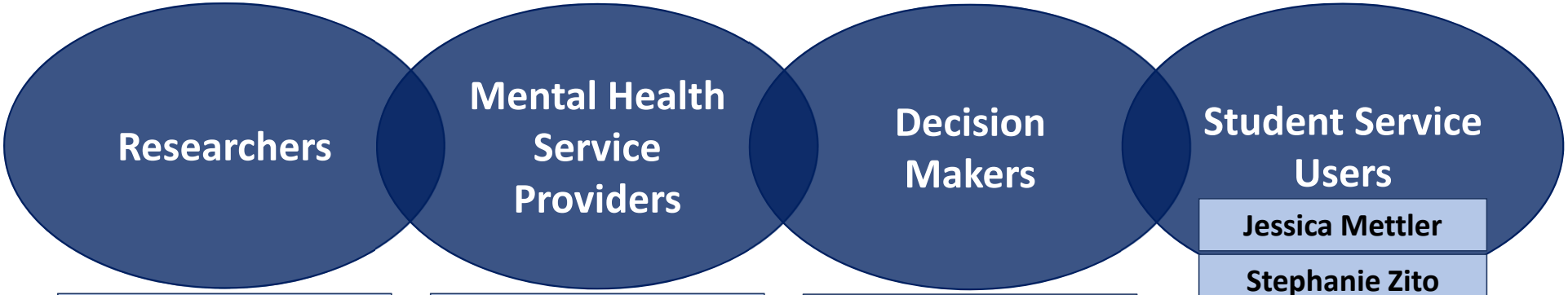
# Project Overview

1) Comparison of:




2) Enhance knowledge about the process of collaborating with multiple stakeholders in the field of mental health and education

# Contributors




**Researchers**

- Dr. Nancy Heath
- Dr. Stephen Lewis
- Dr. Srividya Narayanan Iyer
- Dr. Robert Whitley

**Mental Health Service Providers**

- Dr. Vera Romano
- Dr. Lina Di Genova
- Norman O'Brien

**Decision Makers**

- Martine Gauthier
- Dr. Vera Romano

**Student Service Users**

- Jessica Mettler
- Stephanie Zito
- Bilun Naz Böke
- Isabel Sadowski
- Victoria Carole Eon
- Charlie Burke
- Kyra Kwak
- Nicole Lee
- Ryan Golt
- Francis Charlebois

**Project Coordinator: Laurianne Bastien**

# Background

Stress and mental health difficulties in university students are on the rise and there is a recognized need to develop a multi-stakeholder approach to building student capacity for mental health resilience.

**Upon reviewing the state of the field, determined there was a need for:**

- Enhancing our understanding of the issue from multiple stakeholders' standpoint
- Improving knowledge surrounding peer-led vs. mental health service provider-led online outreach and knowledge about dissemination best practice
- Facilitating and supporting further consensus in the area

# Research Objectives

1. Explore stakeholder perspectives on the process and experience of collaborative co-creation of skills-building outreach
2. Evaluate peer-led versus MHSP-led online skills-building video outreach against a waitlist control group
3. Evaluate relative reach of on-campus mental health services versus peer dissemination of student mental health outreach

# Methods

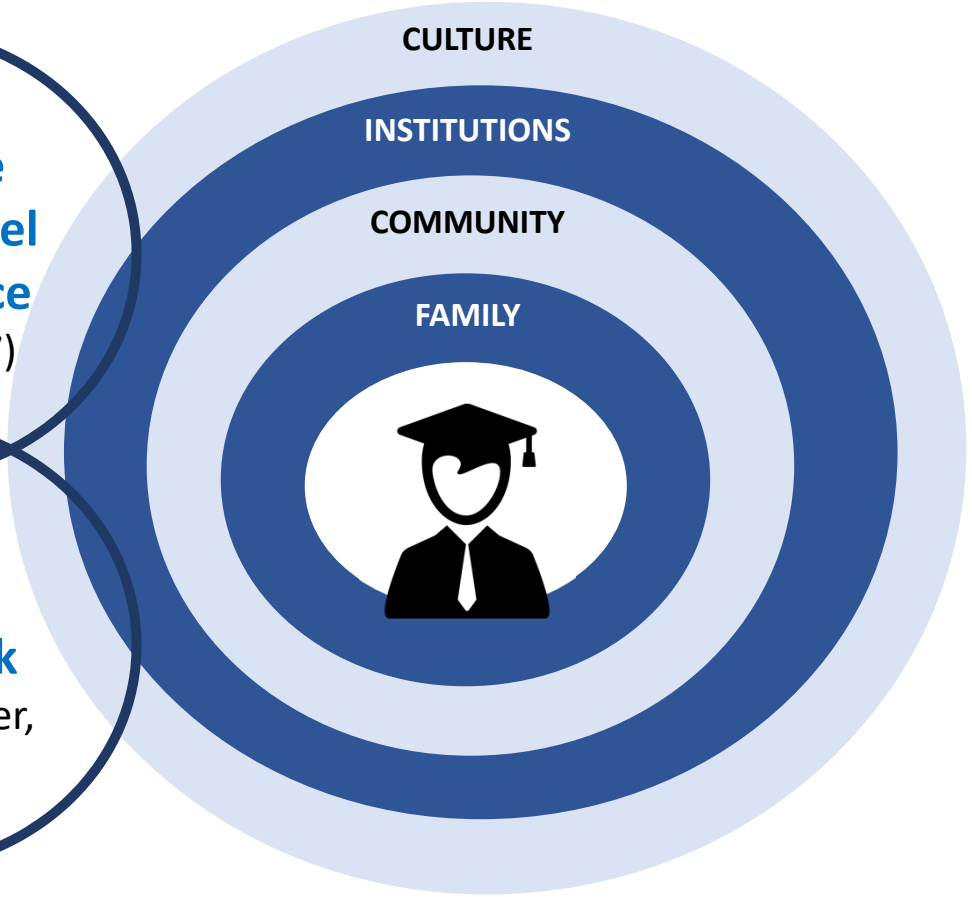

Community-Based Research (CBR) Model
Community Research Canada. *Community-Based Research Canada.*
Participant Action Research (PAR)
(Macaulay, Commanda, Freeman, et al., 1999)
Participatory Video (PV) Framework
(Chávez, Israel, Allen, et al, 2004; Crocker, 2003; Sitter, 2012)

# Methods

Focus on the development of intrapersonal resilience through enhanced coping skills with acknowledgment of environmental context

**Protective Factor Model of Resilience**
(Rutter, 1987)

**Ecological Systems Framework**
(Brofenbrenner, 1992)

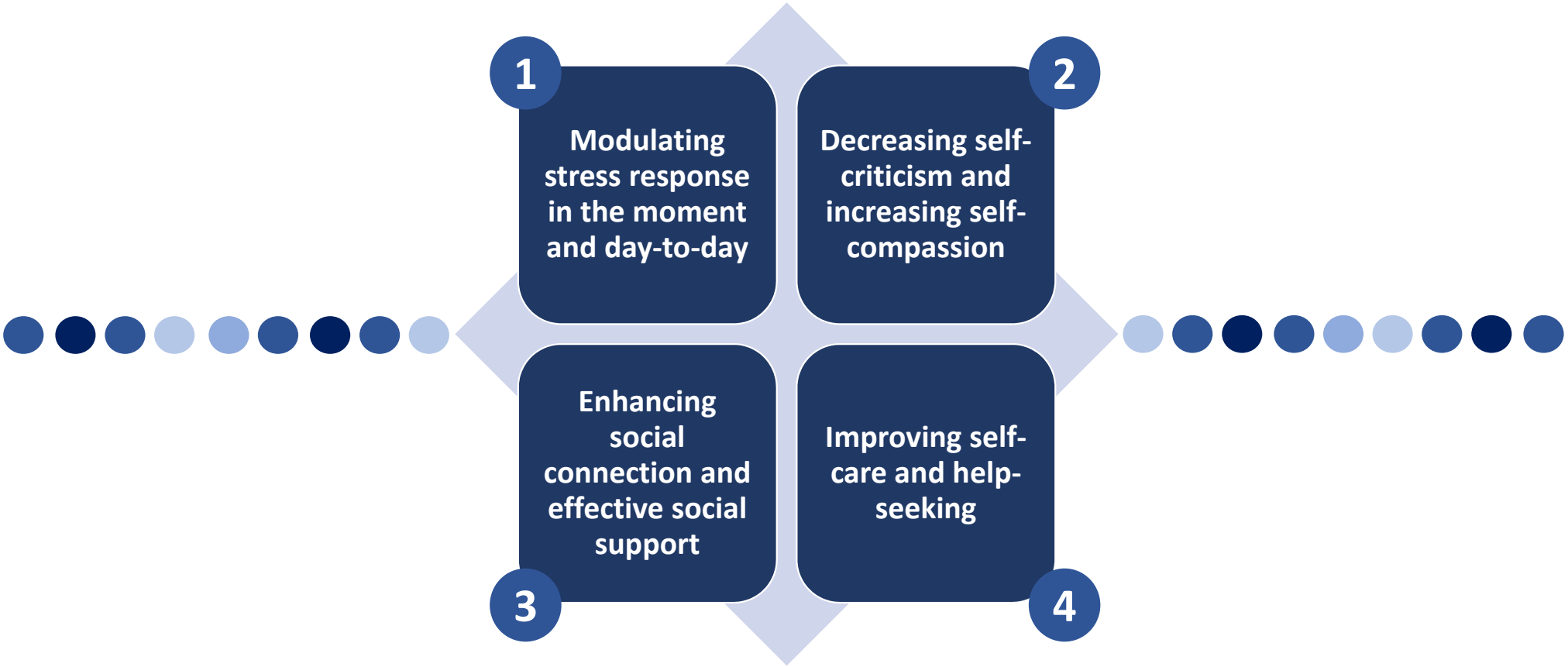


# Progress

*Exploring stakeholders' perspectives on the process and experience of collaborative co-creation of outreach*

- **Regular meetings with all stakeholders including an extended-SSU team**
  - Agreement on core areas for skill-building and method of video outreach
  - Developing SSU-informed content in each core area
  - Co-developing instructional videos

# Progress: *4 Areas of Resilience*



# Progress: *Student Service User Input*

Working in collaboration with the team as equal partners on decisions about:

**Areas of Skill-Building**

- Dealing with break-ups, meeting new people, feeling alone in the classroom

**Style and Length of Videos**

- Shorter videos and visually appealing resources

**Strategies Taught/Practices**

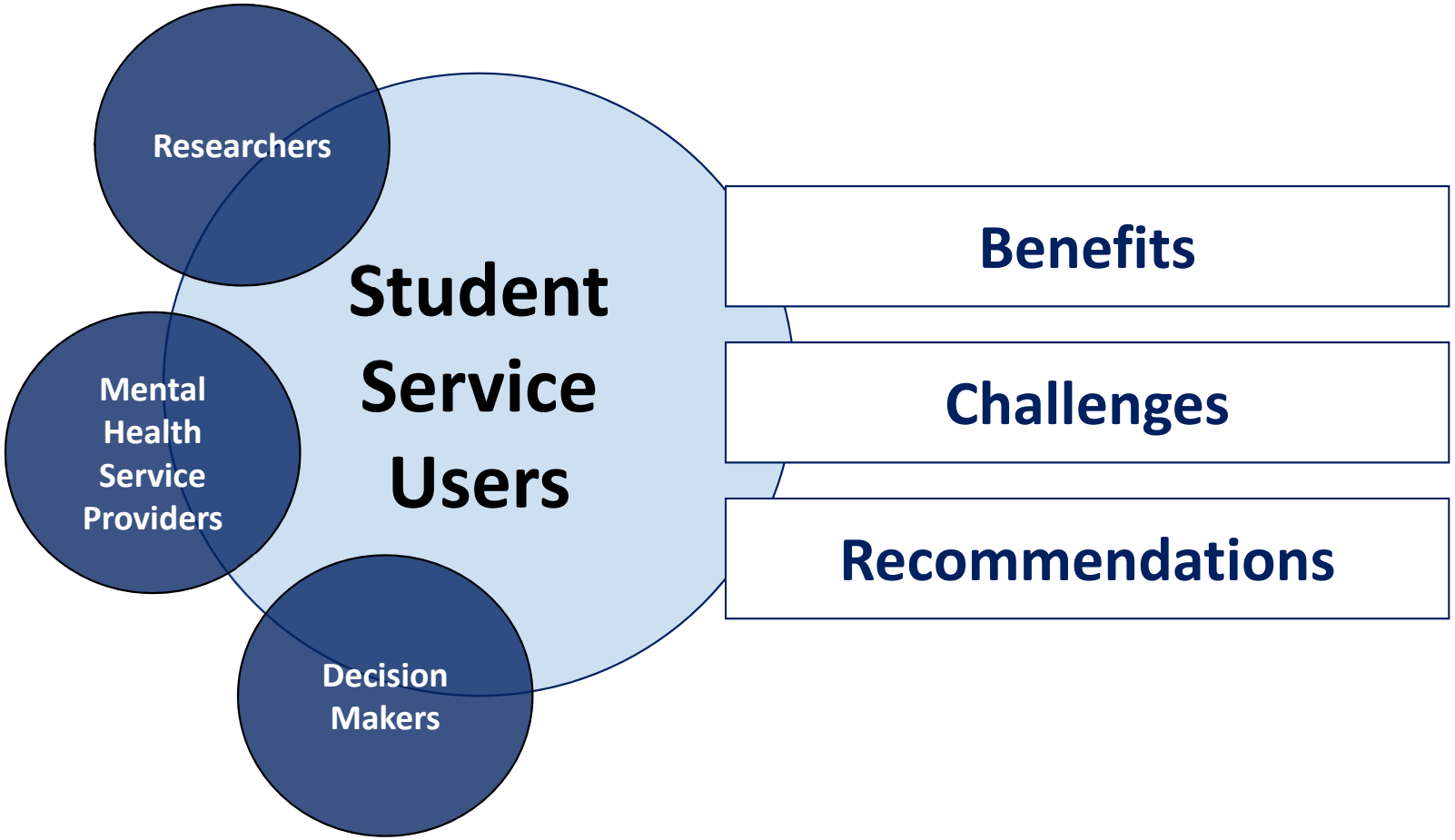
- University-specific resource options

**Method of Instruction**

- Podcasts, infographics and scripted strategies and practices

**Dissemination of Videos**

# Stakeholder Perspectives of the Collaboration



# Benefits of the Collaboration

## Student Service User Perspective

1. Gaining insight on different stakeholder perceptions of university student mental health and well-being
2. Understanding the diversity and range of student difficulties with mental health during university.
3. Feeling understood, heard and valued as representatives of students with lived-experience with mental health difficulties.

"This project recognizes the importance of SSUs' lived experience as a form of expertise on the topic of university student mental health"

# Benefits of the Collaboration

1. All Stakeholders
   - Gaining insight on different stakeholder perceptions of university student mental health and well-being
2. Researcher
   - Fun/relaxed group dynamic and energy, insight into new ways of thinking and different ideas
3. Mental Health Service Provider
   - Realistic timeline for development and implementation of tools

"Highly collaborative process to collect meaningful and high quality evidence."

# Challenges of the Collaboration

## Student Service User Perspective

1. Feeling intimidated or uncomfortable discussing lived experience in front of other stakeholders

> "I still struggle with discussing my own experiences because I feel "exposed" afterwards"

2. Lack of personal connections and emotional bonds between different stakeholder groups

3. Coordinating frequent and consistent meetings with all stakeholder groups present

> "It's hard to get everyone together at the same time and still maintain frequent meetings"

# Challenges of the Collaboration

1

Researcher

Feeling limited by time and technology, collaborating with researchers Canada-wide

2

Researcher and Mental Health Service Provider

Challenging the established dynamic of being in a supervisory role, breaking out of the role of decision maker

**Researcher:**
"As much as I respect and value SSUs as collaborators, we have a history of interacting as teacher/student supervisor/student and it is hard to not fall into that."

3

All Stakeholders

Coordinating frequent and consistent meetings with all stakeholder groups present

# Stakeholder Recommendations

**Establish norms and guidelines, foster a safe and positive group climate through rapport building and open communication**

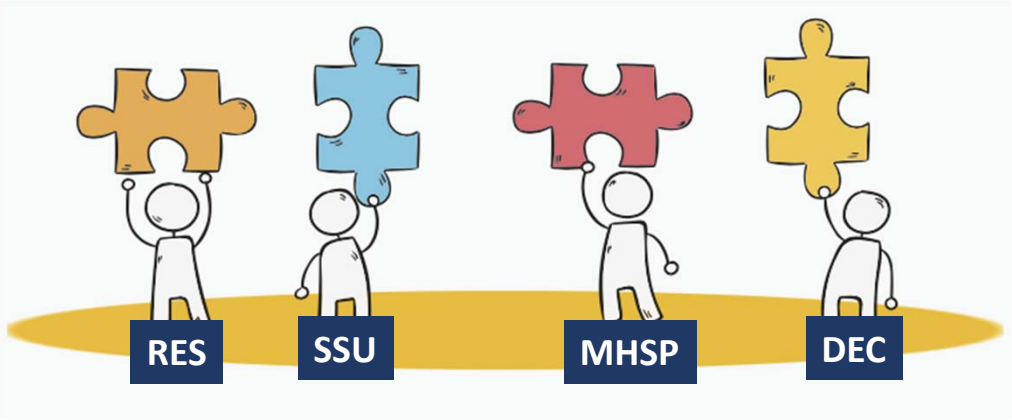
**Keep teams small to improve logistic issues such as scheduling frequent and consistent meetings**

**Allow for greater flexibility at the institutional level. Current policies are not designed in a way that facilitate these types of collaborative projects**

# Conclusion and Future Directions

The current process demonstrates benefits of having a multiple stakeholders perspective

Challenges have also been identified and should be addressed to facilitate future collaborative initiatives



# U-Flourish:
# University Student Well-Being Research

Anne Duffy, MD, FRCPC
CACUSS
June 17, 2019
1:15pm-3:15pm

U-Flourish
Student Well-Being Research

CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

Queen's University

# Crisis on campus: Universities struggle with students in distress

Cash-strapped universities across Canada are trying to cope with a sharp hike in requests from students seeking mental-health services.

**CHARLIE FIDELMAN, MONTREAL GAZETTE** Updated: May 31, 2017

# Queen's SWS Clinical Appointments


2017-2018 year Queen's SWS provided clinical service to over 12,000 students (46% of the population) who attended over 40,000 appointments

SWS Queen's University
Annual Report 2017-2018

# Student petition asks for change in University's mental health treatment

## Calls to improve service circulate social media

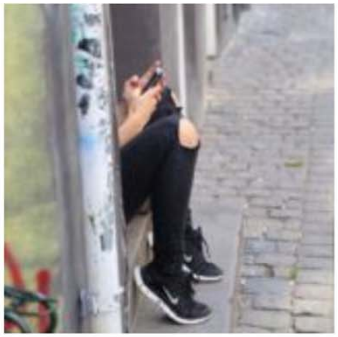
November 2, 2018 | Rachel Aiken

SEP
29
2017

# Is mental malaise the psychological equivalent of obesity?

Posted by
**Stanley Kutcher**

1 Response »



Concerns about the mental health status of young people are increasing with some epidemiological research purporting to suggest heretofore unheard of and skyrocketing rates of Depression and Anxiety Disorders. The response to this information has often been to call for more specialty mental health services and to create social interventions that are designed to lessen what much commentary calls *"huge pressures"* supposedly facing young people. Media headlines featuring the words *"epidemic"* and *"crisis"* linked to terms *"mental health"* and *"mental illness"* are becoming increasingly common.

Unfortunately, all this attention is not likely to help us understand what social phenomenon we may be witnessing nor whether many of the proposed interventions are likely to help. A new mental health briefing paper published last week well illustrates this point (Patalay & Fitzsimons, 2017).

# STUDENT MENTAL HEALTH

The 2.3 million students studying at UK universities are an important mental health population, with distinctive characteristics and vulnerabilities.

There is limited direct evidence on student mental health; the most reliable data is provided by proxy measures of disclosure and demand for services.

| | 2007–08 | 2008–09 | 2009–10 | 2010–11 | 2011–12 | 2012–13 | 2013–14 | 2014–15 | 2015–16 | 2017–18 |
|---|---|---|---|---|---|---|---|---|---|---|
| PG: | 1,260 | 1,485 | 1,745 | 2,185 | 2,720 | 3,195 | 3,925 | 4,590 | 5,625 | 8,040 |
| UG: | 8,415 | 9,715 | 11,310 | 14,325 | 18,010 | 21,435 | 25,450 | 30,910 | 39,275 | 49,265 |

The number of students disclosing a mental health condition to their higher education institution is increasing

POSTGRADUATE UNDERGRADUATE

Universities UK, 2018

# 16- 25 years is the peak period for onset of mental illness


**The incidences of mood, anxiety, psychotic, personality, eating, and substance use disorders peak in adolescence and early adulthood: 50% of mental health problems are established by age 14 and 75% by age 24.**

Kim-Cohen et al., 2007, Kessler et al., 2007, Universities UK

Towards Optimal Brain and Psychosocial Development

# Burden of illness 10-24 year olds

| Rank | Cause | Total DALYs x 1000 ( %) |
|---|---|---|
| 1 | **Depressive Disorders** | 193 (8.2%) |
| 2 | Road accidents | 127 (5.4%) |
| 3 | **Schizophrenia** | 96 (4.1%) |
| 4 | **Bipolar Disorder** | 88 (3.8%) |
| 5 | Violence | 81 (3.5%) |
| 6 | Alcohol use | 71 (3.0%) |
| 7 | HIV/AIDS | 70 (3.0%) |
| 8 | Self-inflicting injuries | 67 (2.8%) |
| 9 | Tuberculosis | 60 (2.6%) |
| 10 | Respiratory infections | 60 (2.6%) |

Gore et al, 2011

Flourish
Mood Disorders Research

# Pathways to self harm in adolescents and emerging adults

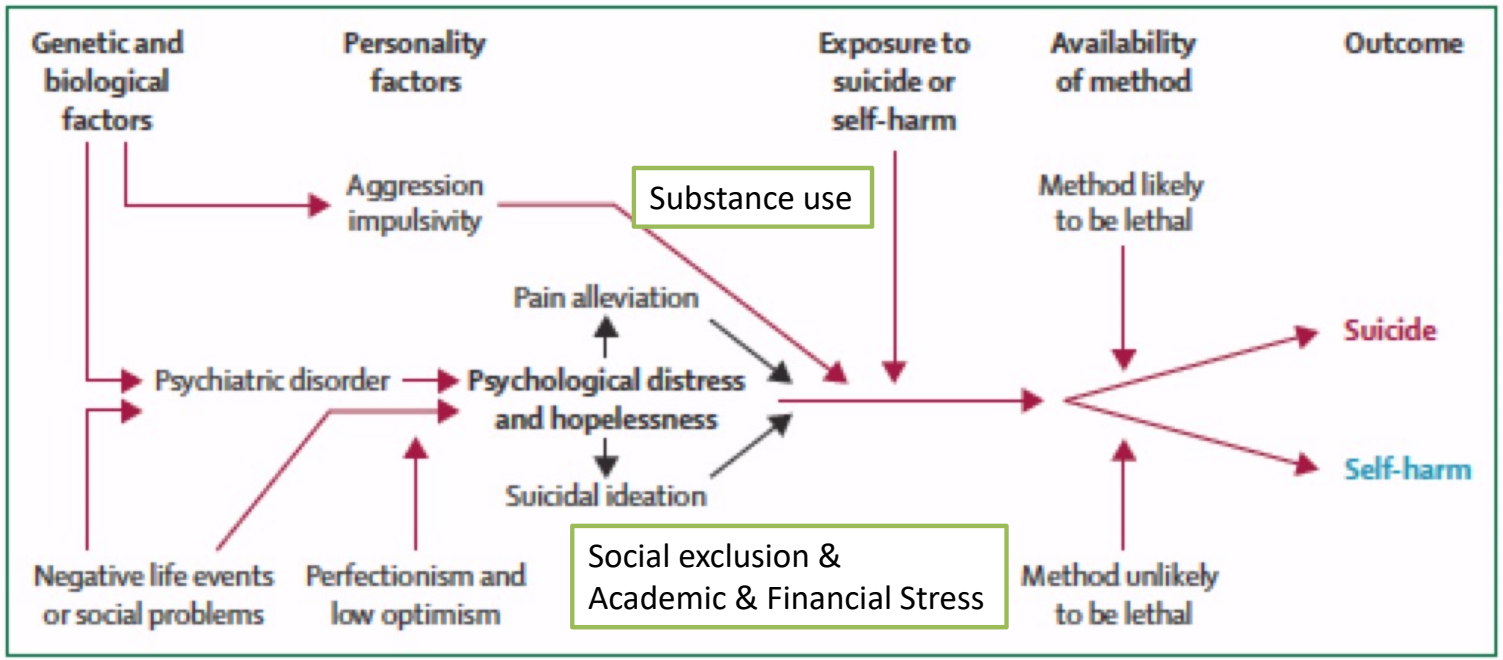



**Figure 2: Key risk factors for adolescent self-harm and suicide**

Hawton, Saunders, O'Connor, 2012

NEWS

# Partnership aims to reduce alcohol harms on Canadian campuses

2016 survey 43,000+ students
- 30% report binge drinking
  18% related injury
  24% unprotected sex
  29% blacking out
  38% something regretted

While binge drinking isn't a new issue for universities and colleges, a more collaborative effort has emerged.

By ANQI SHEN | AUG 16 2017

Post a comment | Share

Thirty-six universities and colleges have teamed up with the Canadian Centre on Substance Use and Addiction and Universities Canada in an effort to curb high-risk drinking. The Postsecondary Partnership – Alcohol Harms (PEP-AH), as it's called, is connecting students and administrators with health experts to create campus programs to reduce harms related to binge drinking.

University Affairs, 2017

# Cannabis Use Canadian University Students

## OVERALL

| Never | Less than once a year | Less than once a month | About once a month | A few times a week | Daily |
|---|---|---|---|---|---|
| 63% | 11% | 10% | 4% | 3% | 2% |

## BY SCHOOL

*Universities with a percentage of students reporting various levels of marijuana use.*

| School | Less than once a year | Less than once a month | About once a month | A few times a month | A few ties a week | Daily | Overall |
|---|---|---|---|---|---|---|---|
| Bishop's University | 14% | 15% | 7% | 12% | 6% | 6% | 60% |
| St. Francis Xavier University | 10% | 13% | 8% | 13% | 10% | 2% | 56% |
| Acadia University | 12% | 13% | 4% | 11% | 5% | 8% | 53% |
| Dalhousie University | 13% | 13% | 8% | 7% | 4% | 5% | 50% |
| University of Victoria | 12% | 15% | 7% | 9% | 5% | 2% | 49% |
| Queen's University | 13% | 13% | 8% | 8% | 5% | 1% | 48% |

Macleans 2018

Clinical Review & Education

Review

# Effects of Cannabis Use on Human Behavior, Including Cognition, Motivation, and Psychosis: A Review

Nora D. Volkow, MD; James M. Swanson, PhD; A. Eden Evins, MD; Lynn E. DeLisi, MD; Madeline H. Meier, PhD; Raul Gonzalez, PhD; Michael A. P. Bloomfield, MRCPsych; H. Valerie Curran, PhD; Ruben Baler, PhD

With a political debate about the potential risks and benefits of cannabis use as a backdrop, the wave of legalization and liberalization initiatives continues to spread. Four states (Colorado, Washington, Oregon, and Alaska) and the District of Columbia have passed laws that legalized cannabis for recreational use by adults, and 23 others plus the District of Columbia now regulate cannabis use for medical purposes. These policy changes could trigger a broad range of unintended consequences, with profound and lasting implications for the health and social systems in our country. Cannabis use is emerging as one among many interacting factors that can affect brain development and mental function. To inform the political discourse with scientific evidence, the literature was reviewed to identify what is known and not known about the effects of cannabis use on human behavior, including cognition, motivation, and psychosis.

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**Author Affiliations:** Author affiliations are listed at the end of this article.

**Corresponding Author:** Nora D. Volkow, MD, National Institute on Drug Abuse, National Institutes of Health, 6001 Executive Blvd, Bethesda, MD 20892 (nvolkow@nida.nih.gov).

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ORIGINAL ART

# Mental disorders among college students in the World Health Organization World Mental Health Surveys

**R. P. Auerbach[1,2], J. Alonso[3,4,5], W. G. Axinn[6], P. Cuijpers[7,8], D. D. Ebert[9], J. G. Green[10], I. Hwang[11], R. C. Kessler[11]*, H. Liu[12], P. Mortier[13], M. K. Nock[14], S. Pinder-Amaker[1,2], N. A. Sampson[11], S. Aguilar-Gaxiola[15], A. Al-Hamzawi[16], L. H. Andrade[17], C. Benjet[18], J. M. Caldas-de-Almeida[19], K. Demyttenaere[20], S. Florescu[21], G. de Girolamo[22], O. Gureje[23], J. M. Haro[24], E. G. Karam[25,26,27], A. Kiejna[28], V. Kovess-Masfety[29], S. Lee[30], J. J. McGrath[31,32], S. O'Neill[33], B.-E. Pennell[34], K. Scott[35], M. ten Have[36,37], Y. Torres[38], A. M. Zaslavsky[11], Z. Zarkov[39] and R. Bruffaerts[40]**

[1] *Department of Psychiatry, Harvard Medical School, Boston, MA, USA;* [2] *Center for Depression, Anxiety and Stress Research, McLean Hospital, Belmont, MA, USA;* [3] *Institut Hospital del Mar d'Investigacions Mèdiques (IMIM), Barcelona, Spain;* [4] *CIBERESP-CIBER en Epidemiología y Salud Pública, Madrid, Spain;* [5] *Department of Experimental and Health Sciences, University Pompeu Fabra, Barcelona, Spain;* [6] *Department of Sociology, Population Studies Center, Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, MI, USA;* [7] *Department of Clinical, Neuro, and Developmental Psychology, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands;* [8] *EMGO Institute for Health and Care Research, Amsterdam, The Netherlands;* [9] *Department of Psychology, Clinical Psychology and Psychotherapy, Friedrich-Alexander University Nuremberg-Erlangen, Erlangen, Germany;* [10] *School of Education, Boston University, Boston, MA, USA;* [11] *Department of Health Care Policy, Harvard Medical School, Boston, MA, USA;* [12] *Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA, USA;* [13] *Research Group Psychiatry, Department of Neurosciences, KU Leuven University, Leuven, Belgium;* [14] *Department of Psychology, Harvard University, Cambridge, MA, USA;* [15] *University of California Davis Center for Reducing Health Disparities, School of Medicine, Sacramento, CA, USA;* [16] *College of Medicine, Al-Qadisiya University, Diwania Governorate, Iraq;* [17] *Section of Psychiatric Epidemiology – LIM 23, Institute of Psychiatry, University of São Paulo Medical School, São Paulo, Brazil;* [18] *Department of Epidemiologic and Psychosocial Research, National Institute of Psychiatry Ramón de la Fuente Muñiz, Mexico City, Mexico;* [19] *Chronic Diseases Research Center (CEDOC) and Department of Mental Health, Faculdade de Ciências Médicas, Universidade Nova de Lisboa, Lisbon, Portugal;* [20] *Department of Psychiatry, University Hospital Gasthuisberg, Katholieke Universiteit Leuven, Leuven, Belgium;* [21] *National School of Public Health, Management and Professional Development, Bucharest, Romania;* [22] *IRCCS St John of God Clinical Research Centre, Brescia, Italy;* [23] *Department of Psychiatry, University College Hospital, Ibadan, Nigeria;* [24] *Parc Sanitari Sant Joan de Déu, CIBERSAM, Universitat de Barcelona, Barcelona, Spain;* [25] *Department of Psychiatry and Clinical Psychology, Faculty of Medicine, Balamand University, Beirut, Lebanon;* [26] *Department of Psychiatry and Clinical Psychology, St George Hospital University Medical Center, Beirut, Lebanon;* [27] *Institute for Development Research Advocacy and Applied Care (IDRAAC), Beirut, Lebanon;* [28] *Department of Psychiatry, Wroclaw Medical University, Wroclaw, Poland;* [29] *Ecole des Hautes Etudes en Santé Publique (EHESP), EA 4057 Paris Descartes University, Paris, France;* [30] *Department of Psychiatry, Chinese University of Hong Kong, Tai Po, Hong Kong;* [31] *Queensland Centre for Mental Health Research, The Park Centre for Mental Health, Wacol, Queensland, Australia;* [32] *Queensland Brain Institute, The University of Queensland, St. Lucia, Queensland, Australia;* [33] *School of Psychology, University of Ulster, Londonderry, UK;* [34] *Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, MI, USA;* [35] *Department of Psychological Medicine, University of Otago, Dunedin, Otago, New Zealand;* [36] *Trimbos-Instituut, Netherlands Institute of Mental Health and Addiction, Utrecht, the Netherlands;* [37] *Department of Epidemiology, Netherlands Institute of Mental Health and Addiction, Utrecht, the Netherlands;* [38] *Center for Excellence on Research in Mental Health, CES University, Medellín, Colombia;* [39] *Department Mental Health, National Center of Public Health and Analyses, Sofia, Bulgaria;* [40] *Universitair Psychiatrisch Centrum – Katholieke Universiteit Leuven (UPC-KUL), Campus Gasthuisberg, Leuven, Belgium*

Study of prevalence of mental disorders & substance use in over 1,500 college students and 4,000 non-students aged 18-22 from 21 countries

# 12- month prevalence mental disorders among 18-22 year olds- WHO study

**Table 1.** *Pooled 12-month prevalence of DSM-IV/CIDI mental disorders separately among respondents aged 18–22 years who were current students, college attriters and non-students in the same age range*[a]

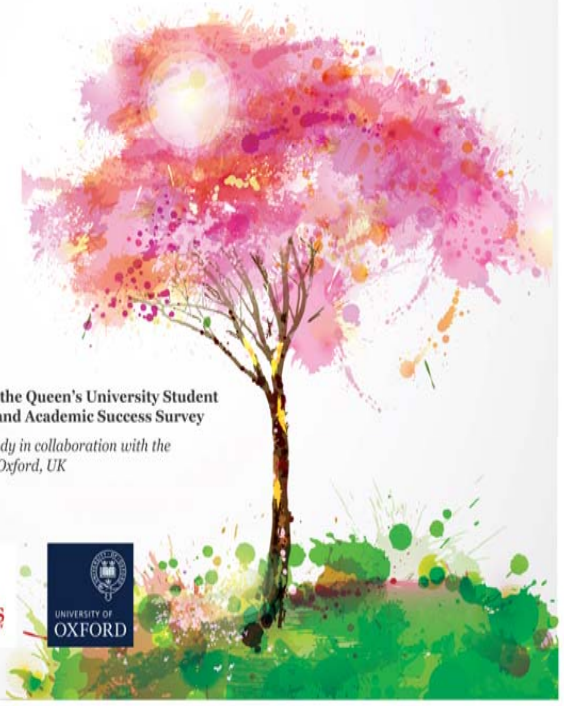
| | Students % (S.E.) | Attriters % (S.E.) | Other % (S.E.) | Students *v.* attriters[b] OR (95% CI) | Students *v.* other[b] OR (95% CI) | AUC[c] |
|---|---|---|---|---|---|---|
| I. Anxiety disorders | | | | | | |
| Any | 11.7 (1.3) | 14.7 (1.6) | 12.9 (0.6) | 1.0 (0.7–1.4) | 0.9 (0.7–1.2) | 0.69 |
| II. Mood disorders | | | | | | |
| Any | 6.0 (0.7) | 9.9 (1.0) | 7.6 (0.5) | 0.8 (0.6–1.1) | 0.7 (0.6–1.0)* | 0.68 |
| III. Behavioral disorders | | | | | | |
| Any | 2.8 (0.4) | 5.3 (1.1) | 3.8 (0.3) | 0.6 (0.4–1.0)* | 0.7 (0.5–0.9)* | 0.79 |
| IV. Substance disorders | | | | | | |
| Any | 4.5 (0.6) | 6.7 (1.1) | 5.8 (0.4) | 0.9 (0.5–1.4) | 0.7 (0.5–0.9)* | 0.78 |
| V. Total disorders | | | | | | |
| Low/lower middle-income countries | 12.8 (1.9) | 13.4 (2.5) | 14.7 (1.1) | 1.1 (0.6–1.9) | 0.8 (0.6–1.2) | 0.64 |
| Upper-middle-income countries | 21.8 (4.9) | 31.8 (6.5) | 21.9 (1.9) | 0.8 (0.3–2.0) | 1.0 (0.5–1.8) | 0.63 |
| High-income countries | 25.2 (1.7) | 27.5 (2.6) | 27.3 (1.4) | 1.1 (0.8–1.5) | 0.9 (0.7–1.1) | 0.66 |
| Total | 20.3 (1.4) | 25.0 (2.0) | 21.4 (0.8) | 1.0 (0.8–1.3) | 0.9 (0.7–1.1) | 0.67 |
| *n* | 1572 | 702 | 3476 | – | – | – |

Auerbach et a., 2016


CIHR IRSC | Canadian Institutes of Health Research | Instituts de recherche en santé du Canada

# Flourish

## *The Queen's University Student Well-Being Survey*



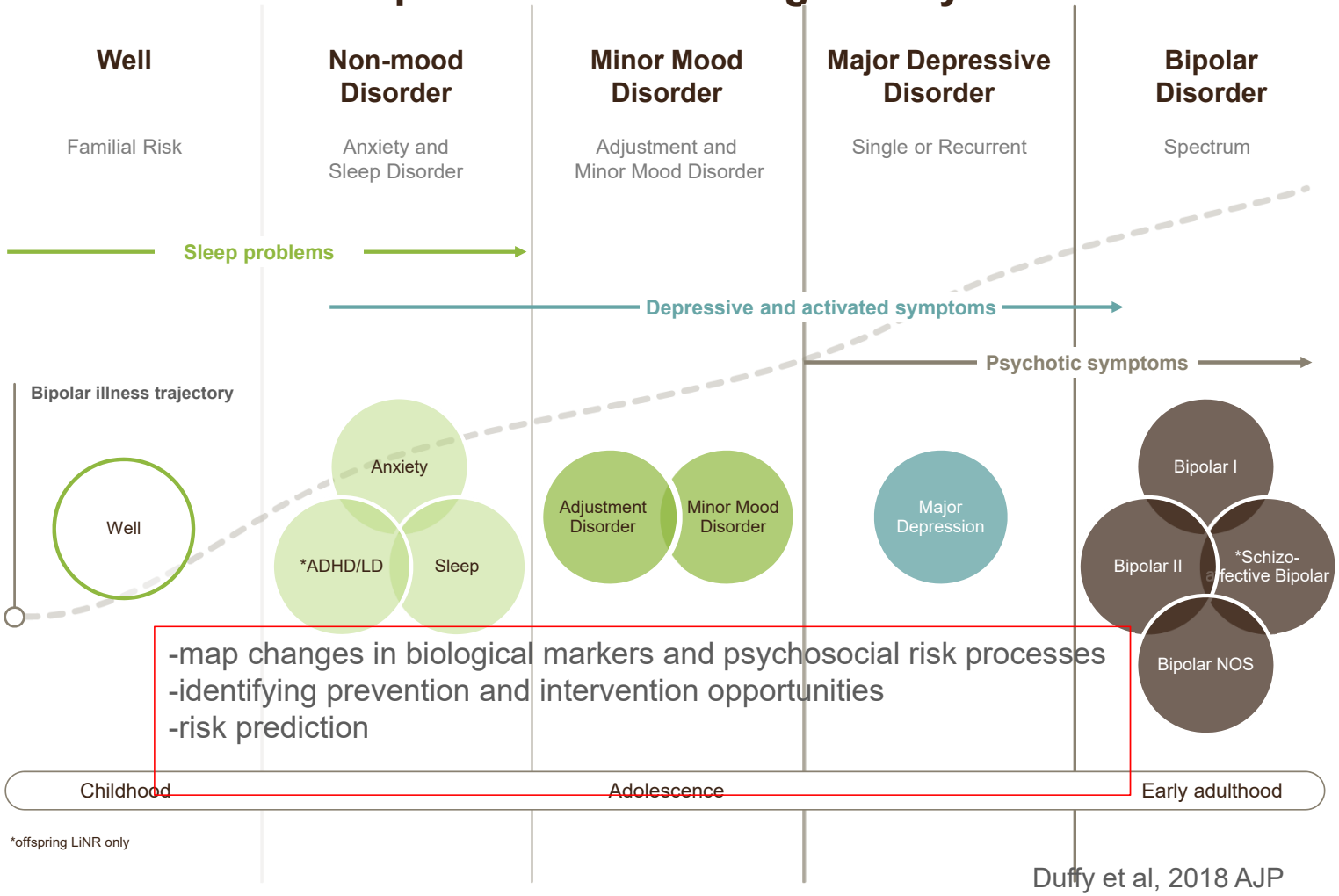
**Welcome to the Queen's University Student Well-Being and Academic Success Survey**

*A research study in collaboration with the University of Oxford, UK*

Queen's University

University of Oxford

# CIHR funded longitudinal research mapping the developmental trajectory of bipolar disorder in high-risk youth




Duffy et al, 2018 AJP

# U-Flourish model of pathways to well-being and academic success

**Family Factors**
- Parental education
- Parent attitudes
- Parental warmth
- Family history

**Personal Factors**
- Mental health
- Physical health
- Self-esteem
- Social competence

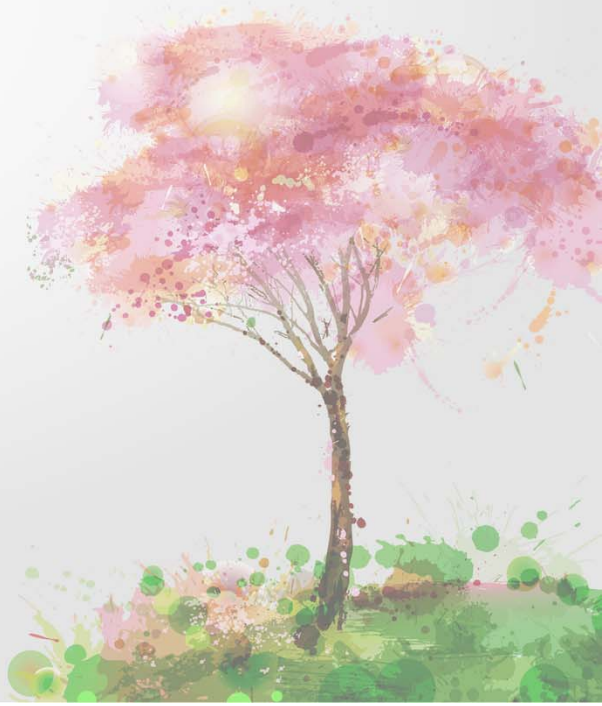
**Environment**
- Early adversity
- Peer relationships
- Perceived stress

**Psychological**
- Expectancy beliefs
- University value appraisal

**Lifestyle & Behaviour**
- Exercise
- Substance use
- Self-regulation
- Help seeking

**Mental Health**
- Emotional symptoms
- Mental illness
- Life satisfaction
- Well-being

**Academic Success**
- Grades, retention
- Perceived success
- Returning to school



# U-Flourish Study Plan

Social media posts
Digital posters
In residence events
100 level class talks
incentives

Engagement Campaign

Survey creation and pilot testing

Baseline survey link sent

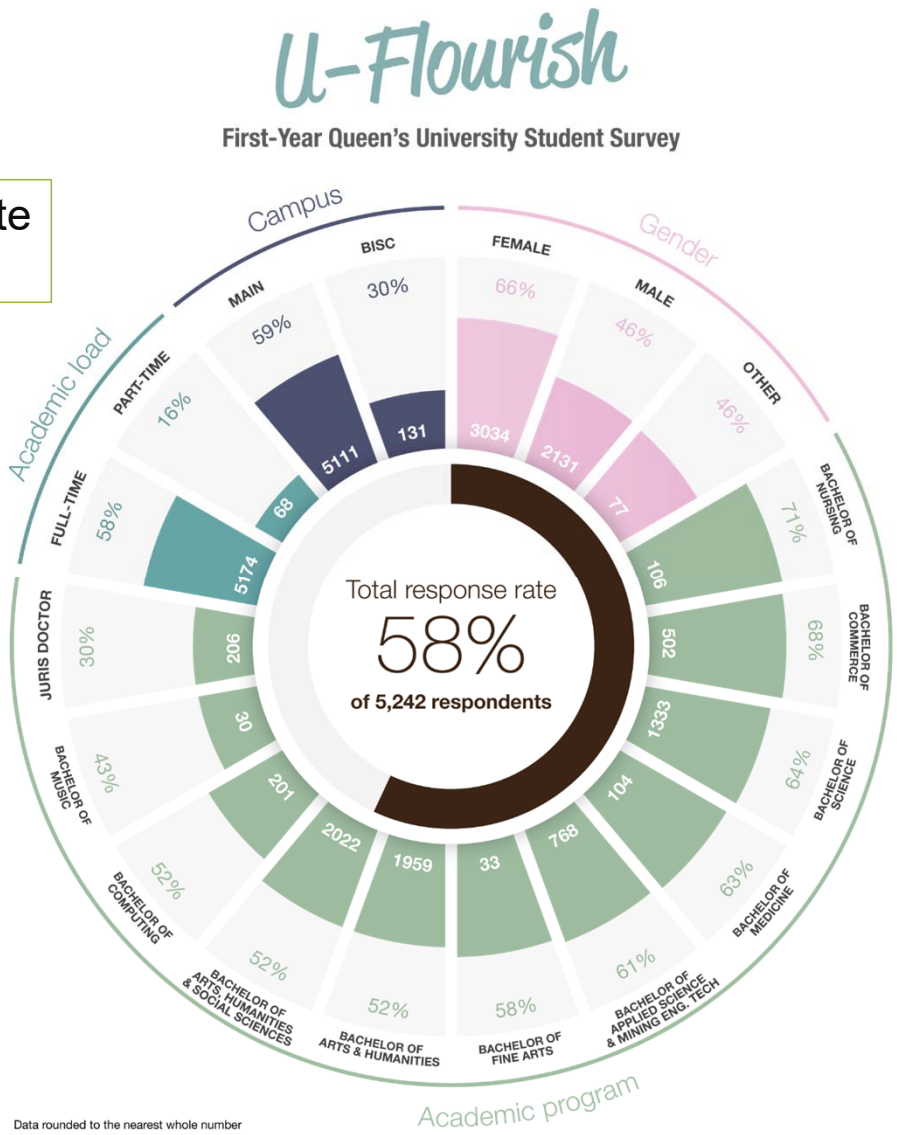
Engagement Campaign

Follow-up survey link sent

Survey Analysis & Data Linkage

September October November December January February March April

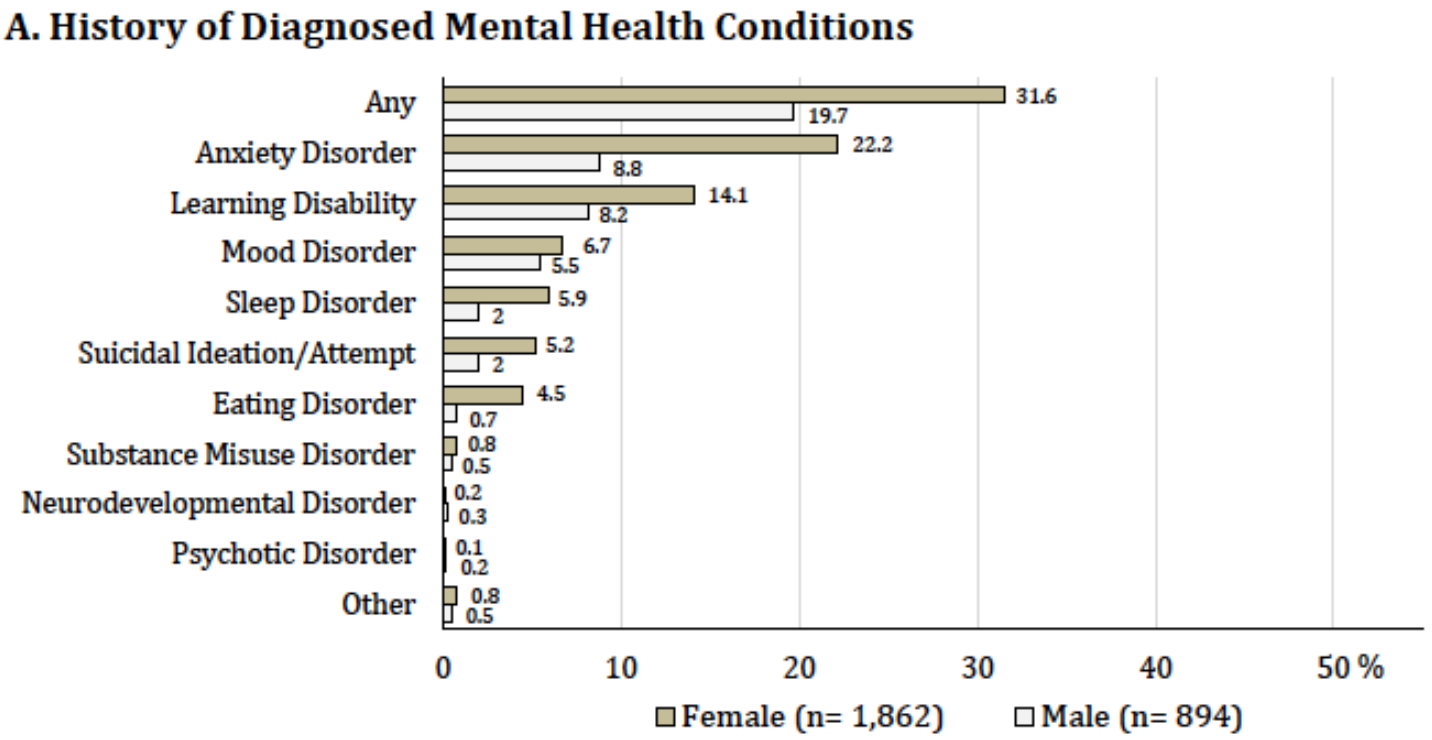
68% completion rate
End of term survey




Data rounded to the nearest whole number

U-Flourish
Student Well-Being Research

# U-Flourish Queen's First Year Cohort



# Substance Use

**Table 3.** Description of Substance Use in the Past Month, Overall and by Sex/Gender

| | Full Sample (n= 3,029) | | Male (n= 978) | | Female (n= 2,012) | | Other (n= 25) | |
|---|---|---|---|---|---|---|---|---|
| Substance use, *at least one a week* | n | (%) | n | (%) | n | (%) | n | (%) |
| Any | 891 | (32.7) | 360 | (41.5) | 524 | (28.5) | 7 | (33.3) |
| Binge drinking | 667 | (24.5) | 282 | (32.5) | 383 | (20.9) | 2 | (9.5) |
| Cannabis | 302 | (11.3) | 146 | (17.3) | 152 | (8.4) | 4 | (19.1) |
| Non-prescribed sleeping pills or stimulants | 155 | (5.7) | 55 | (6.4) | 96 | (5.2) | 4 | (19.1) |
| Pain killers or Opiates | 58 | (2.2) | 22 | (2.6) | 34 | (1.9) | 2 | (9.5) |
| Illicit drugs (psychedelics, cocaine, ecstasy) | 36 | (1.3) | 22 | (2.6) | 13 | (0.7) | 1 | (4.8) |
| Binge drinking (≥4 drinks on one occasion) | | | | | | | | |
| None | 1011 | (37.1) | 276 | (31.8) | 721 | (39.3) | 14 | (66.7) |
| Once | 396 | (14.6) | 125 | (14.4) | 270 | (14.7) | 1 | (4.8) |
| 2-3 times | 648 | (23.8) | 184 | (21.2) | 460 | (25.1) | 4 | (19.1) |
| 4 or more times | 667 | (24.5) | 282 | (32.5) | 383 | (20.9) | 2 | (9.5) |
| Cannabis | | | | | | | | |
| Never | 1972 | (73.8) | 565 | (67.0) | 1391 | (76.9) | 16 | (76.2) |
| Less than once a week | 399 | (14.9) | 132 | (15.7) | 266 | (14.7) | 1 | (4.8) |
| Once a week | 158 | (5.9) | 68 | (8.1) | 88 | (4.9) | 2 | (9.5) |
| More than once a week | 144 | (5.4) | 78 | (9.3) | 64 | (3.5) | 2 | (9.5) |
| *Missing/Prefer not to say, 1 or more* | *421* | | *154* | | *248* | | *5* | |

King et al., in prep

# Self-Harm/Suicidal Behaviour or Ideation

**Table 2.** Self-reported Physical and Mental Health Status of the Cohort, Overall and by Sex/Gender

| | Full Sample (n= 3,029) | | Male (n= 978) | | Female (n= 2,012) | | Other (n= 25) | |
|---|---|---|---|---|---|---|---|---|
| *Suicide and Self Harm; Have you ever…* | | | | | | | | |
| Wished you were dead or could not wake up | 929 | (34.1) | 216 | (24.9) | 698 | (37.9) | 15 | (71.4) |
| Had thoughts about ending your life | 792 | (29.0) | 203 | (23.4) | 575 | (31.3) | 14 | (66.7) |
| Self-harmed without intent to end your life | 479 | (17.6) | 73 | (8.4) | 395 | (21.5) | 11 | (52.4) |
| Attempted to end your life | 166 | (6.1) | 30 | (3.5) | 129 | (7.0) | 7 | (33.3) |

King et al., in prep

# U-Flourish Queen's First Year Cohort

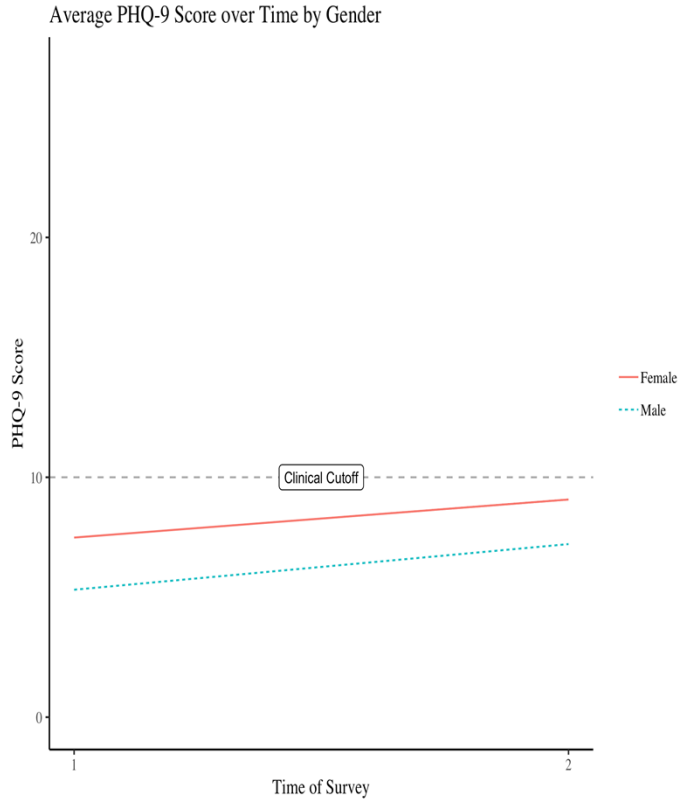
**Table 4.** Percentage of first year students with specific mental health conditions, and receipt of treatment or support, by gender

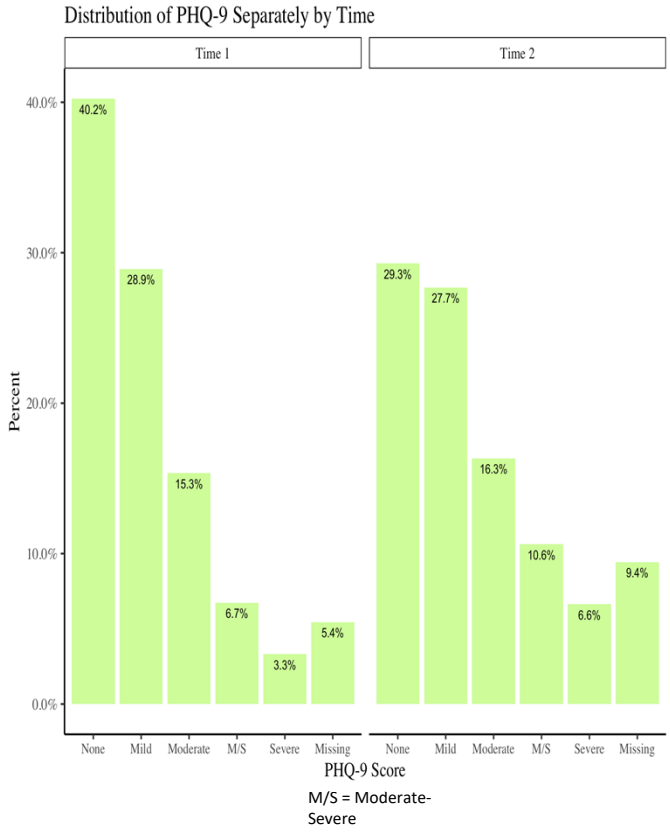
| Gender: | Diagnosed with Mental Health Condition | | | | | Symptomatic of Mental Health Condition[1] | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | No Treatment/Support | | | | | No Treatment/Support | |
| **Mental health condition** | **N Total** | **N** | **(%)** | **%** | **(95% CI)** | **N Total[2]** | **N** | **(%)** | **%** | **(95% CI)** |
| **Males** | | | | | | | | | | |
| Any condition | 894 | 176 | (19.7) | 81.3 | (75.5 to 87.0) | 653 | 406 | (62.2) | 99.0 | (97.5 to 100) |
| Anxiety disorder | 894 | 79 | (8.8) | 77.2 | (68.0 to 86.5) | 739 | 136 | (18.4) | 93.4 | (89.2 to 97.6) |
| Mood disorder | 894 | 49 | (5.5) | 71.4 | (58.8 to 84.1) | 757 | 141 | (18.6) | 92.9 | (88.7 to 97.1) |
| Sleep disorder | 894 | 18 | (2.0) | 88.9 | (74.4 to 100) | 786 | 90 | (11.5) | 87.8 | (81.0 to 94.5) |
| Substance use disorder | 894 | 4 | (0.5) | 100 | (40.0 to 100) | 802 | 337 | (42.0) | 96.1 | (94.1 to 98.2) |
| Eating disorder | 894 | 6 | (0.7) | 83.3 | (53.5 to 100) | - | - | - | - | - |
| Learning disability | 894 | 73 | (8.2) | 84.9 | (76.7 to 93.1) | - | - | - | - | - |
| Suicidal Ideation/Attempt | 894 | 18 | (2.0) | 88.9 | (74.4 to 100) | 789 | 184 | (23.3) | 88.6 | (84.0 to 93.2) |
| Other disorder | 894 | 9 | (1.0) | 66.7 | (35.9 to 97.5) | - | - | - | - | - |
| **Females** | | | | | | | | | | |
| Any condition | 1861 | 589 | (31.7) | 67.1 | (63.3 to 70.9) | 1201 | 733 | (61.0) | 99.2 | (98.5 to 99.8) |
| Anxiety disorder | 1861 | 414 | (22.3) | 59.7 | (54.9 to 64.4) | 1359 | 420 | (30.9) | 96.7 | (95.0 to 98.4) |
| Mood disorder | 1861 | 263 | (14.1) | 54.4 | (48.4 to 60.4) | 1490 | 394 | (26.4) | 92.9 | (90.4 to 95.4) |
| Sleep disorder | 1861 | 83 | (4.5) | 63.9 | (53.5 to 74.2) | 1647 | 306 | (18.6) | 80.7 | (76.3 to 85.1) |
| Substance use disorder | 1861 | 15 | (0.8) | 46.7 | (21.4 to 71.9) | 1710 | 469 | (27.4) | 86.4 | (83.3 to 89.5) |
| Eating disorder | 1861 | 110 | (5.9) | 69.1 | (60.5 to 77.7) | - | - | - | - | - |
| Learning disability | 1861 | 125 | (6.7) | 69.6 | (61.5 to 77.7) | - | - | - | - | - |
| Suicidal Ideation/Attempt | 1861 | 97 | (5.2) | 48.5 | (38.5 to 58.4) | 1642 | 476 | (29.0) | 85.1 | (81.9 to 88.3) |
| Other disorder | 1861 | 18 | (1.0) | 66.7 | (44.9 to 88.4) | - | - | - | - | - |

[1]Symptomatic if score greater than or equal to (clinical) cut-off for disorder

[2]Total excludes students with equivalent diagnosis

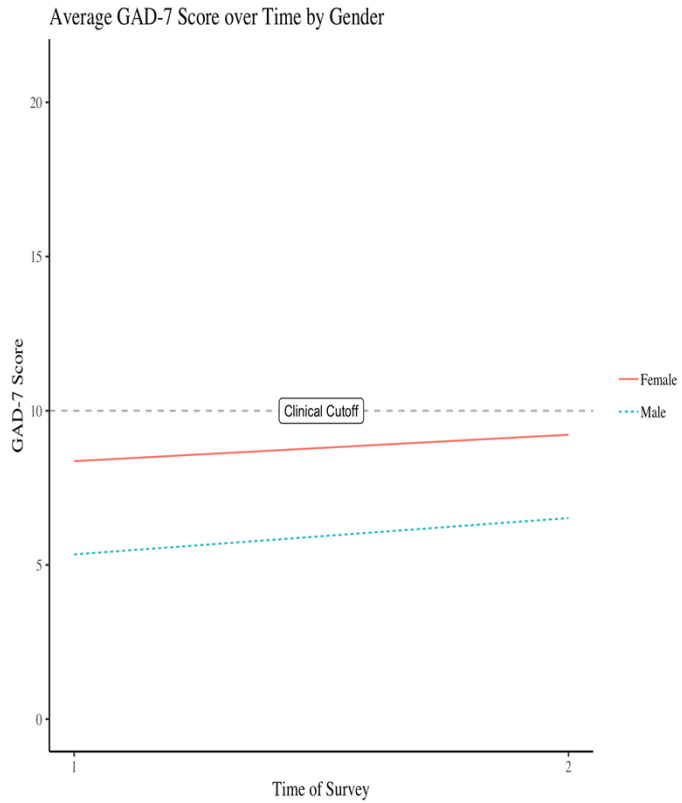
# Patient Health Questionnaire PHQ-9
# Time 1 and Time 2 First Year Queen's Students

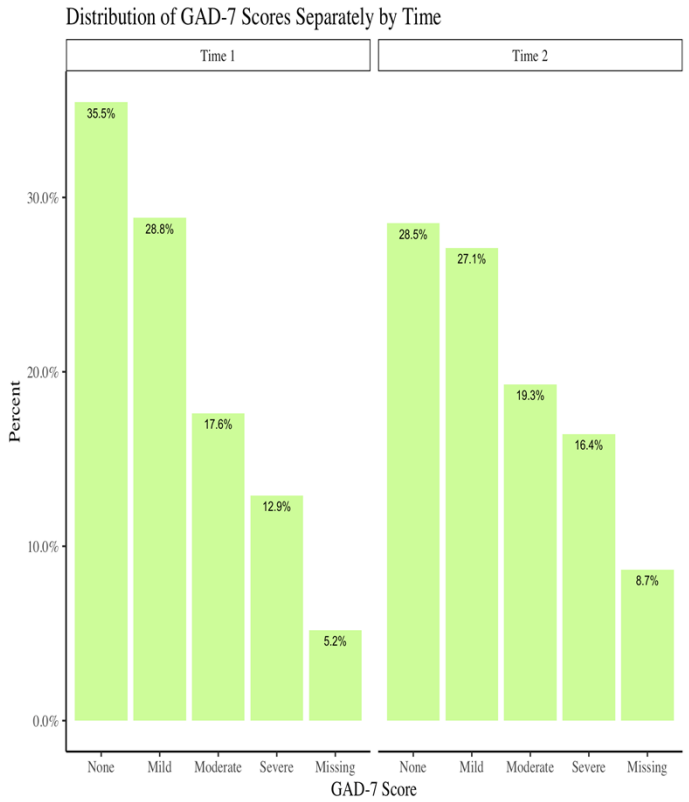



Questionnaire for screening and measuring the severity of depressive symptoms. A score of 5-9 indicates mild severity. 10-14 is moderate. 15-19 is moderately severe. 20+ indicate severe depressive symptoms.

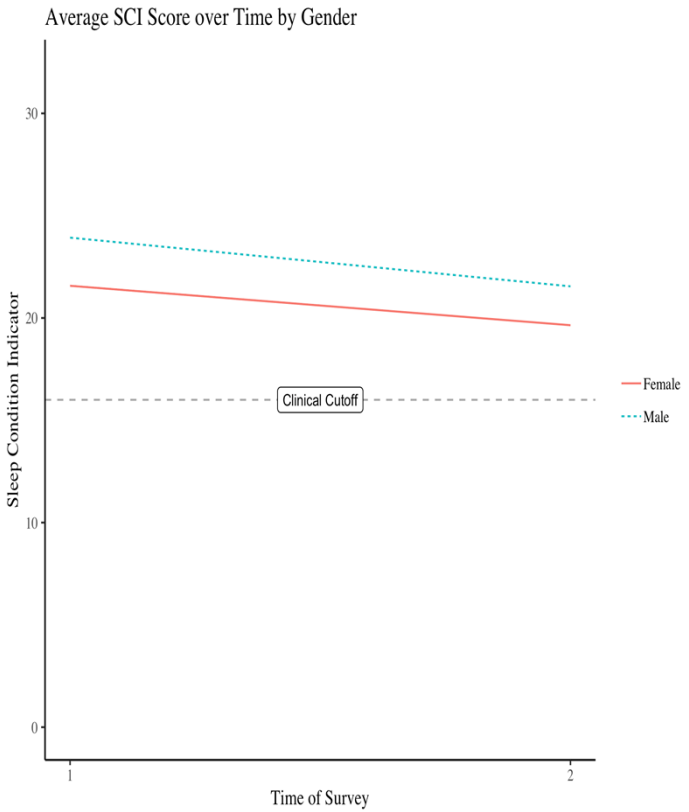
# Generalized Anxiety Disorder Questionnaire (GADS-7)*
# Time 1 and Time 2 First Year Queen's Students

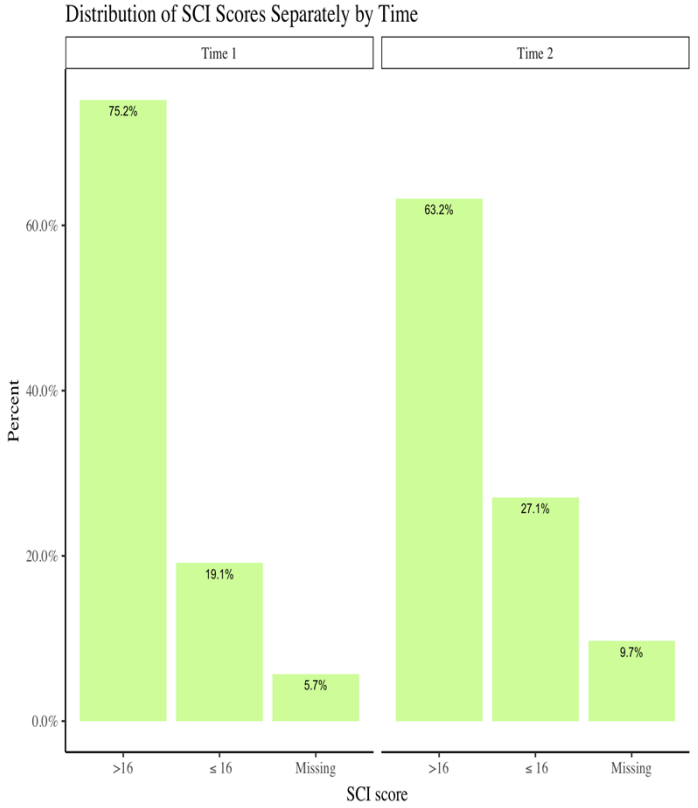



*Questionnaire for screening and measuring the severity of generalized anxiety symptoms. A score of 5-9 indicates mild symptom severity. 10-14 indicates moderate symptom severity. A score of 15+ indicates symptoms are severe.

# Sleep Condition Indicator (SCI)*
# Time 1 and Time 2 First Year Queen's Students




*Screening tool for evaluating quality of sleep. The SCI ranges from 0 (very poor) to 32 points (excellent). The higher the score the better the quality of sleep. A score of 16 or less indicates clinically significant insomnia.

Towards Optimal Brain and Psychosocial Development

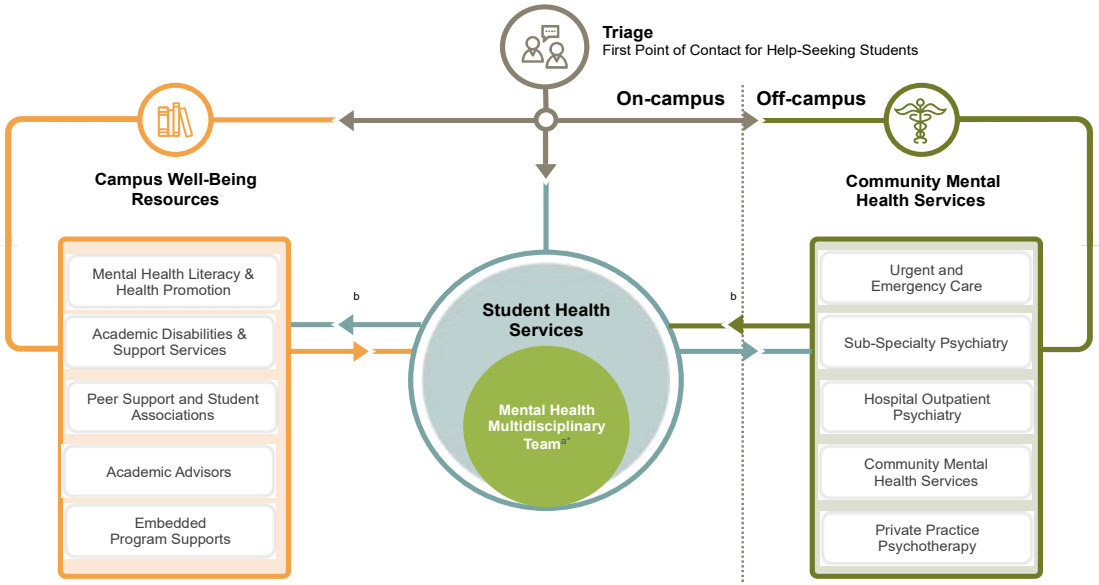
# Implications & future directions

- Emergent adulthood is normally a time of adaptation and change but coincides with the peak period of risk for onset of serious and enduring psychiatric illness
- University students make up a substantial sector of the emergent adult population and face unique stresses and report high rates of stress, emotional distress and psychopathology
- Mental health problems negatively impact academic success a major social determinant of individual and societal growth and development
- Need to identify early intervention opportunities & targets
- Provide and evaluate evidence-informed prevention and targeted early intervention initiatives
- Universities have an obligation and incentives to lead the development of appropriate resources and ensure facilitated pathways to appropriate levels of support and when indicated care to respond to student mental health needs

Flourish
Mood Disorders Research

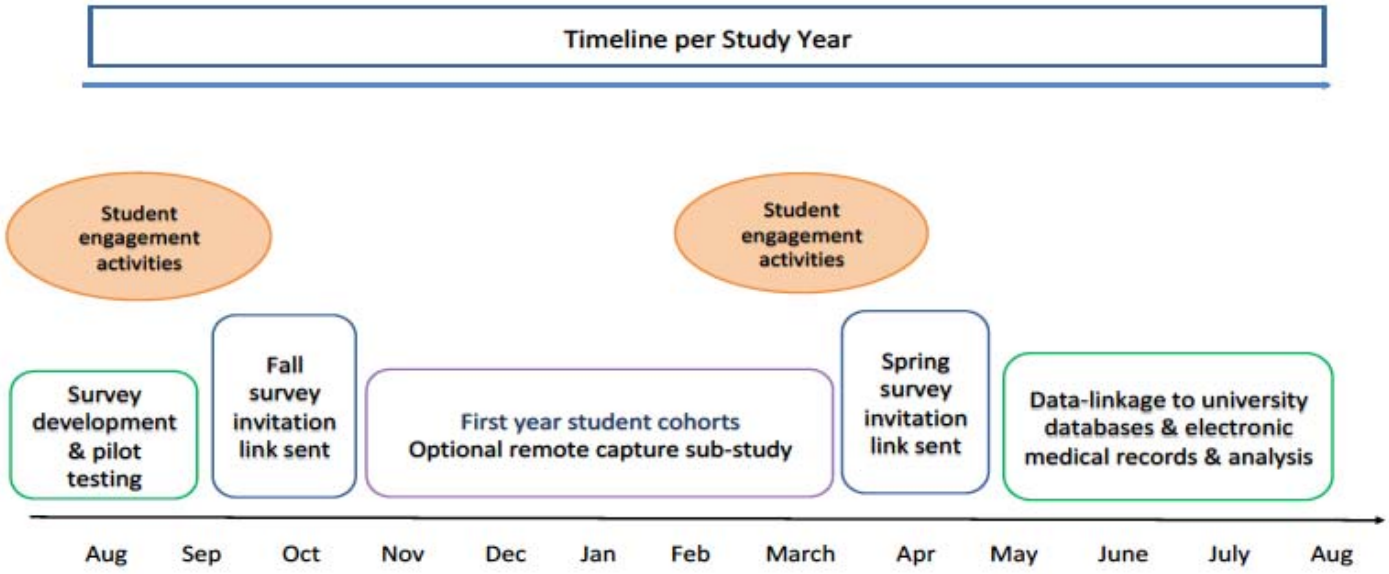
U-Flourish
Student Well-Being Research

# System of Student Mental Health Care




**Legend:** a) Multidisciplinary team (or teams depending on the size of the student population) embedded in student health services. b) Facilitated transitions to and between campus and community mental health services (i.e. off-campus psychiatry and psychology services, local services during school breaks) ;* see Figure 2b

# Transitions to care for university students study plan




*Objectives*

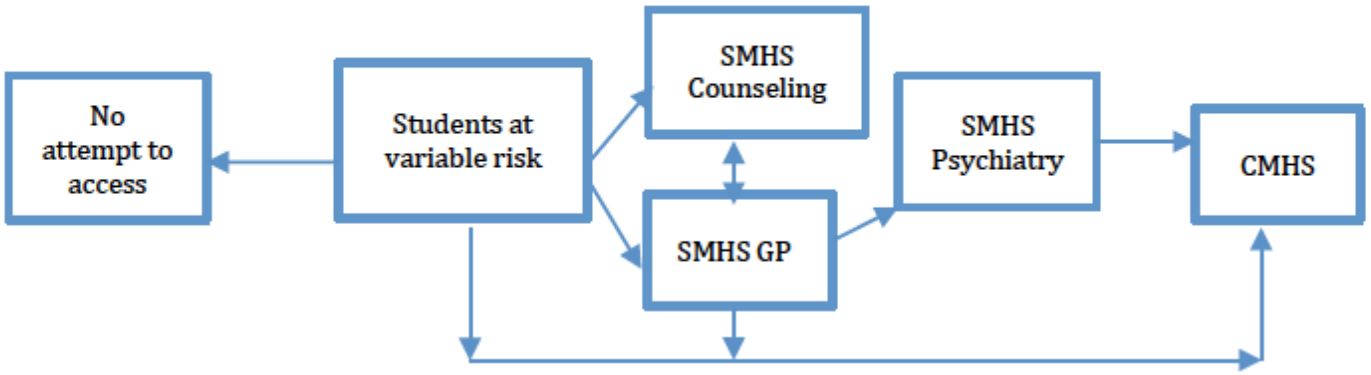
The main objectives of the proposed research in undergraduate students includes:

(i) To evaluate transitions to campus and community mental health care

(ii) To identify key barriers and gaps in transition to mental health care

(iii) To assess the impact of mental health care on the association between risk factors, mental health and academic outcomes

*Figure 1. Model of Transitions to Mental Health Care*



Towards Optimal Brain and Psychosocial Development

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Student Well-Being Research

# SUPPORT-ED: An Occupation-Based Approach to Enhancing the Mental Health of University Students

Bonnie Kirsh, PhD, OT Reg. (Ont.); Emily Nalder, PhD, OT Reg. (Ont.);
Simon McKendry , MSc.(O.T.), OT Reg. (Ont)

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health and wellness. healthandwellness.utoronto.ca

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Strategy for Patient-Oriented Research SPOR Putting Patients First

Fondation de la famille Rossy / Rossy Family Foundation

# Acknowledgements


| Collaborators | | Research staff and trainees | Funders and Partners | |
|---|---|---|---|---|
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| | | | | |

# Occupations and Mental Health

**Occupations:**

- **everyday activities** that people do to occupy time and bring meaning and purpose to life
- activities that people need to, want to, or are expected to do
- what we do, what it means, the conditions under which we “do” are determinants of mental health

# Student MH: Focus on occupation

- Students may have difficulties performing occupations that are part of their student role:
  - ✓ Getting overwhelmed and avoiding class or school work
  - ✓ Having trouble meeting people and making friends
  - ✓ Not being able to make money go far enough to eat well and have some leisure activity
  - ✓ Not having enough time for any self-care or social activities and feeling burnt out
- Can lead to or can intensify mental health challenges

# Project Overview

**Supported Education** – a promising practice that is increasingly being used to help students with psychiatric disorders achieve success in their educational pursuits

**Occupational therapy**

- Helps people do what they need, want, or are expected to do
- Considers Person, Environment, and Occupation
- In vivo services, where and when needed

# Purpose:
# Occupation-based approach to student mental health

To enable a successful student experience by:

- Improving performance and satisfaction with everyday life activities that students need or want to be able to do;
- Facilitating generalization and transfer
- Influencing resiliency related capacities specifically: self-efficacy, and skills in developing and employing strategies to manage student life

# Study Aims

- To understand the occupational issues experienced by university students experiencing mental health problems
- Determine the feasibility of delivering an occupation-based intervention to enable students to succeed in the student role

# Our model: Occupation-based approach to student mental health

- One on one program
- 12-weeks (up to 2-hours of therapy per week)
- Services where and when needed

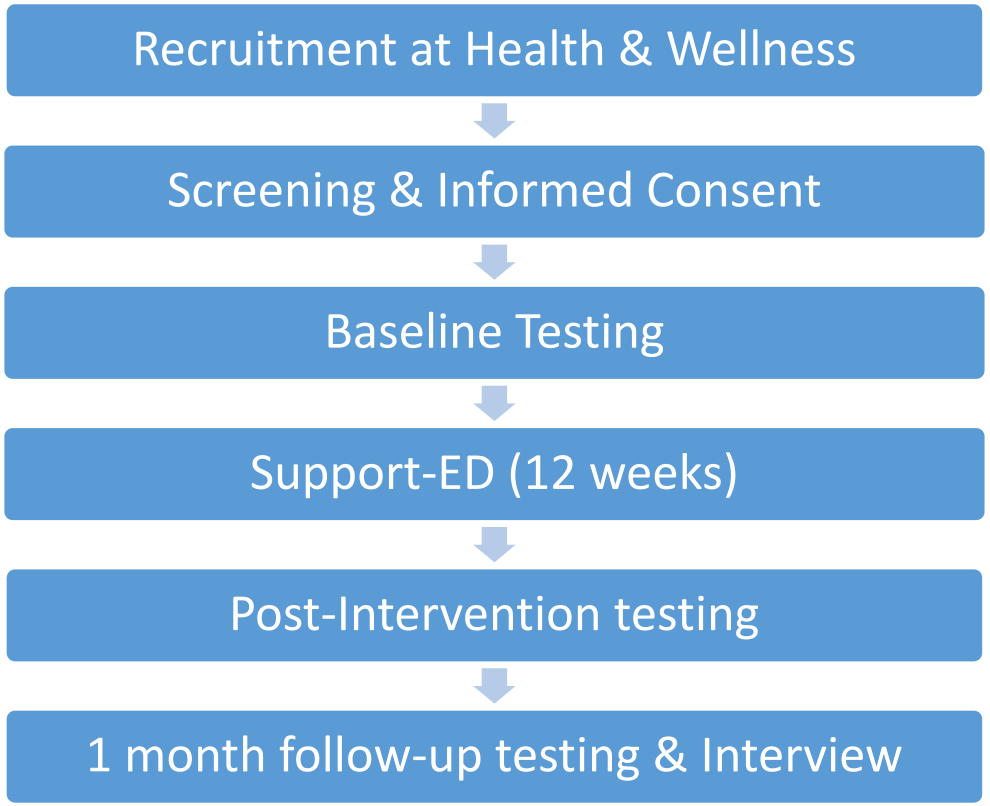
# Student Involvement

- Our research team includes students with lived experience who have been involved from project conception to its current phase. These students have:
  - Shared insights regarding their university experience, challenges, and needs
  - Assisted in the design of our intervention and protocol
  - Collaborated on methods, including recruitment, how to best communicate and engage with students
  - Consistently participated in monthly team meetings

# Method

**Selection Criteria**

- At least **18 years of age**
- Enrolled in an **undergraduate degree** at the University of Toronto
- Experiencing **concerns about their mental health** (e.g., feeling anxious, stressed, or overwhelmed)
- Can think of **at least one activity in their daily life** that they need/want to do but are having **difficulty performing**



# Preliminary Findings

| Demographic Information | |
|---|---|
| **Age** | $\bar{x}$ = 22 \| SD: 2.366 |
| **Gender** | 50% males and 50% females |
| **Ethnicity/Culture** | Asian (67%), Canadian (33%) |
| **Marital Status** | Single, Never Married (100%) |
| **Academic Experience** | |
| **Academic Program** | Humanities & Social Sciences, Physical & Environmental Sciences, Visual and Performing Arts |
| **Year in program** | 1 – 5 |
| **Number of courses** | 3 – 8 |
| **GPA** | 1.54 – 3.1 |
| **Involvement in other campus activities** | No (83%) |
| **Missed classes/activities because of mental health** | Very often to almost everyday |

| Work Experience | |
|---|---|
| **Employment** | Employed (33%) |
| **Volunteer Activities** | Volunteering (33%) |
| **Sources of Income** | Ontario Student Assistance Program (67%)<br>University Scholarships/Awards (67%)<br>Family (50%)<br>Employment (33%) |
| **Frequency of missed work due to mental health** | One to two days a week |
| **Living situation** | University (33%)<br>Private rental (50%)<br>Family home (17%) |
| **Mental Health** | |
| **Diagnosed mental health condition** | Yes (83%) – depression, anxiety, social anxiety d/o |
| **Year diagnosed** | 2016 to 2018 |
| **Other mental health treatments/services being received** | Medications (50%)<br>Cognitive Behavioural Therapy (50%)<br>Mindfulness (33%) |

# Occupational Goals

| Self-care | Productivity | Leisure |
|---|---|---|
| Engaging in exercise | Going to class | Incorporating exercise into routine |
| Developing/maintaining healthy eating habits | Completing school work | Spending more time with family and friends |
| Waking up on time | Sticking to a study plan | Building relationships |
| Taking showers | Time management | |
| Brushing teeth | Meeting with professor for help | |
| Going to healthcare appointments | Going to the gym regularly | |
| Spending less money | Volunteering | |
| Shopping for things of interest | Finding a part-time job | |
| | Engaging in household chores | |

# Where to from here

- Continue recruitment and data collection
- Establish a steering committee composed of undergraduates with lived experience
  - ✓ To provide strategic guidance to the research team regarding project directions and opportunities for continued growth of the partnership
  - ✓ To facilitate knowledge-mobilization and collaborative learning
- Plan to publish theoretical paper detailing intervention protocol
- Analyze and disseminate results

# Thank you!

Bonnie.kirsh@utoronto.ca

# Roots of Resiliency: Participant-informed Program Development

Jennifer Thannhauser, PhD, RPsych (Student Wellness Services)
Melinda Coetzee, Student

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# Roots of Resiliency: The Program

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- 7-week holistic program developed around Hettler's dimensions of wellness framework & positive psychology
- Program is designed to be interactive and experiential
- Multidisciplinary facilitation team
- Includes personalized health behavior change plan and 1-on-1 sessions with a psychologist
- Pilot program from 2014-16
- Evaluation indicated revealed significant improvements in Total Wellness, Resiliency, Anxiety, Depression, and HLQ (Holistic Lifestyle Questionnaire) Composite Scores

# Roots of Resiliency: Engaging Students in Program Development

- Aims:
  - Enhance relevance and cultural-appropriateness of program for indigenous students
  - Engage students in identifying priority areas to enhance resilience and guide curriculum development

- Student/Community involvement:
  - Student advisory committees
  - Indigenous knowledge-keeper

# Roots of Resiliency: Program Evaluation

- Student Research Assistants
- Pre-post-1 month-3 month-follow up evaluation design
- Outcome measures:
  - Connor-Davidson Resilience Scale 2
  - Patient Health Questionnaire 9
  - General Anxiety Disorder Scale 7
  - 1 month follow up Focus Group Interviews
- The Student Experience: Melinda Coetzee

# Q & A's?

**For more information: Attend CACUSS Session "Building Student Resilience through Participant-Oriented Research" on June 18th at 11:30 (Chinook 2/3)**

jthannha@ucalgary.ca
https://www.ucalgary.ca/wellness-services

# Bring it back to campus activity

How can you use what you have learned today in your work?

# Thank you!


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