

Campus Suicide Prevention Conference
Harrisonburg, VA October 16, 2009

Healthy Minds Study:
Data to Assist Decision-making
about Campus Mental Health

Daniel Eisenberg

Department of Health Management and Policy
School of Public Health, University of Michigan
(daneis@umich.edu)

Outline of Presentation

1. Introduction to Healthy Minds Study (5 min)
2. Previous research using the data (10 min)
3. New projects building on Healthy Minds (5 min)
4. Selected data from 2009 (20 min)
 - a. Comparison of Virginia to non-Virginia schools
 - b. Variation across schools in Virginia
 - c. Variation across student subgroups in Virginia
5. Discussion/Q&A (15 min)

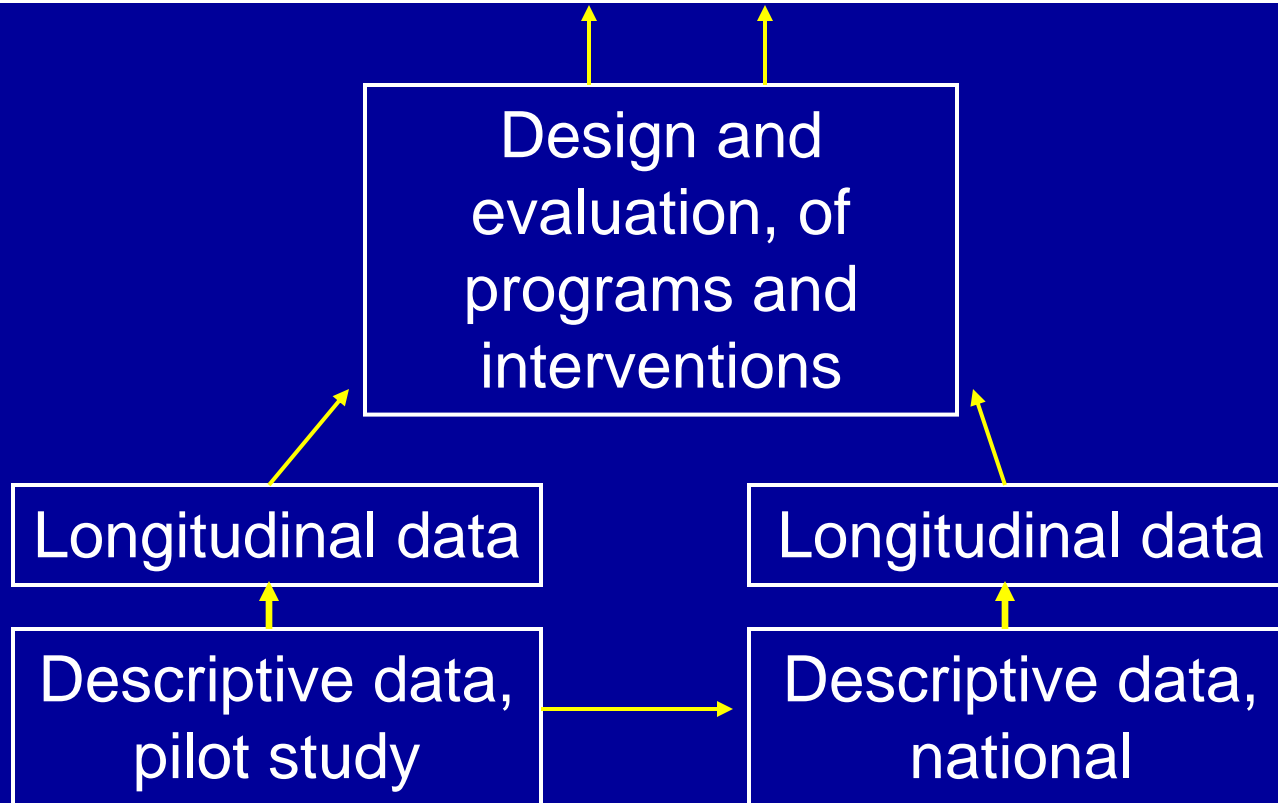
1. Introduction to Healthy Minds Study (5 min)

Significance of Mental Health in the College Population

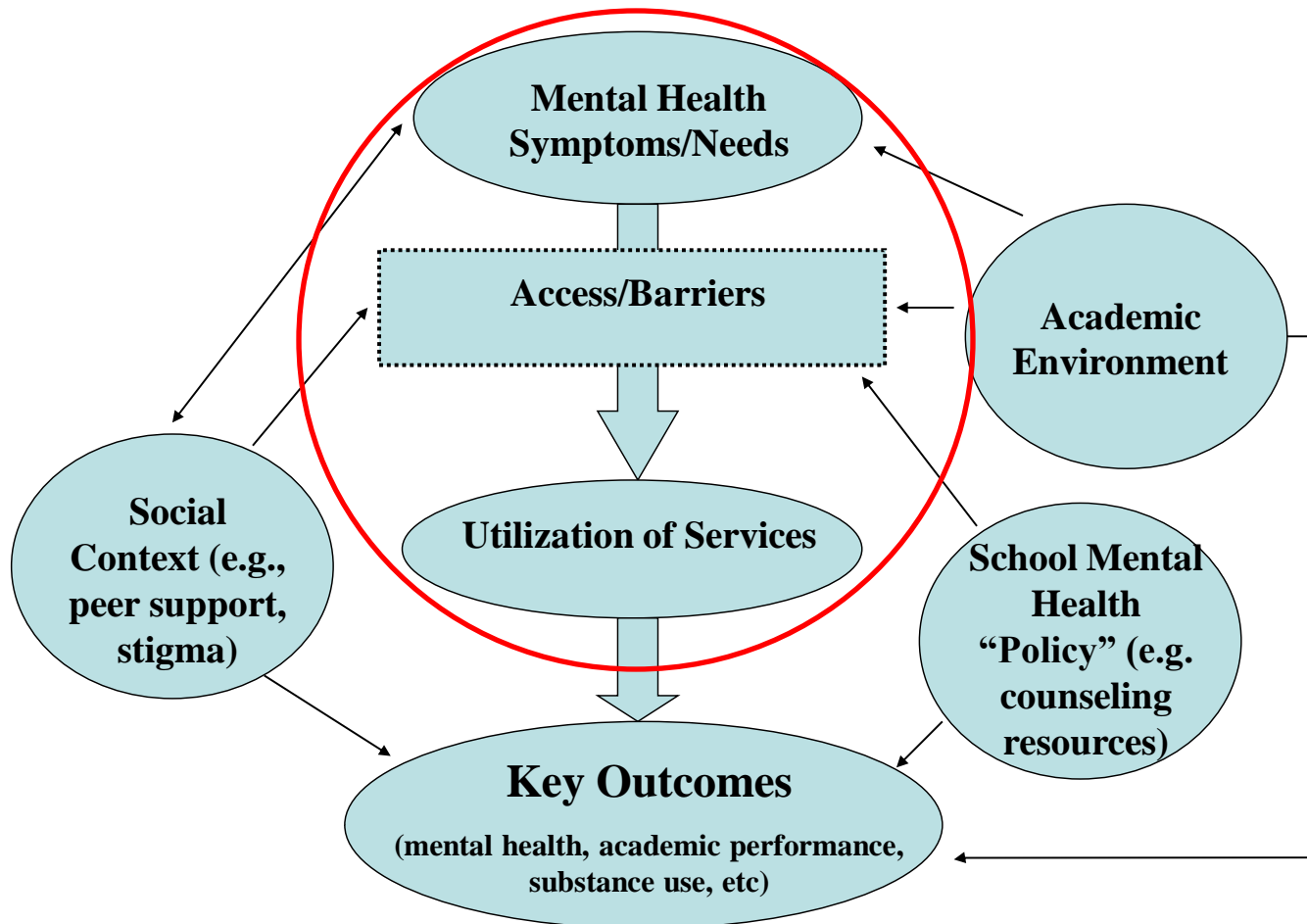
- **Age of onset** (three quarters of mental disorders have first onset by age 24) (Kessler et al, 2005 Arch Gen Psych)
- **Lifelong implications** of early mental health
- **Unique opportunity** to reach young people
 - Settings that integrate residential, academic, and social activities
 - Vast human resources within these settings
- Despite all of this, the **research evidence** on our big question **is sparse**

Our Big Research Question

How can we invest most efficiently in the mental health of college students (What are the returns from potential interventions)?



Conceptual Framework for *Healthy Minds Study*



Aims of Survey Data

1. Estimate the prevalence and correlates of:
 - Depression
 - Anxiety disorders
 - Positive mental health (flourishing)
 - Disordered eating
 - Mental health service utilization
 - Medication and therapy/counseling
 - Quality of care

Aims of Survey Data (cont'd)

2. Analyze barriers and facilitators to help-seeking
 - Perceived need for help
 - Attitudes and beliefs about treatment (stigma)
 - Knowledge of treatment options
 - Financial factors
 - Peers, family, social context
3. Estimate relationships between mental health and other important aspects of well-being
 - Academic performance
 - Substance use
 - Self-injury

Aims of Survey Data (cont'd)

4. Investigate how colleges and universities make decisions about programs and services for student mental health
 - Qualitative study based on surveys and interviews of campus administrators.

Key Features of *Healthy Minds*

- Focus on help-seeking and access to care
- National study with samples representative of full student populations at each campus
- Methods to boost response rates and adjust carefully for differences in non-responders
- Examination of a broad range of factors related to mental health (e.g. stigma, social support, academic outcomes, substance use)
- Longitudinal design (comparisons over time)

Schools in the Healthy Minds Study (2007-2009)



2. Previous Research Using Healthy Minds Data (10 min)

Research Articles

- Hunt, J, Eisenberg, D. (2009). **Mental Health Problems and Help-Seeking Behavior among College Students: A Narrative Review.** *Journal of Adolescent Health* (forthcoming).
- Serras, A., Saules, K., Cranford, J., Eisenberg, D. (2009). **Co-occurrence of Substance Use and Self-injury among College Students.** *Psychology and Addictive Behaviors* (forthcoming).
- Golberstein, E., Gollust, S., Eisenberg, D. (2009). **Perceived Public Stigma and Help-seeking in a Longitudinal Sample of College Students.** *Psychiatric Services* (forthcoming).
- Hefner, J., Eisenberg, D. (2009). **Social Support and Mental Health in a University Student Population.** *American Journal of Orthopsychiatry* (forthcoming).
- Eisenberg, D., Golberstein, E., Hunt, J. (2009). **Mental Health and Academic Success in College.** *B.E. Journal of Economic Analysis & Policy* 9(1) (*Contributions*): Article 40.
- Eisenberg, D., Downs, M., Golberstein, E., Zivin, K. (2009). **Stigma and Help-seeking for Mental Health among College Students.** *Medical Care Research & Review* 66(5): 522-541.

Research Articles (cont'd)

- Zivin, K., Eisenberg, D., Gollust, S., Golberstein, E. (2009). Persistence of Mental Health Problems and Needs in a College Student Population. *Journal of Affective Disorders* 117(3): 180-185.
- Cranford, J., Eisenberg, D, Serras, A. (2009). Substance Use Behaviors, Mental Health Problems, and Use of Mental Health Services in a Probability Sample of College Students. *Addictive Behaviors* 34(2): 134-145.
- Gollust, S, Eisenberg, D, Golberstein, E. (2008). Prevalence and Correlates of Self-Injury among University Students. *Journal of American College Health* 56(5): 491-498.
- Golberstein, E, Eisenberg, D, Gollust, S. (2008). Perceived Stigma and Mental Health Care Seeking. *Psychiatric Services* 59: 392-399.
- Eisenberg, D, Gollust, SE, Golberstein, E, Hefner, JL. (2007). Prevalence and Correlates of Depression, Anxiety and Suicidality among University Students. *American Journal of Orthopsychiatry* 77(4): 534-542.
- Eisenberg, D, Golberstein, E, Gollust, SE (2007). Help-seeking and Access to Mental Health Care in a University Student Population. *Medical Care* 45(7): 594-601.

Research Articles (cont'd)

- Eisenberg, D, Nicklett, E.J., Roeder, K.M., Kirz, N.(2009). Eating Disorder Symptoms among College Students: Prevalence, Persistence, Correlates, and Treatment-seeking. (Under review).
- Hunt, J., Watkins, D., Eisenberg, D. (2009). How Do College Campuses Make Decisions about Allocating Resources for Student Mental Health? Findings from Key Participant Interviews at 10 Campuses. (Under review).
- Watkins, D., Hunt, J., Eisenberg, D. (2009). Increased Demand for Mental Health Services on College Campuses: Perspectives from Interviews of Campus Mental Health Administrators. (Under review).

Summary of Key Findings

- High prevalence of untreated disorders
 - <50% of students with probable depression or anxiety disorder have received treatment in past year
- Main barriers to help-seeking appear to be related to knowledge and attitudes
- Substantial variation across schools and across student sub-groups
- Mental health problems are significant predictors of lower GPA and higher likelihood of dropping out

3. New Projects Building on Healthy Minds Data (5 min)

New Project #1

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

New Project #2

- **Peer effects** in mental health among college students
 - PI: Daniel Eisenberg
 - Funder: W.T. Grant Foundation (2009-2011)

New Project #3

- Evaluation of **Mental Health First Aid** training for resident advisors
 - Co-PIs: Nicole Speer (WICHE) and Daniel Eisenberg
 - Funder: NIMH (2009-2011)

4. Selected Data from 2009 (20 min)

Selected Data from 2009

- a. Comparison of Virginia to non-Virginia schools
- b. Variation across schools in Virginia
- c. Variation across student subgroups in Virginia

Comparison of Virginia (N=8) to non-Virginia (N=7) schools

Schools in 2009 Healthy Minds

- Virginia
 - Bridgewater College
 - George Mason University
 - James Madison University
 - Liberty University
 - Mary Baldwin College
 - Shenandoah University
 - University of Richmond
 - University of Virginia
- Non-Virginia
 - Earlham College
 - Emory University
 - Miami University (Ohio)
 - New York University
 - School of the Art Institute of Chicago
 - University of Arkansas, Fayetteville
 - University of Texas, Pan American

Demographic and Social Characteristics

Relative to non-VA schools, VA student populations have:

- More white and black students; and fewer Hispanic, Asian, and international students
- More undergraduates and students living on campus
- Higher religiosity
- Fewer gay, lesbian, and bisexual students

Mental Health Measures

- Higher “flourishing” (58% vs 49%)
- Similar:
 - Depression (16% vs 17%)
 - Anxiety disorder (11% vs 12%)
 - Non-suicidal self-injury in past year (16% vs 17%)
 - Suicidal ideation in past year (6% vs 7%)
- Slightly lower:
 - Symptoms of eating disorders
 - Academic impairment from mental health
 - Previous diagnoses, mental disorders (24% vs 27%)

Health Behaviors

- Substantially lower:
 - Binge drinking in past two weeks (40% vs 47%)
 - Smoking cigarettes in past 30 days (14% vs 22%)
 - Marijuana use in past 30 days (11% vs 20%)
- Higher:
 - Exercised 3 or more hours per week in past month (56% vs 51%)

Stigma and Awareness

- Higher:
 - Perceived public stigma
- Similar:
 - Personal stigma
- Lower:
 - Knowledge of where to go for professional help
 - Number of family and friends who have received treatment

Help-seeking

- Lower:
 - Perceived need for help, past yr (35% vs 41%)
 - Use of psychiatric medication, past yr (14% vs 16%)
 - Prescriber more likely to be general practitioner
 - Use of therapy/counseling (14% vs 20%)
 - Current treatment, among those w/ depression or anxiety (23% vs 28%)
- Similar
 - Visit to any health provider in past yr (82% vs 82%)
- Higher
 - Support from religious contact (11% vs 6%)

Satisfaction with Providers

- Campus providers
 - Higher satisfaction overall as compared to non-Virginia schools (particularly regarding quality of therapists and respect for privacy concerns)
- Non-campus providers
 - Similar satisfaction overall as compared to non-Virginia schools

Barriers/Facilitators

- Less likely to decide on own to seek help (among those who received services) (63% vs 74%)
- Similar insurance coverage (92% vs 93%)
 - But...
 - More through parent's employer (63% vs 48%), fewer through student plan (8% vs 30%)
 - Less likely to know if covered for mental health visits (40% vs 33% have no idea)

Supportiveness of Academic and Social Environment

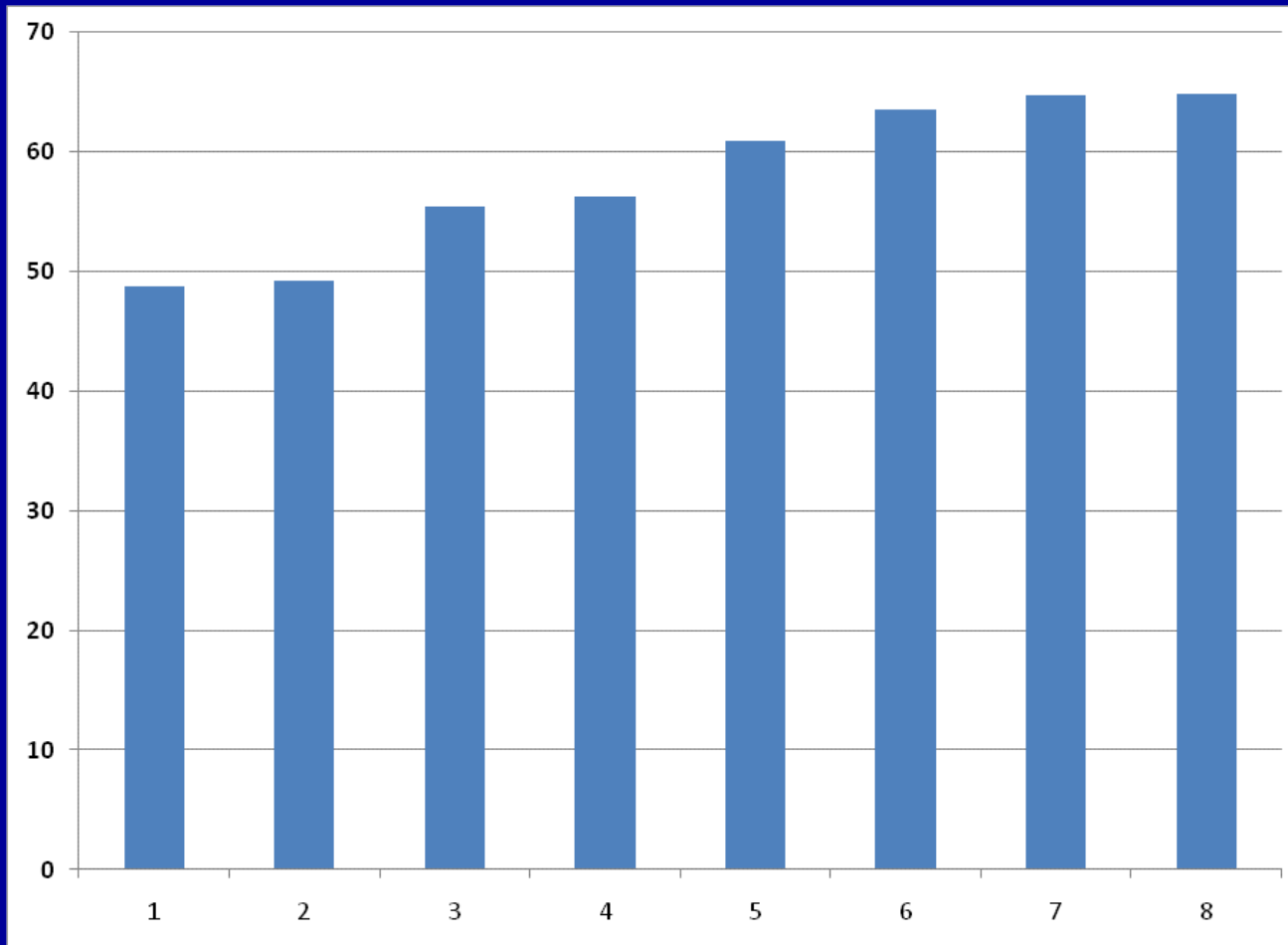
- Higher:
 - Supportiveness of major department about mental health
 - Would talk to academic personnel if mental health was affecting performance
 - Emotional support from family
- Lower:
 - Competitiveness between students in your classes
 - Treated unfairly because of race, ethnicity, or culture in past yr (28% vs 35%)

Time Use and Attitudes about Education

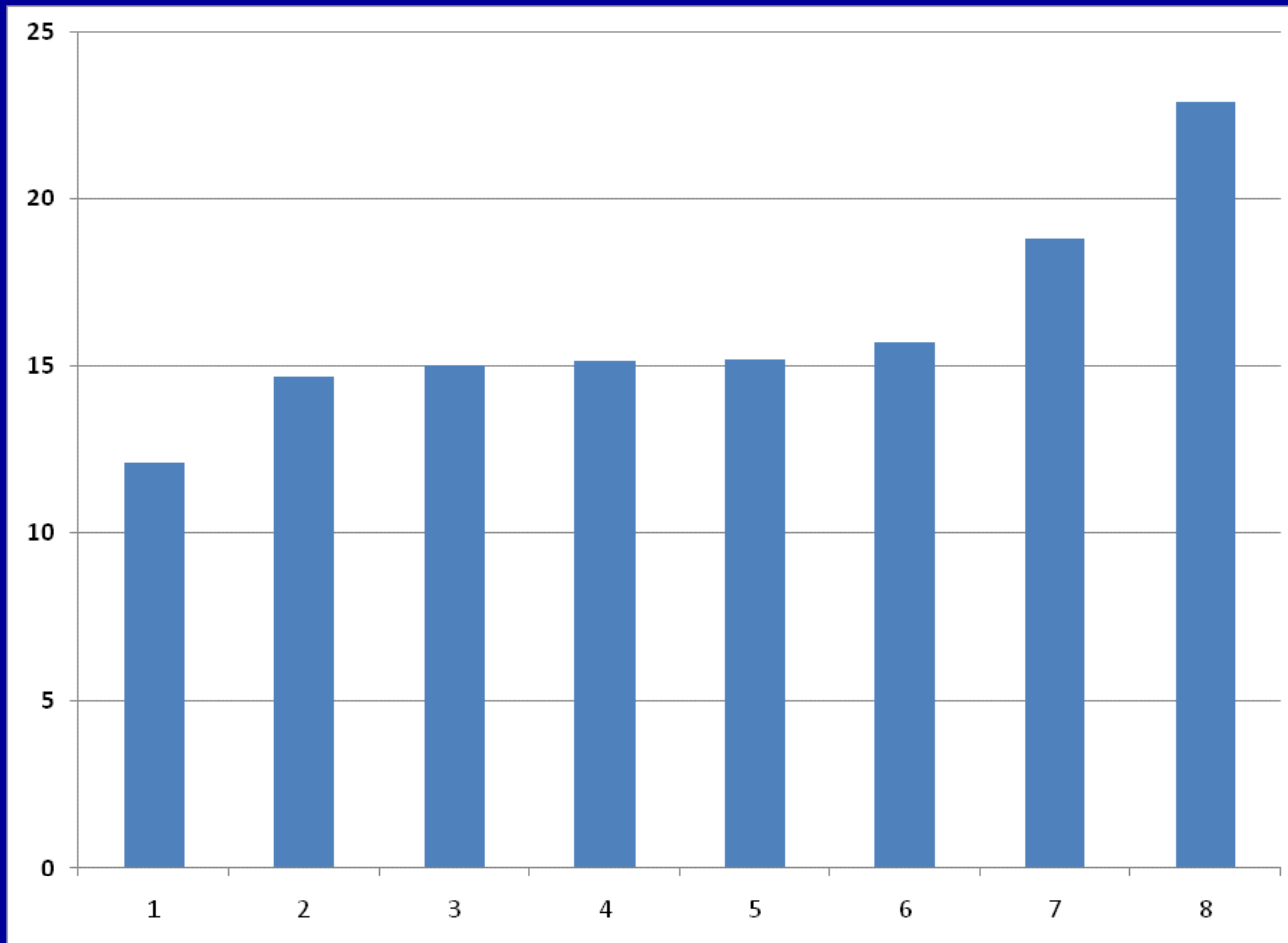
- Lower:
 - Time spent studying per day (3.6 vs 3.8 hrs)
- Higher:
 - Confidence that degree will be worth it
 - Optimism about job prospects
 - Satisfaction with overall experience at school
 - Likelihood of donating after graduating

Variation across Virginia schools

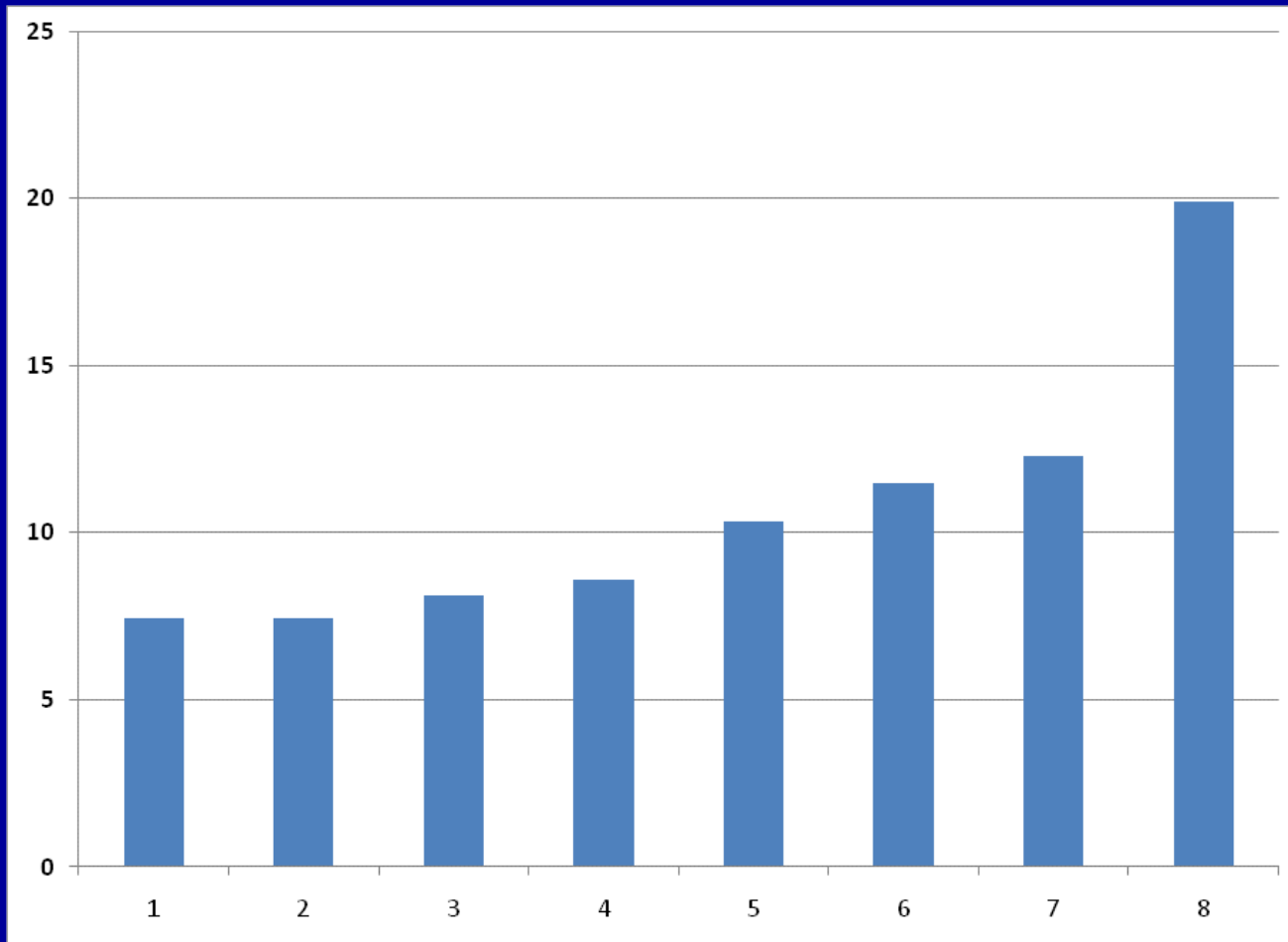
Flourishing



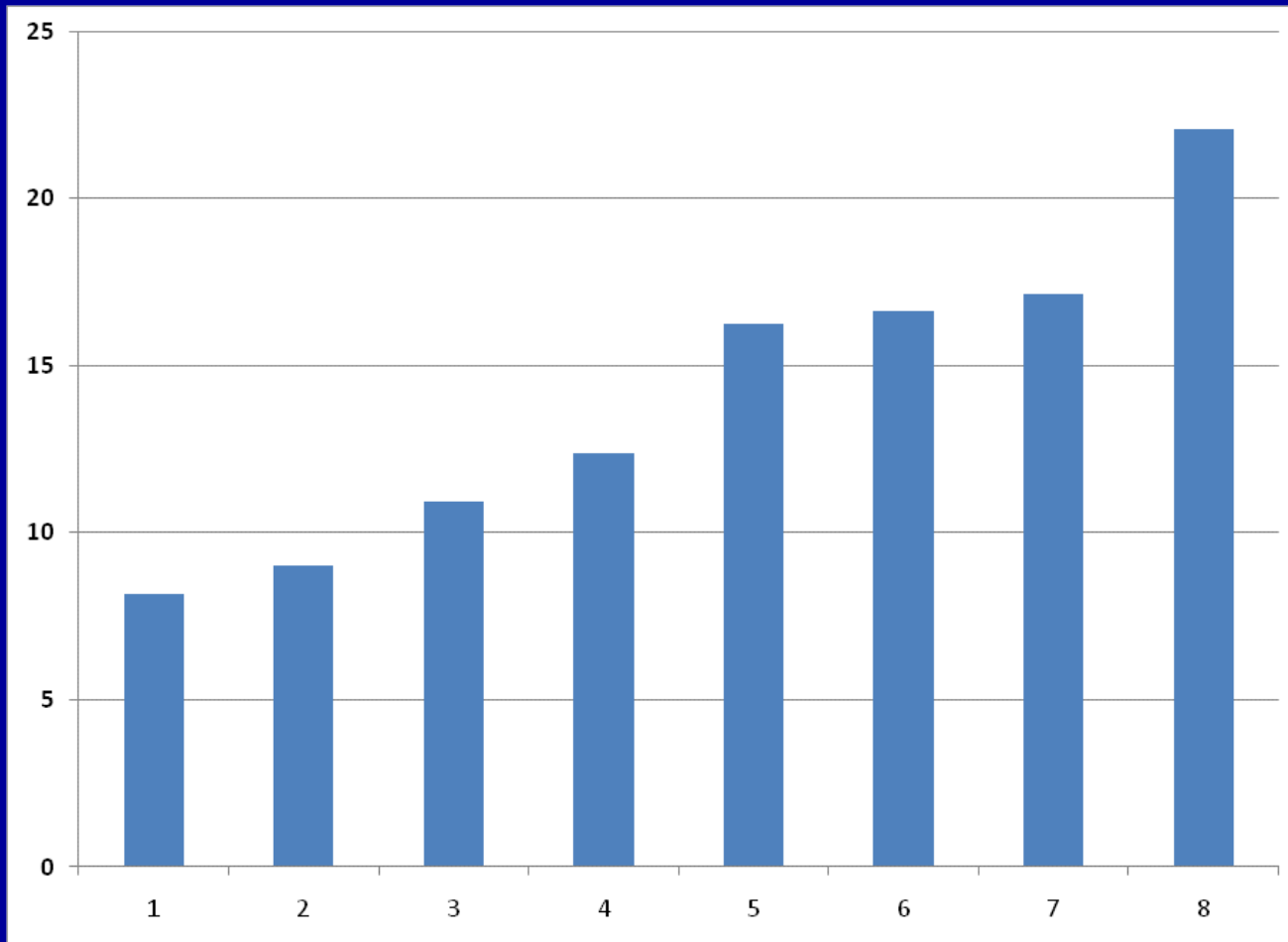
Depression



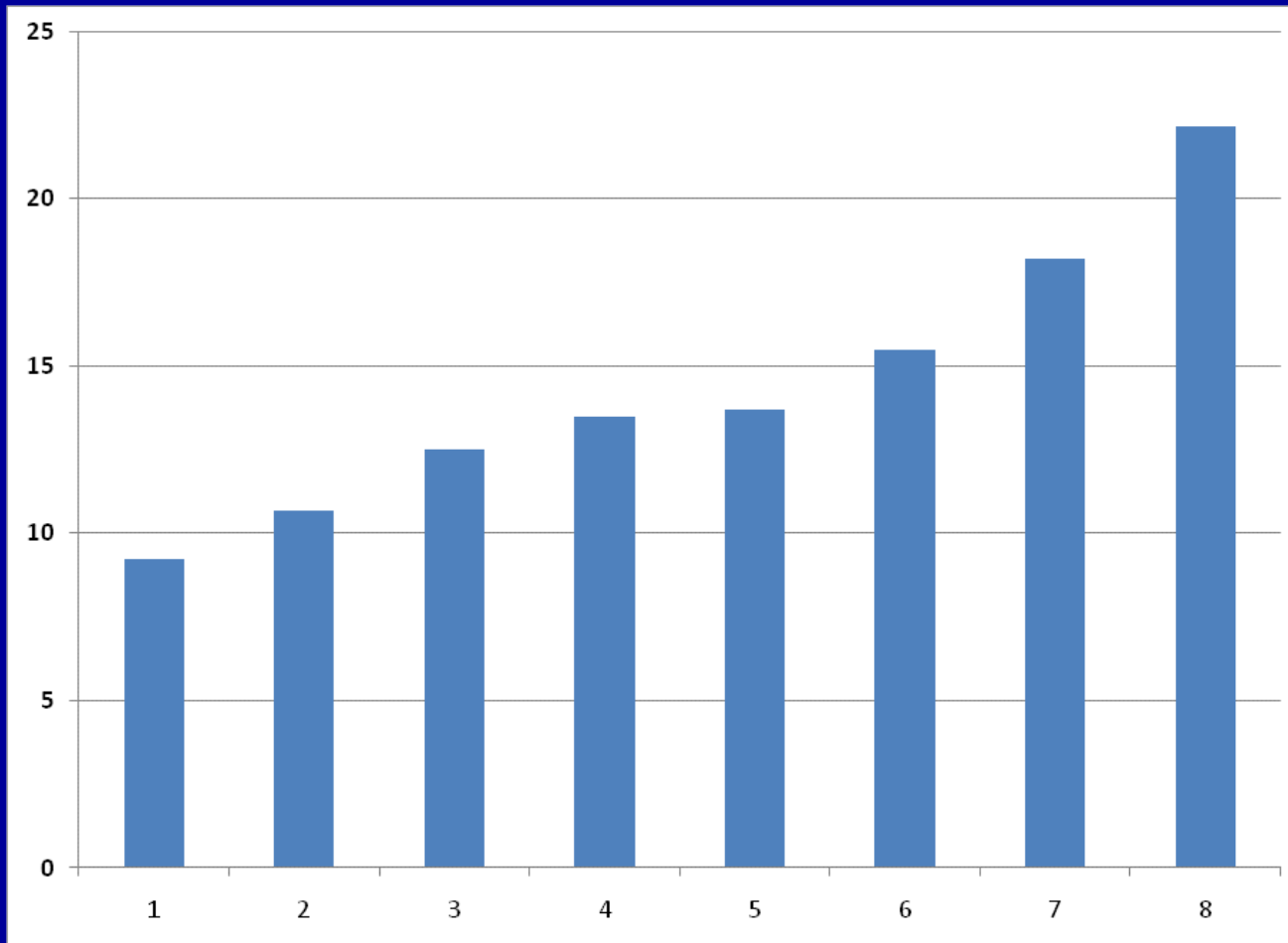
Anxiety



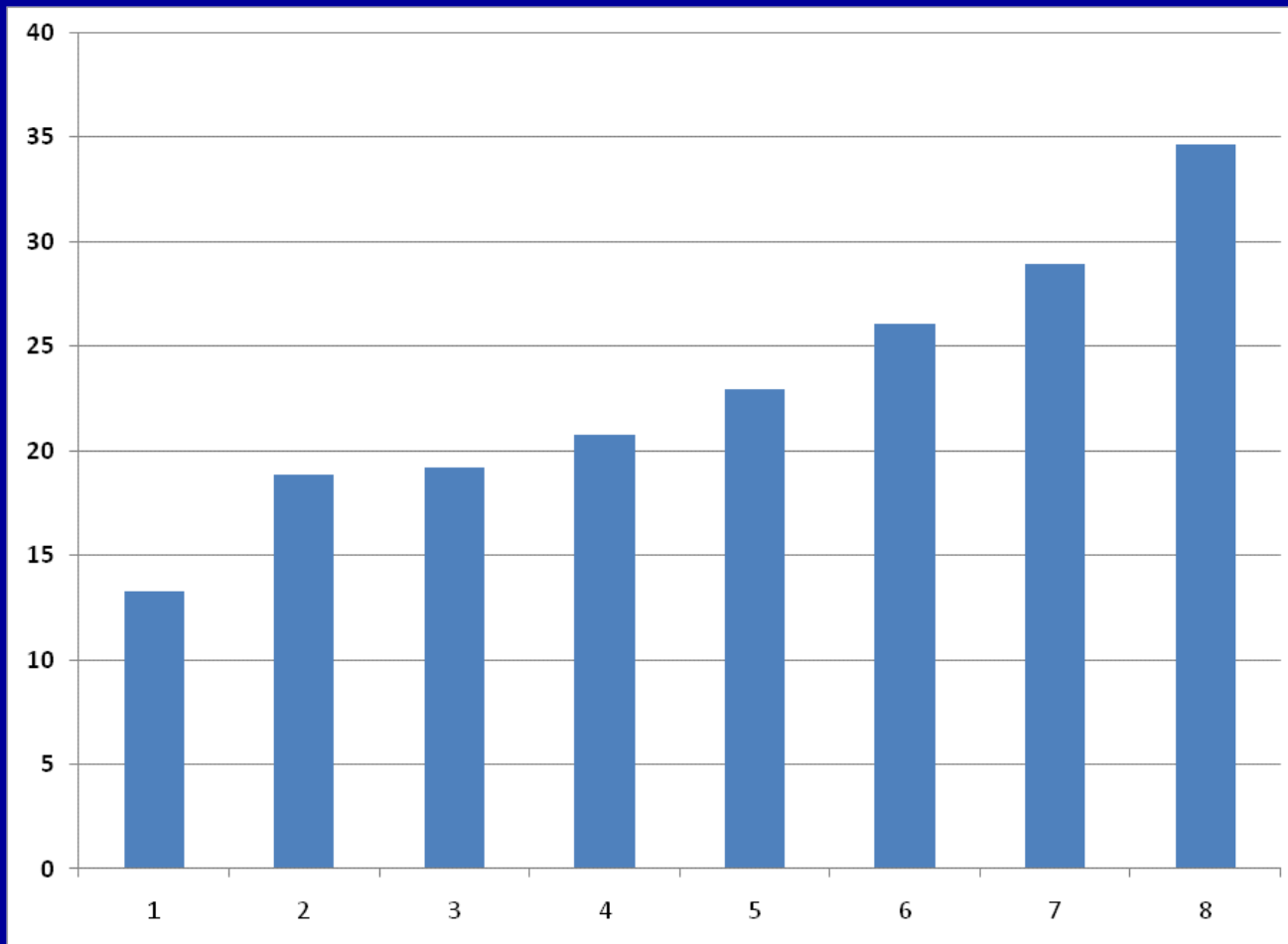
Psychiatric Medication (Past Yr)



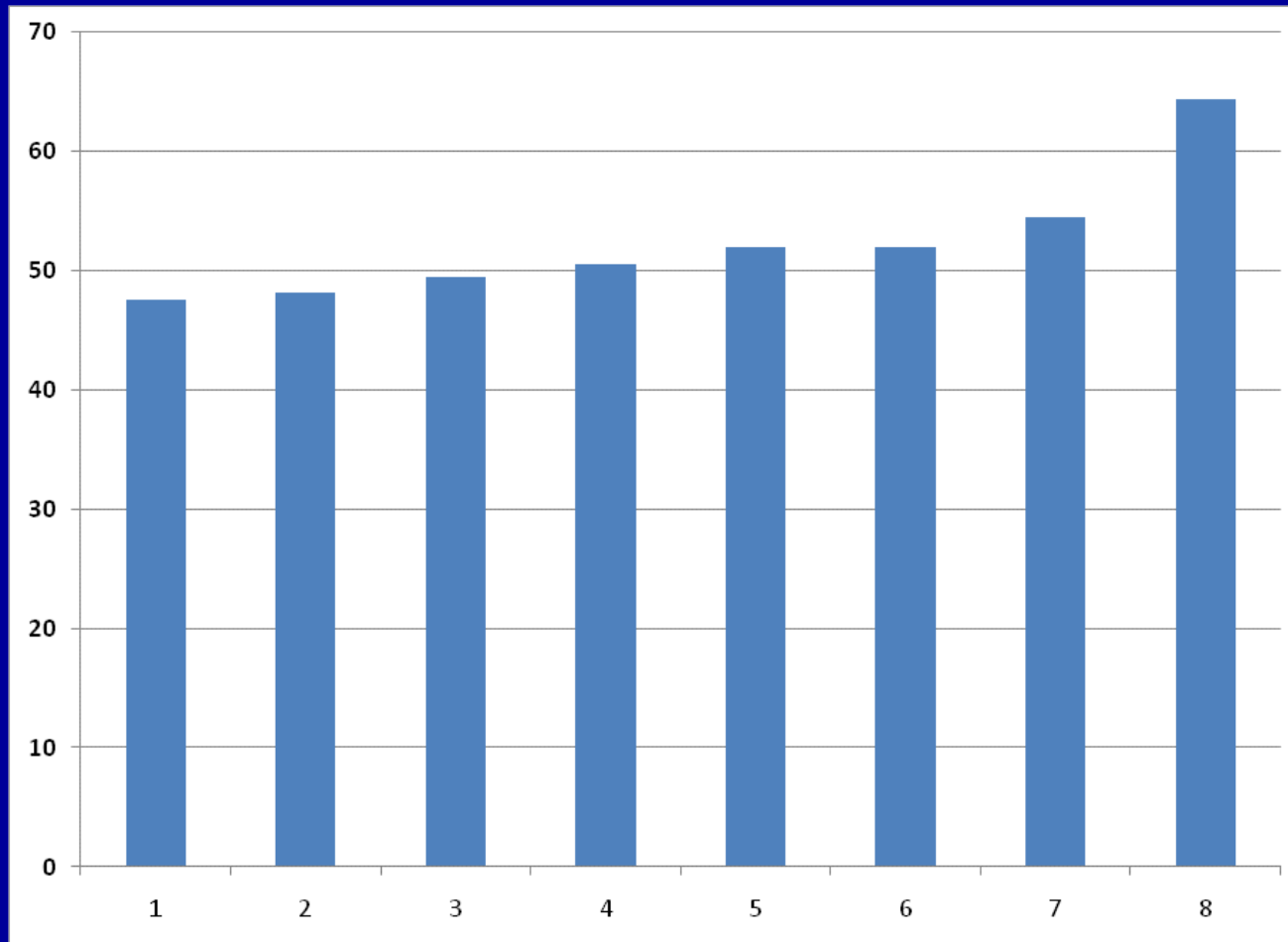
Therapy/Counseling



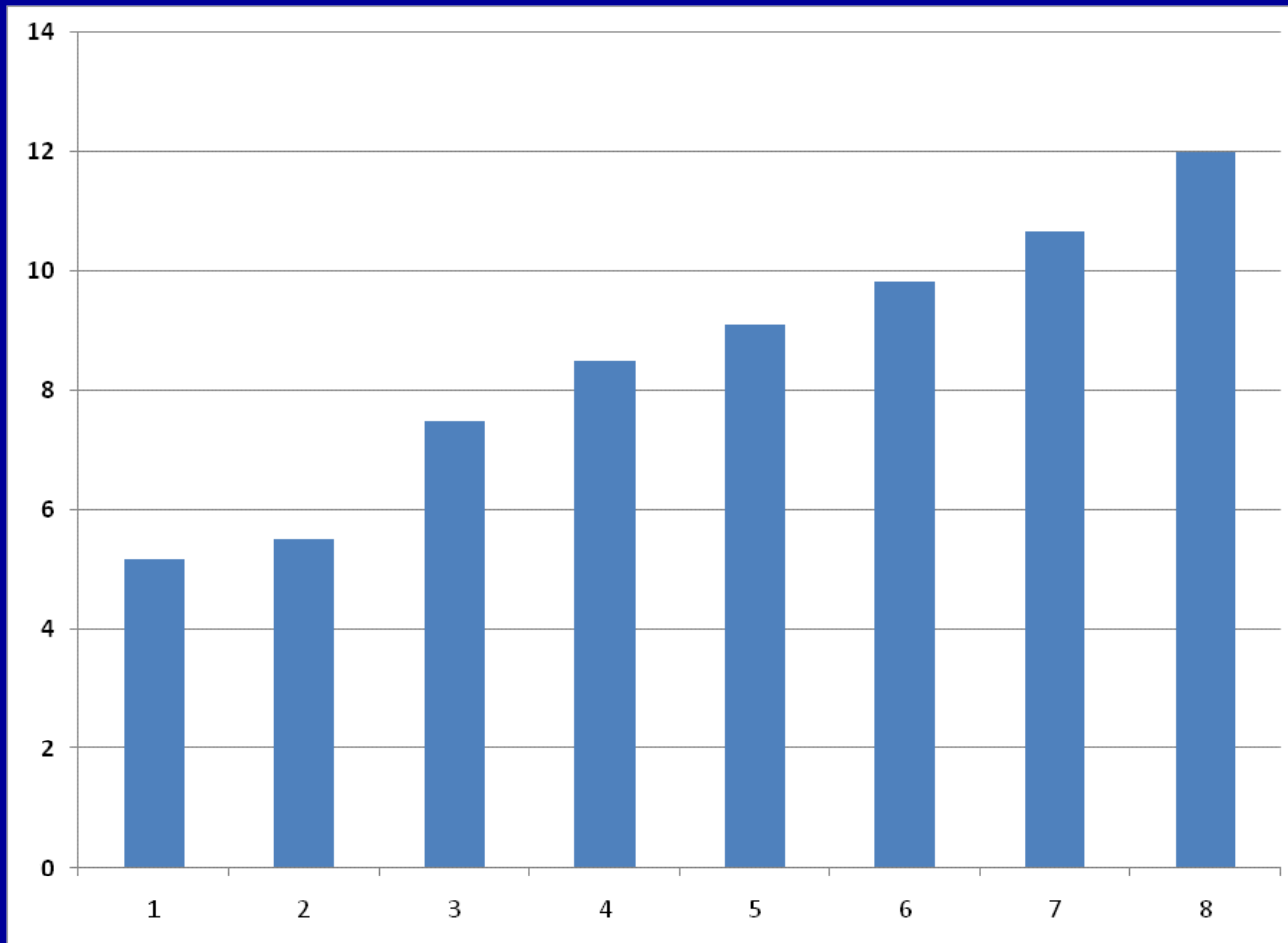
Current Treatment among those with Depression or Anxiety



Perceived Public Stigma (% Who Agree with “Most People Think Less of Someone Who Has Received MH Treatment”)



Personal Stigma (% Who Agree with “I Think Less of Someone Who Has Received MH Treatment”)



Variation across student sub-groups in Virginia

Mental Health, by Race/Ethnicity

	Asian/ Asian- Amer. (N=231)	Black/ African- Amer. (N=272)	Hispanic /Latino (N=87)	White, non- Hispanic (N=2,752)
Depression (PHQ-9) (%)	22.1	24.0	18.3	13.7
Anxiety (PHQ) (%)	10.5	11.0	8.1	10.5
Flourishing (%)	40.6	52.4	52.1	61.4

Treatment Use, by Race/Ethnicity

	Asian/ Asian- Amer. (N=231)	Black/ African- Amer. (N=272)	Hispanic /Latino (N=87)	White, non- Hispanic (N=2,752)
Medication (%)	3.5	3.2	7.1	15.8
Therapy/ counseling (%)	10.2	11.0	9.9	14.7

Stigma, by Race/Ethnicity

	Asian/ Asian- Amer. (N=231)	Black/ African- Amer. (N=272)	Hispanic /Latino (N=87)	White, non- Hispanic (N=2,752)
Perceived stigma (% who agree “Most people would think less...”)	54.5	61.3	51.4	50.3
Personal stigma (% who agree “I would think less...”)	18.5	7.0	3.2	7.7

Differences by Gender

- Women are higher than men in:
 - Anxiety disorders (13% vs 7%)
 - Medication in past yr (16% vs 12%)
 - Therapy in past yr (17% vs 10%)
- Women are similar to men in:
 - Flourishing (58% vs 57%)
 - Depression (17% vs 15%)
 - Suicidal ideation in past yr (6% vs 6%)
- Women are lower than men in:
 - Perceived stigma (“Most people would think less...”) (48% vs 59%)
 - Personal stigma (“I would think less...”) (5% vs 14%)

Differences by Undergraduate/Graduate Student

- Undergraduates and graduate students are similar in most mental health measures (with slightly higher depression and anxiety)
- Undergraduates have slightly lower medication use, slightly higher therapy use
- Undergraduates have slightly higher stigma (both perceived and personal)

Other Correlates of Mental Health

- Positively correlated with mental health (higher flourishing and/or, lower depression, and/or lower anxiety):
 - Living on campus
 - Religiosity
 - Having a spouse/partner/significant other
- Negatively correlated with mental health:
 - Current or past financial struggles
 - Bisexual or gay/lesbian

Other Correlates of Treatment Use

- Positively correlated with treatment use:
 - Graduate student or older student
 - Gay/lesbian or bisexual
 - Coming from wealthy family
 - Parents' education level
- Negatively correlated with treatment use:
 - Minority racial/ethnic group (especially Asian/Asian-American)
 - International student (especially for medication)
 - Religiosity

Satisfaction with College, by Mental Health Status

	Depression	Anxiety disorder	Flourishing
Satisfied overall (%)	54%	59%	85%
Likely to donate as an alum (%)	26%	28%	38%

Research Collaborators

- Survey Sciences Group, LLC:
 - Scott Crawford, Sara O'Brien, Andrew Piskorowski, Brian Hempton, Aaron Pearson, and others
- Pilot Healthy Minds Study
 - Co-developers and co-authors: Ezra Golberstein, Sarah Gollust, Jennifer Hefner
 - Co-authors: Jim Cranford, Emily Nicklett, Katie Roeder, Alisha Serras
- National Healthy Minds Study
 - Collaborators/co-authors: Jim Cranford, Marilyn Downs, Ezra Golberstein, Sarah Gollust, John Greden, Justin Hunt, Corey Keyes, Alisha Serras, Daphne Watkins, Kara Zivin
 - Study coordinators at 26 colleges and universities

Funders

- Pilot Healthy Minds Study
 - University of Michigan
 - Office of the Vice President of Research
 - School of Public Health
 - Dept of Health Management & Policy (McNerney Award)
 - Rackham Graduate School (two grants)
 - Blue Cross Blue Shield of Michigan Foundation
- National Healthy Minds Study
 - University of Michigan Comprehensive Depression Center
 - Participating colleges and universities
 - Virginia Department of Health (VDH)
 - Penn State Children, Youth, and Families Consortium

More Information

- daneis@umich.edu
- www-personal.umich.edu/~daneis/papers.html
- www.healthymindsstudy.net

5. Discussion (15 min)