U-SHAPE

University Study of Habits, Attitudes, and Perceptions around Eating

SAARC 2013 | Columbus, Ohio
Agenda

U-SHAPE report

U-SHAPE overview and background

Findings
  Quantitative and qualitative data

Considerations for research and practice

Next steps for U-SHAPE

Discussion
  (also please share reactions throughout!)
U-SHAPE: Overview
University Study of Habits, Attitudes, and Perceptions Around Eating

Campus-wide online survey
Administered to random sample of students (all genders, race/ethnicities, academic programs, etc.)

Pilot year—AY 2012-2013

Fielded at 2 large, public universities
University of Michigan, Ann Arbor & Michigan State University

Interdisciplinary Study Team
Pilot year support from the Global Foundation for Eating Disorders

IRB Approved; NIH Certificate of Confidentiality
Why a campus-wide study of eating and body image?
“College Mental Health Crisis”:
Awareness is heightened by rigorous, epidemiological research

Within ED Research

- Sorority women
- Female athletes
- Nutrition, Psych
- White females
- All other students

Image: People Weekly magazine cover with the headline "Wasting Away: Eating Disorders on Campus."
Prior Research in College Student Populations [1]

Prevalence estimates

8-17% of college students ED+\(^{1-4}\)

20% suspected they suffered from an ED at some point in their lives\(^5\)

Diagnoses: AN: 3% female, 0.4% male; BN: 2% female, 0.2% male\(^6\)

Many cases assumed to be EDNOS\(^7\)

Using SCOFF (described later)

Score of >3 (conservative, >2 typically scored as + screen): 9-13% females and 3-4% males (undergraduate and graduate)\(^8\)

Co-occurring psychopathology

SCOFF (>3) significantly associated with depression, anxiety, self-injury, substance use\(^8\)
Prior Research in College Student Populations [2]

Treatment utilization

Among students who screen ED+, <10% dx, <20% any tx

Among students with SCOFF scores $\geq 3$, prevalence rate 3 times tx rate$^8$

What’s at stake?

Longitudinal study: 1 “yes” to SCOFF (baseline) corresponded to elevated risk of a positive screen of 3 “yes” answers 2 years later$^8$

Substantial psychological toll associated with sub-clinical symptoms (body image dissatisfaction, eating concerns)

Symptoms are persistent, may become more serious, more refractory to tx—importance of EARLY DETECTION
Prior Research in College Student Populations [3]

Who’s been studied on campus?

Women (sorority members, female athletes)\textsuperscript{1,2,4}

Convenience samples (academic departments—psychology, nutrition, residence halls)

Study design (typically small sample size, single-site)

Lack of campus-wide epidemiological research reflective of diversity of students on campus today

To complement this research, it is critical that we examine the distribution and characteristics of eating pathology at a campus-wide level
U-SHAPE addresses the diversity of disordered eating habits and attitudes among the diversity of students on college campuses today.
About U-SHAPE
U-SHAPE Objectives

Investigate the **prevalence and correlates** of a broad range of eating and body image issues among diverse college and university student populations

Examine relationships between **disordered eating and other important aspects of well being**

Understand **help-seeking** behaviors and preferences

Explore **campus environments** and norms (peers, etc.)

**TO COLLECT DATA THAT CAN INFORM THE DEVELOPMENT AND IMPLEMENTATION OF EFFECTIVE CAMPUS-LEVEL PREVENTION, SCREENING, AND INTERVENTION STRATEGIES**
Survey Design

Summer 2012: Survey design
- Input from administrators, researchers, clinicians, national mental health organizations

Pilot-testing with undergraduate and graduate students

Total—104 questions (WIDE range of eating/body image topics)
- Students answer fewer based on skip logic

Validated screening tools
- SCOFF for EDs, PHQ-4 for depression and anxiety, EDE-Q features associated with binge eating

Other survey items
- Some survey items are adapted from existing questionnaires, some are unique to U-SHAPE
- Created questions unique to the university setting

Linked to administrative data from Registrar’s Office
- Allows for non-response weighting
- Can track GPA and other outcomes over time
## Sample Characteristics (N=4,007)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random, non-clinical sample</td>
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<tr>
<td>Average age:</td>
<td>22.8</td>
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<tr>
<td>Female (64.1%), male (35.9%)</td>
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<tr>
<td>Undergraduate (60.5%), graduate student (39.6%)</td>
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<td>Average years in program:</td>
<td>2.4</td>
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<tr>
<td>Diverse across race/ethnicity (66.8% white), citizenship (13.0% international, over 60 countries), 23 academic disciplines, etc.</td>
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*Non-response weights applied hereafter*
Qualitative Data

“This topic is really important for most students...I really hope that this survey could support those in need...It's a universal issue that affects most people I know whether they show it or not.”

-Female, 2nd year master’s student
University Study of **Habits**, Attitudes, and Perceptions around Eating
Eating Disorder Screen: 
SCOFF

(Morgan et al., 1999)

U-SHAPE: Do you ever make yourself vomit, or use laxatives, diuretics (water pills), or diet pills to influence your body shape or weight?
*Do you make yourself Sick when you feel uncomfortably full?*

U-SHAPE & original: Do you worry you have lost Control over how much you eat?

U-SHAPE: Have you recently lost more than 15 pounds in a 3-month period?
*Have you recently lost more than One stone in a 3 month period?*

U-SHAPE & original: Do you believe yourself to be Fat when others say you are too thin?

U-SHAPE: Would you say that thoughts and fears about food and weight dominate your life?
*Would you say the Food dominates your life?*

**Validation in university samples:**

Validated in female and male university samples\(^7,\,10\)

\(\geq 2\) “yes” answers: sensitivity=53%, specificity=93%; positive predictive value=67%, negative predictive value=89%\(^7\)
**SCOFF+ Results**

**Audience Estimates: highest rates of ED+ in which academic field?**

<table>
<thead>
<tr>
<th>Undergraduate females?</th>
<th>Undergraduate males?</th>
<th>Graduate females?</th>
<th>Graduate males?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art/Design 40.2% (n=40)</td>
<td>Humanities 12.4% (n=105)</td>
<td>Business 38.6% (n=43)</td>
<td>Business 18.9% (n=95)</td>
</tr>
</tbody>
</table>
## Specific Screen Questions

- **Purging:** 11.5% (female undergraduates), 6.8% (female graduate students)
- **Loss of control:** 38.6% (all females), 15.0% (all males)
- **Weight loss (≥15 pounds in 3 months):** 12.0% (all males)
- **Believe fat, others say too thin:** 19.2% (all females)
- **Food/weight dominates life:** 18.2% (all females), 6.9% (all males)

**Students with SCOFF score ≥3 report functional impairment in many aspects of their daily lives**

(mental health, physical health, relationships/social life, sleep, concentration, daily tasks, academics, etc.)
“I know that my nutrition and eating choices (or lack of) have a lot to do with many of the other health and psychological issues that I have developed recently. Unfortunately, this preoccupation with thinness and body image has got such a tight hold on me that I am unable to free myself from its grip. The dieting (starving, really) and calorie counting, and stressing over thinness, and especially the resulting health and psychological problems have gotten so bad that these aspects have completely taken over my life...Its just an awful and unnecessary way to live.” - Female, third-year undergraduate
Dieting & Exercising

Dieting: ~1 in 3 students report being on a diet in the past year
- ~29.4% of whom report more dieting days than non-dieting days in the past year

Exercising: 85% of students report some exercise in past 2 weeks
- 40.3% of whom say it is “very like me” to exercise because “I want to influence my body shape or weight”
- Only 39.5% of whom say it is “not like me” to be “very focused on burning calories when I exercise”
- 74.9% of non-first-year students say their “exercise habits have changed a lot” since they began college/graduate school
“I feel one thing that is somewhat common especially with my girlfriends is taking adderol or other prescription medicines to also curb their appetites. Also my friends that are trying to watch their weight will starve themselves all day long and end up binge eating on unhealthy take out food as soon as they get drunk or their adderol wears off.” -Female, 1st year undergraduate
Binge Eating (≥1/week)

Students who binge eat have 1.7 times higher odds of screening positive for depression*** and 1.9 times higher odds of screening positive for anxiety***.
“I go from having a cookie, to a bag of M&M's, to a pint of Ben and Jerry's, to a pizza and I have no idea how I got to where I end up.” - Male, 2nd year master’s student
Changes during College/Grad school
(among all non-first-year students)

I have become more concerned about my body shape and weight since I began as a student at my university.

12.9% say “completely true”, 15.9% say “mostly true”

My eating habits have changed a lot since I began as a student at my university.

18.9% say “completely true”, 25.9% say “mostly true”

How have your eating habits changed...?

Most common response: “I am more concerned about what I eat” (33.6%)

My exercise habits have changed a lot since I began as a student at my university.

20.9% say “completely true”, 26.5% say “mostly true”
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Body Image & Self-Regard

Compared to other things in your life, how important is your body shape and weight to you?

*Very important*: 19.4% (all students)

I would like myself more if I were thinner.

*Very like me*: 15.4% (all females), 5.5% (all males)

My weight influences how I judge myself as a person.

*Very like me*: 13.7% (all females), 4.5% (all males)

I am willing to sacrifice to influence my body shape or weight.

*Very like me or Like me*: 30.2% (all females), 32.5% (all males)
Body Image Concerns

The thought of gaining a little bit of weight doesn’t bother me.

Not like me: 50.1% (all females), 22.9% (all males)

I am worried about gaining the “freshman 15”.

Very like me: 33.2% (female 1st-yrs), 10.1% (male 1st-yrs)
“Seeing girls in the dining hall with only a salad or close to no food on their tray makes me feel fat and guilty and unattractive.”

-Female, first-year undergraduate
Body Image & Peers

My friends and I often talk about weight and/or dieting.

*Completely true or Mostly true:* 21.9% (all females), 10.6% (all males)

I feel competitive or jealous when I compare myself to someone I think has a better body than me.

*Very like me or Like me:* 43.9% (all females), 29.2% (all males)

Highest amounts of competition/jealousy among pre-professional undergraduates (pre-health, pre-law, pre-business)
“I eat only healthy foods and it takes a lot for me to be okay with eating something I consider unhealthy. I also believe I don't eat enough. I workout at least 4 days a week for at least an hour. I put school aside for working out at times, but I also put my social life aside for school. I haven't been drinking alcohol for a few months because I'd hate to ruin a workout with the calories of alcohol. This has caused my roommates and friends to stop inviting me out with them many times.”

-Female, second-year undergraduate
“The exercise in choosing which out of the lineup of female bodies looked most like my own is something I basically do everyday when I look at other women.” - Female, 3rd year undergraduate
University Study of Habits, Attitudes, and Perceptions around Eating
Stigma

Most students at my university would think less of a person with an eating disorder.

ED+ students are more likely to perceive stigma from others***
[No significant differences in personal stigma]

Audience estimates: Which 3 sub-groups of students have elevated personal stigma (I would think less of a person with an eating disorder)?

- International students
- **Female students**
- Religion is ‘very important’
**Peer Support on Campus**

**Likely to intervene** (how true)  
(among ED- students)

**Likely to accept help** (how true)  
(among ED+ students)

**ED+ more likely “Not true”:** 16.9% students who purge, 13.5% ≥1/week binge eaters  
**ED+ less likely “Not True”:** 9.2% sorority women
“During my time here, I have had two very close friends deal with severe eating disorders. When it first began, I had literally no idea how to talk to my friends about it. I didn't know how to confront them, or how I could help. I think we need more programs that focus on how to address eating disorders on campus. I also think people need to be made more aware of just how prevalent they are.”

-Female, 3rd year undergraduate
“My friend was diagnosed with anorexia disorder [sic] and I never noticed. I wish info about how to see the signs was not only made available but pushed in dorms or something.”

-Male, 4th year undergraduate
Comorbidity
Alcohol

80.0% of undergraduates and over 50.0% graduate students report binge drinking in past 2 weeks

Binge drinking by gender and ED+/-

77.4% ED+ vs. 64.1% ED- females***
No significant difference for ED+/- males

17.2% females report having more confidence about their bodies when drinking

All students

19.0% report skipping meals or eating less when planning to drink
56.5% report eating more than normal while drinking
10.2% report often vomiting before, during, or after drinking
“The alcohol and drug use in the graduate student community is a problem. There is a great deal of stress associated with being a graduate student at this university. Alcohol, drug, and food consumption are all things students use to cope.”

-Male, 2nd year PhD student
Depression

(PHQ-4: Löwe et al., 2005)

8.0% of females and 2.7% of males screen positive for both an eating disorder and depression
“I am aware that my bad eating habits stem from what is likely depression (undiagnosed, and am a bit intimidated to seek the help I need).”

-Male, 1st year graduate student
12.8% of females and 3.2% of males screen positive for both an eating disorder and anxiety.
“Stress and anxiety are a major cause of my eating problems. I feel as though these problems are unavoidable in an educational environment [sic] that places high expectations on students.”

-Male, 2nd year undergraduate
Help-Seeking
Help-Seeking

Past 12-month professional service utilization among students who screen positive for an eating disorder

9.0% who report ≥1/week binge eating
23.7% who report purging
20.4% who screen positive for an eating disorder and depression
19.0% who screen positive for an eating disorder and anxiety
“The hardest part is not just admitting that you might want to talk to someone, but taking the step to go to a place where that person is available. Walking into a mental health space, especially as a graduate student, seems a bit daunting. What if someone sees you? How do you keep your worries private and out of a space where they could reflect poorly on your professionalization?”

-Female, 2nd year PhD student
## Reasons for Not Seeking Help

**Audience estimates: What are the 3 most commonly reported reasons for not seeking treatment among ED+ students?**

<table>
<thead>
<tr>
<th>Reason</th>
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<tbody>
<tr>
<td>I don’t know what resources are available to me.</td>
</tr>
<tr>
<td>I prefer to deal with issues on my own.</td>
</tr>
<tr>
<td>There are financial reasons (too expensive, insurance won’t cover what I need).</td>
</tr>
<tr>
<td>I don’t have time.</td>
</tr>
<tr>
<td>Issues related to eating and body image are normal in college/graduate school.</td>
</tr>
<tr>
<td>I’m not sure how serious my needs are</td>
</tr>
</tbody>
</table>

- “I prefer to deal with issues on my own”
- “I’m not sure how serious my needs are”
- “I don’t have time”
“I know that I have unhealthy thoughts about food/body image but I never feel it's extreme enough to schedule an appointment or be classified as an eating disorder...would be nice if there were a less extreme counseling option”

-Female, 2nd year master’s student
Considerations for Research and Practice
Implications for Practice [1]

Address eating disorders in combination with other mental health problems (depression, anxiety)

Target often ignored populations (e.g. males, international students)
  - 23.5% of international students screen positive for an eating disorder
  - Highest levels of stigma reported by international students

Social norms campaigns (redefine the status quo)
  - “Freshman 15”

Strengthening knowledge and intervention skills among peers (Gatekeeper Trainings)
Implications for Practice [2]

Educate students and staff/faculty
- Eating disorders affect people of all sizes in all different ways
- Weight does not determine risk for certain eating disorder symptoms

Promote weight-neutral approach
- Health At Every Size ®

Identify stakeholders on campus
- Collective impact
## Next Steps for Research

### AY 2013-2014 expand
- Collecting data at a diverse set of institutions (U.S. and abroad)

### Building risk profiles
- Linking from survey to customized interventions/preventions

### Collect counselor/administrator/faculty data
- *U-SHAPE Professionals*

### Longitudinal data collection and analysis

### Translational research (bridging research to practice)
- For administrators, faculty, students, others
Research-to-Practice Feedback Loop

1. U-SHAPE conducts research
2. Dissemination of research to practitioners/policy-makers
3. Practitioner feedback to U-SHAPE
4. U-SHAPE-practitioner collaboration

Informs U-SHAPE research
Participate in U-SHAPE

Benefits of participation
- Easy to participate—we do the work for you!

Utilize data to:
- Apply for grants
- Advocate for resources
- Discuss and assess policy and program changes at your institution

New enhancements
- Interactive data interface: explore your data further; generate graphs and tables for presentations
- Improved data reports
More information:

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References


