The Healthy Minds Network: Research-to-Practice in Campus Mental Health

Student Affairs Assessment and Research Conference
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Introduction to The Healthy Minds Network

- University of Michigan School of Public Health
  - Self-sustaining research-to-practice network
  - Public health approach (population-level)
- Building a collaborative, international network to:
  (1) produce knowledge (*research*), (2) distribute knowledge (*dissemination*), (3) use knowledge (*practice*)
# Agenda

- I. Overview of national campus mental health surveys and the economic case for mental health services
- II. Mental health treatment gap on college campuses and interventions to narrow the gap
- III. Next steps for The Healthy Minds Network
• Introduction

• Mental health in college populations: general statistics and the economic case for mental health services

• Help-seeking and barriers to mental health services; interventions to narrow the campus mental health treatment gap

• Next steps for The Healthy Minds Network
The Healthy Minds Study

About HMS

- Began in 2007
- Fielded at approximately 100 campuses
- ~100,000 survey respondents

Main Topics (validated screening tools)

- Mental health status (depression, anxiety, self-injury, suicidality, positive mental health)
- Lifestyle and health behaviors (substance use, exercise, sleep)
- Attitudes and awareness
- Service utilization
- Academic and social environment
Publically Available Data

We welcome the use of our data by others!

- Aggregate data from HMS 2007-2012 are publically available

- Data can be shared in multiple file formats

- To request the data, please visit:
  - healthymindsnetwork.org/research/data-for-researchers
The Healthy Minds Network for Research on Adolescent and Young Adult Mental Health (HMN) is dedicated to improving the mental and emotional well-being of young people through innovative, multidisciplinary scholarship. HMN addresses the connection between the mental health of adolescents and young adults and their health behaviors, physical health, and social, educational, and economic outcomes.

Taking a public health approach, HMN focuses on three main objectives: (1) producing knowledge (research), (2) distributing knowledge (dissemination), and (3) using knowledge (practice).

Through its rich array of research projects (The Healthy Minds Study, U-SHAPE, inkblots, and more), the network serves as a resource for secondary and higher education administrators, researchers, clinicians, policymakers, and the public. Based at the University of Michigan, HMN is led by a multi-disciplinary team of scholars from public health, education, medicine, psychology, and information sciences, many of whom are affiliated with the University's Comprehensive Depression Center.
The interactive data interface securely contains de-identified survey data and is available to all participating schools (2007-on).

Using a simple drop-down menu, the data interface allows users to:

- Auto-generate graphs/tables for reports, presentations, meetings
- Compare sub-groups of interest
  - e.g., depression among female vs. male students; substance use among international vs. U.S. students
- Compare with peer institutions
  - e.g., How does U-M’s rate of anxiety compare with other large, public universities?
Question of interest: What are the relative rates of depression among male and female students at U-M?

You can further limit to only undergraduates and make other specifications to meet your interests.
Output: Depression by Gender

Question of interest: What are the relative rates of depression among male and female students at U-M?

![Bar graph showing relative rates of depression by gender at U-M]

- Males: 16
- Females: 18
Question of interest: *How does the rate of anxiety at my school compare to my peer schools?*
Output: Anxiety Across Campuses

Question of interest: How does the rate of anxiety at my school compare to my peer schools?
The Healthy Bodies Study

Main Topics (validated screening tools)

- Body shape and weight
- Eating and exercising habits
- Campus climate (peer influence, eating/body image norms)
- Resources, support, help-seeking
- Mental health, substance use
HBS: A Comprehensive Survey

Gender, Age

Race, SES, Citizenship

Academics

Behaviors
Eating, dieting, exercising, weight, binging, purging, etc.

Attitudes/Beliefs
Body image, preoccupation, stigma, etc.

Campus Climate
Campus environment, social norms, peers

Sexuality, Relationship

Housing, Clubs, Athletics

Comorbidity
Substance use Abuse Knowledge Functional impairment
The Healthy Minds Study: 2007-2013
**Finding #1:** ~1/3 of Students Have an Apparent Mental Health Issue

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Dep. (PHQ-9)</td>
<td>10%</td>
</tr>
<tr>
<td>&quot;Minor&quot; Dep. (PHQ-9)</td>
<td>8%</td>
</tr>
<tr>
<td>Panic (PHQ-9)</td>
<td>5%</td>
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<tr>
<td>Gen Anx. (PHQ-9)</td>
<td>6%</td>
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<tr>
<td>Suic. Ideation (past yr.)</td>
<td>7%</td>
</tr>
<tr>
<td>Self-Injury (past yr.)</td>
<td>16%</td>
</tr>
<tr>
<td>Any MH problem</td>
<td>33%</td>
</tr>
</tbody>
</table>
Finding #2: Variation across Demographic Groups

Major Depression (%) by Demographic Group, 6-13%
Finding #3: Variation across Campuses

Number of Campuses (denoted by X's) at each Prevalence Level

<table>
<thead>
<tr>
<th>Prevalence Level</th>
<th>Depression</th>
<th>Anxiety</th>
<th>Suicide Ideation (yr)</th>
<th>Self-Injury (yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td></td>
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<tr>
<td>25%</td>
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<td></td>
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<tr>
<td>20%</td>
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<td></td>
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<td></td>
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<tr>
<td>15%</td>
<td></td>
<td></td>
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<tr>
<td>10%</td>
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<tr>
<td>5%</td>
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<tr>
<td>0%</td>
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</tr>
</tbody>
</table>
**Finding #4: Risk and Protective Factors**

- **Risk factors (negative correlation w/ mental health)**
  - Financial stress (both past and present)
  - Experienced discrimination

- **Protective factors (positive correlation)**
  - Social support
  - Religiosity
  - Living on campus
Finding #5: Treatment gap is >50%

- Major Dep. (PHQ-9): 45%
- "Minor" Dep. (PHQ-9): 30%
- Anxiety/Panic (PHQ-9): 54%
- Suic. Ideation (past yr.): 52%
- Self-Injury (past yr.): 42%
- Any MH problem: 40%
Finding #6: Variation across Demographic Groups

Treatment past year (%) among those with a MH Problem, by Demographic Group, 22-48%
Finding #7: Mental Health and Academic Outcomes

- Mental health as predictor of academic outcomes in 2005-2008 HMS (Eisenberg, Golberstein, & Hunt, 2009)

- Depression (PHQ-9) is a significant predictor of dropping out

- 10 point lower PHQ-9 score → reduction in risk of dropping out by a multiple of 0.6 (e.g., from 10% to 6%)
Finding #7 (cont’d)

- Depression (PHQ-9 score) is also a significant negative predictor of same-semester GPA
  
  10 point lower PHQ-9 score → 9 point increase in GPA percentile

- Co-occurrence of depression and anxiety associated with a significant additional drop in GPA

- Symptoms of eating disorders also associated with lower GPA
Translating to Economic Case

- Economic case for program treating 500 depressed students
  - Program/service cost ~ $500,000
  - Tuition from retained students: > $1 million
  - Lifetime earnings for students: > $2 million
Economic Case for Mental Health Services

- Reduced depression
  - Increased retention
    - Increased student satisfaction
      - Increased institutional reputation & alumni donations
    - Increased tuition
  - Increased lifetime productivity (earnings)

Benefits to institution
Benefits to students and society
Introduction

Mental health in college populations: general statistics and the economic case for mental health services

Help-seeking and barriers to mental health services; interventions to narrow the campus mental health treatment gap

Next steps for The Healthy Minds Network
Help-Seeking and Barriers to Help-Seeking

- Current literature emphasizes stigma, lack of knowledge, lack of access, and financial reasons as key barriers

- Current interventions attempt to target these cited barriers
“Gatekeeper-Training” Programs

- Evaluation of Mental Health First Aid training for RAs
  - Co-PIs: Daniel Eisenberg and Nicole Speer
  - Funder: NIMH (2009-2011)
  - 32-campus randomized trial to assess impacts on student communities

- Main findings
  - Positive effects on RAs
    - ↑ Knowledge about mental health
    - ↑ Belief in the helpfulness of medication
    - ↑ Confidence to help someone with a mental health problem
    - ↑ Use of mental health treatment
    - ↑ Positive affect

  No effects for student residents
Online Screening and Linkage to Treatment

- *e-Bridge to Mental Health* online intervention
  - PI: Cheryl King (University of Michigan)
  - Funder: NIMH (2009-2012)

- Brief risk screen -> personalized feedback -> correspondence with counselor using motivational interviewing

- Promising findings in pilot RCT
Findings on Stigma

- Personal stigma low among college students
  - Only 12% of students agree with statement “I think less of someone who has received MH treatment”

- Perceived public stigma considerably higher
  - 64% agree with “Most people think less of someone who has received MH treatment”

- Personal stigma somewhat higher among: male, younger, Asian, international, religious, from a poor family
Stigma Findings (cont’d)

- *Perceived public stigma* not significantly associated with use of services or support

- In contrast, *personal stigma* is significantly associated with lower use of services & support

Our estimates suggest that lowering the population-level personal stigma by one half would result in an increase of service use among students with major depression from 44% to 60%
### Attitudes and Beliefs of Students with Untreated Mental Health Problems

<table>
<thead>
<tr>
<th>BARRIERS:</th>
<th>stigma low</th>
<th>treatment helpful</th>
<th>perceived need for help</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
<td>49</td>
<td>2%</td>
</tr>
<tr>
<td>Group 2</td>
<td>X</td>
<td></td>
<td></td>
<td>41</td>
<td>2%</td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
<td>X</td>
<td></td>
<td>74</td>
<td>3%</td>
</tr>
<tr>
<td>Group 4</td>
<td></td>
<td>X</td>
<td>X</td>
<td>47</td>
<td>2%</td>
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<tr>
<td>Group 5</td>
<td>X</td>
<td></td>
<td></td>
<td>348</td>
<td>13%</td>
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<tr>
<td>Group 6</td>
<td>X</td>
<td></td>
<td>X</td>
<td>323</td>
<td>12%</td>
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<tr>
<td>Group 7</td>
<td>X</td>
<td>X</td>
<td></td>
<td>868</td>
<td>33%</td>
</tr>
<tr>
<td>Group 8</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>894</td>
<td>34%</td>
</tr>
</tbody>
</table>
What’s Up with Groups 7 & 8?

- **Group 7 (low stigma, believes tx helpful, no perceived need):**
  - prefer to deal with problems on one’s own (53%)
  - thinks stress is normal in school (47%)
  - gets support from family/friends (42%)
  - questions how serious issues are (36%)
  - doesn't have time (29%)

- **Group 8 (low stigma, believes tx helpful, perceives need):**
  - questions how serious issues are (62%)
  - prefers to deal with problems on one’s own (60%)
  - doesn't have time (59%)
  - thinks stress is normal in school (59%)
  - gets support from family/friends (44%)
  - financial reasons (38%)
Interventions for Groups 7 & 8?

- Anti-stigma, education, and awareness campaigns may have little impact

- May be useful to borrow lessons from other contexts where people do not have strong objections, yet fail to engage in “healthy” behaviors
  - (e.g., exercise, diet, preventive screening, even saving for retirement!)
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Behavioral Economics: Help-Seeking Inertia?

- Is depression related to present-orientation (discounting of future)?
- Is lack of help-seeking a form of procrastination?
- Might young people need a “nudge”?
Empirical Analysis of these Questions

- Healthy Minds Study (2011)
  Large, cross-sectional (N=8,806, 11 institutions)

- College Transition Study Replication (CTSR)
  Panel with five monthly surveys (August-December 2010) at University of Michigan
  281 first-year and transfer undergraduates
  PI: Steve Brunwasser
Findings

- Depressive symptoms significantly associated with present-orientation (discounting the future) and procrastination tendencies
  Results available at: http://healthymindsnetwork.org/projects

- Procrastination tendencies associated with lower likelihood of receiving treatment

- Implications for help-seeking interventions?
New Intervention: “Mental Health Check-Ups”

- **Intervention objective:** To reframe mental health service utilization as a *default* behavior.

- **Basic idea:** All students in a community are scheduled for brief in-person check-ups. Some students are referred to follow-up care.

- **Primary research questions:** (1) *How can we maximize attendance at the initial in-person check-ups and linkage to follow-up treatment?* (2) *At the population-level, what is the impact of the intervention on student mental health and well-being?*

- **Population of interest (for initial trials):** Undergraduate students living on-campus

- **Main outcomes:** Participation rates in the initial check-ups; successful linkage to mental health care for students with high symptom levels; and improvement in mental health
• Four Words
http://vimeo.com/88323320

• Daury
http://vimeo.com/88323321

• Trapped
www.inkblots.com/trapped
Engaging
Relevant
Convenient
Brief
Practical
Engaging: Use of humor/suspense, high-end editing, technical jargon

Relevant: “Student-to-student” approach adds credibility and relatability. Conducted extensive field-testing to determine content with broad appeal.

Convenient/brief: “Stress management in bite-sized chunks!” 2-5 minute films

Practical: Each segment presents a specific coping skill that can be applied immediately.
Our goal:

To bridge current video trends and styles with pertinent mental health and life information – not by focusing on mental health symptoms, but rather by describing normative life experiences and helping young people see them as manageable and to serve as a segue to further treatments for students in need.
Preliminary findings

95% — “relevant and engaging”
91% — “learned and plan to use coping skill”
93% — “recommend to a friend”

n = ~400 undergraduate students
Ways of using *inkblots*

- Illustrations or discussion starters for academic survival courses and/or residential life
- “First day” icebreakers
- Freshman/Parent orientations
- Wellness promotion tool
- Feature on campus TV or online news forum

- Upload to your school’s YouTube Channel
- Post on Facebook page or homepage of student affairs, the health center, counseling center, advising, residential life, etc.
- Email to ALL students or to at-risk students
Tiny Shifts Can Lead to Big Changes
Peer insight and advice on how to flourish and manage the seemingly unmanageable.

tinyshifts: A pocket guide to young adulthood
Contact Information

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Web: healthymindsnetwork.org
Main References

Review articles:

Prevalence of Mental Health Problems:

Service Use and Help-seeking:

Academic Outcomes and Economic Case: