A framework for building resilience on college campuses: The evolving Cornell approach

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The mental health landscape: What the data say
The mental health landscape

- Rates of mental health challenges high and appear to be increasing

- Age of onset for most mental disorders is 18-24 but symptoms often begin earlier (most common are depression and anxiety)

- 13.9% of students have been diagnosed with a DSM IV classifiable disorder (29.3% believe they have struggled with a DSMIV disorder)

- The proportion of U.S. office visits that resulted in the prescription of a psychotropic medication among adolescents increased 250% from 1994 to 2001: The largest increase was for SSRIs and stimulants; 15% of students in our study reported psychotripc medication use

- 30.5% of Cornell students sought mental health services at some point and 16.6% of all Cornell students have considered going to mental health services

Meta analysis of changes in depression scores in college students by year (1930-2010)

(Twenge, et.al, 2010)
Meta analysis of changes in psychopathic deviation in college students by year (1930-2010)
Meta analysis of changes in hypomania scores in college students by year (1930-2010)
Global comparisons of rates of mental illness: The World Health Organization Study, 2004

<table>
<thead>
<tr>
<th></th>
<th>Any MI (%)</th>
<th>Any MI (%)</th>
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<tbody>
<tr>
<td>US</td>
<td>Netherlands</td>
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<td>Columbia</td>
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<td>Italy</td>
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<td></td>
<td>China (Shanghai)</td>
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Kessler et. al., JAMA, June 2, 2004—Vol 291, No. 21
## Results

<table>
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<td>France</td>
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<td></td>
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<td>China (Shanghai)</td>
<td><strong>4.3</strong></td>
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</tbody>
</table>

Although disorder severity was correlated with probability of treatment in almost all countries, 35.5% to 50.3% of serious cases in developed countries and 76.3% to 85.4% in less-developed countries received no treatment in the 12 months before the interview.
Study 1: The 8 college study
(2006 Survey of student wellbeing; SSWB)

Objectives:
To assess student mental health and wellbeing with particular focus on non-suicidal self-injury, suicide, wellbeing, risk and protective factors, and help seeking in a community population of young adults

Methods:
• Cross-sectional survey administered in 8 universities (Cornell, Princeton, Harvard, Columbia, U. North Dakota, Youngstown State, MIT, U of Rochester) (total n=14,372)

• Simple random sample of 10,655 Cornell graduate and undergraduate students; 4,150 participated (RR= 38.9%)

• Administered via web-based survey in 2006-2007 academic year

• Representative of all known population parameters, with the exception of more female than male respondents.

• All analysis conducted controlling for design effects
The average level of perceived academic stress across all schools is 6.48; rates vary little across school.
Frequency of parental contact

- At least once a day: 25.8% (1st year), 27.3% (2nd year), 28.9% (3rd year), 26.6% (4th year), 5.5% (5th year), 12% (graduate)
- Few times a week: 60% (1st year), 60% (2nd year), 60% (3rd year), 60% (4th year), 100% (5th year), 100% (graduate)
- Once a week: 0% (1st year), 0% (2nd year), 0% (3rd year), 0% (4th year), 0% (5th year), 0% (graduate)
- Few times a month: 40% (1st year), 40% (2nd year), 40% (3rd year), 40% (4th year), 40% (5th year), 40% (graduate)
- Once a month: 20% (1st year), 20% (2nd year), 20% (3rd year), 20% (4th year), 20% (5th year), 20% (graduate)
- <1 per month: 0% (1st year), 0% (2nd year), 0% (3rd year), 0% (4th year), 0% (5th year), 0% (graduate)
To whom do students turn for advice when sad, depressed, or anxious?

<table>
<thead>
<tr>
<th></th>
<th>Friend</th>
<th>Family</th>
<th>Non-mental health professional</th>
<th>Mental health professional</th>
<th>No one</th>
<th>Other</th>
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</thead>
<tbody>
<tr>
<td>Friends at school</td>
<td>70.2</td>
<td>66.4</td>
<td>61.7</td>
<td>43.3</td>
<td>40.1</td>
<td>39.9</td>
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<td>Friends away</td>
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<tr>
<td>Parents</td>
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<td>Siblings</td>
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<td>Romantic partner</td>
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<td>Roommate</td>
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<tr>
<td>Other relatives</td>
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<td>Spiritual advisor</td>
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<td>Secondary school associate</td>
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<td>Therapist on campus</td>
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<tr>
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<tr>
<td>Resident Advisor</td>
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<td>Faculty member</td>
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<tr>
<td>MD at home</td>
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<tr>
<td>MD at school</td>
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<tr>
<td>Virtual friend</td>
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<tr>
<td>Other</td>
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<td>7.1</td>
</tr>
</tbody>
</table>

0 10 20 30 40 50 60 70 80

For non-mental health professionals, students most commonly turn to friends at school (70.2%) and at home (66.4%). For mental health professionals, the most common are friends at school (43.3%) and at home (40.1%).
Study 2: Longitudinal study in 5 colleges (SSWH 2006 – 2009)

Objectives:
To longitudinally investigate the relationship between NSSI and suicidality in a young adult sample

To longitudinally assess psychological distress trajectories over time and to identify key contributors to the onset of distress in a young adult sample

Methods:
• Simple random sample of undergraduate and graduate students drawn from 8 universities (n=14,372; overall response rate of 38.9%) using measures from the Survey of Student Wellbeing administered via web-based survey in 2006-2007 academic year.

• Longitudinal study in 5 of 8 original schools (3 private, 2 public). Wave I-III data on 1,466 individuals (2006-2009)
Key Measures

Suicide (Kessler et. al., 2005)
- Coded binarily and by lethality (ideation, gesture, attempt) cumulatively and at each wave

Self injury (NSSI-AT; Whitlock & Purington, 2010)
- Lifetime frequency, NSSI status at each wave coded binarily and by lifetime frequency at each wave (0, 1, 2-10, >11)

Global psychological distress (K-6; Kessler, 2002)
- Captures DSMIV classifiable anxiety and distress in past 30 days

Demographics
- Sex
- Sexual orientation
- Ethnicity / race
- SES

Psychological traits
- Optimistic or pessimistic cog style
- Emotion regulation
- Sense of presence of meaning in life
- Endorsement of aggression
- Life satisfaction

History of trauma or abuse (emotional, phys, sex)

History of mental illness
- Subjective and diagnosed (self)
- Parental diagnosed

Social connectedness
- Number of confidants
- Category of confidant
- Perceived peer connectedness

Mental health treatment
- History of MH treatment
- Attitudes toward treatment (stigma)
Accumulation of NSSI, suicide, and psychological distress over time

NSSI incidence:
- Wave 2: n=77 (5.2%)
- Wave 3: n=11 (.8%)

SI/SA incidence:
- Wave 2

Psychical distress:
- Wave 2: n=

Psychological distress:
- Wave 2: n=

SI/SA incidence:
- Wave 2

SA incidence:
- Wave 2: n=

NSSI incidence:
- Wave 2: n=77 (5.2%)
- Wave 3: n=11 (.8%)
Trajectories over time using NSSI, SI/SA, and K-6 (GPD)

28.7% of all students at time 1 had a history of GPD or experienced onset of GPD over the subsequent 2 years

- 18.2% show GPD at T1 but no more following
- 3.6% show GPD at T1 and add more over 2 year period
- 6.9% show NO GPD at T1 but “convert” in next 2 years

In sum: **10.5% students are adding some form of PD between T1 and T2**

When restricted to <20 yo at T1
31.7% of all students at time 1 had a history of GPD or experienced onset of PD over the subsequent 2 years

- 19.3% show GPD at T1 but no more following
- 4.9% show GPD at T1 and add more over 2 year period
- 7.5% show NO GPD at T1 but “convert” in next 2 years

In sum: **12.4% of students <20 yo at T1 are adding some form of PD between T1 and T2**
What predicts who is at risk for later psychological distress (as measured by NSSI, suicidality, and global psychological distress)?

Progress from no PD at time 1 to PD by T3 (ROC curve analysis classifying 58%-75% of individuals who convert)

- History of MH treatment
- History of physical abuse
- SES
- Number of traumas reported
- Pessimistic cognitive style (this alone correctly categorizes 70% of individuals in the risk condition)
- Emotional regulation and processing
- Model identified would correctly predict 84 of every 100 people at risk for conversion

Confidant categories:
- No one
- Peers only
- Peers and adult professionals
- Peers, professionals, and informal adults
- Parents

Perceptions of therapy stigma

Life satisfaction

Endorsement of physical aggression

Presence of meaning in life

Progress from no PD at time 1 to PD by T3 (ROC curve analysis classifying 58%-75% of individuals who convert)
Factors significant in the final model

Pessimistic cognitive style

Emotional regulation and processing

Presence of meaning in life

Presence of confidants (particularly parents)

Perceived isolation and number of confidant categories*

History of MH treatment
The relationship between academic stress and global psychological distress

- Academic stress at T1 does moderately predict later GPD among those who already experiencing GPD and who stay high but drops out when emotional regulation (presence of coping strategies) and cognitive style are added.

- Academic stress at T1 does NOT predict later GPD among those with no history of GPD at T1.

**Take home message:** academic stress does not cause distress but exacerbates distress tendencies among those with existing vulnerabilities.
Additional trends of interest

By time 3:
- 41.3% of all students by Time 1 reported believing that they have suffered from a diagnosable mental illness
- 22.9% have been diagnosed with a DSMIV classifiable MI
- 43.4% have received some form of MH treatment

At time 1:
- 36.6% of all individuals with NSSI history reporting telling no one
- 50% of all those who reported some suicidality (including 12%of those who reported suicide attempts) reported talking to no one about it
- 16.3% of those reporting T1 elevated distress reported generally talking to no one when sad, anxious or depressed (compared to 3.5% of low folks and 5.9% of mod folks)
A few implications

Assessment would allow for identification of individuals at risk who are otherwise silent. Coupling this with a web-based mechanism for engaging students may encourage honest disclosure.

Enhance cognitive style and emotion regulation and coping

Enhance perceived social support confidant circle (adding adults particularly useful)

The predictive power of cognitive style as well as of endorsement of aggression suggests the centrality of norms – this is consistent with the literature.

Trends which show minorities at higher risk in univariate or preliminary analyses suggest that engaging students from minority backgrounds in strength-based social and emotional resilience skill training (perhaps linked to the summer school preparation programs?) may be a fruitful way to reach an elevated risk group.

Capitalize on the power of parents – they may be out of sight, but they are clearly not out of reach or influence.
So, what do we do?

A Framework for building resilience
Cornell University Mental Health Framework

- Foster a healthy educational environment
- Promote social connectedness and resilience
- Restrict access to means of suicide
- Increase help-seeking behavior
- Deliver coordinated crisis management
- Provide mental and medical health services
- Identify people in need of care
What is resilience?

A class of phenomena characterized by positive adaptation in the context of significant adversity or risk
(Masten & Reed, 2002, pg. 75)

A positive outcome in the context of risk or adversity, known to be associated with negative outcomes as a result of effective utilization of available personal and ecological resources
(Luthar, Cicchetti, & Becker, 2000; Unger et. al., 2008)

Resilience is grounded in what we know about how humans develop and thrive. One’s awareness of self (or system) resilience is activated when there is perceived risk to psychological integrity or physical safety.
How do we recognize resilience?

The most complex taxonomy of resilience identifies a multi-dimensional model (Wong, 2012):

**Cognitive:** How events are interpreted (cognitive style, appraisal, attribution)
Transactional: how daily stressors and life circumstances are negotiated (coping)

**Behavioral:** Habits of persistence and endurance in face of obstacles and failures (behavioral practice and reinforcement)

**Motivational:** Clear sense of life purpose and commitment (will to live)

**Existential/spiritual:** Sense of larger purpose and meaning of human life (meaning and life purpose)

**Relational:** Sense of social connectedness, engagement, and altruism

**Emotional:** Ability to tolerate negative emotions and rejection and to maintain emotional confidence and hopefulness (emotion regulation, emotional intelligence)
What promotes resilience?

Resilience stems from the interaction of *internal* factors (e.g. temperament, personal history, generic make-up etc..) and *external* factors (e.g. availability of developmentally supports and opportunities) (Garmezy, 1974; 1985; Werner, 1984; Rutter, 1993; Bonanno, 2004)
Mental Health Programmers Work Team

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Pathways for building student resilience

Functional Resilience

Existential Resilience

Opportunities for Service

Opportunities for Connectedness to Others

Opportunities for Efficacy & Mastery

Opportunities for Self Awareness
How are our pillars related to resilience?
(this slide needs development)

Service to society:
Mastery and autonomy
Connectedness to others
Self-awareness & self-regulation
Meaning

Resilience

Self regulation and care

Interpersonal and social engagement
- Generosity
- Integrity
- Intimacy
- Authenticity
- Humility

Service

Efficacy & Mastery

Self Awareness

Attention / focus
Resilience

Interpersonal and social engagement
- Generosity
- Integrity
- Intimacy
- Authenticity
- Humility

Service
- Efficacy & Mastery

Connectedness to Others
- Self regulation and care
  - Self-regulation
  - Persistence
  - Adversity tolerance
  - Cognitive (re)framing
  - Healthy physical habits

Meaning
- Attention / focus

Self Awareness
- Generosity
- Integrity
- Intimacy
- Authenticity
- Humility
Meaning

Self regulation and care
- Self-regulation
- Persistence
- Adversity tolerance
- Cognitive (re)framing
- Healthy physical habits

Connectedness to Others

Service

Interpersonal and social engagement
- Generosity
- Integrity
- Intimacy
- Authenticity
- Humility

Attention / presence
- Focus
- Curiosity
- Flexibility
- Learning enjoyment

Efficacy & Mastery

Self Awareness

Resilience
Resilience

Meaning
- Purpose
- Acceptance
- Trust
- Gratitude
- Hope
- Optimism

Attention / presence
- Focus
- Curiosity
- Flexibility
- Learning enjoyment

Efficacy & Mastery

Social engagement
- Generosity
- Integrity
- Intimacy
- Authenticity
- Humility

Self regulation and care
- Self-regulation
- Persistence
- Adversity tolerance
- Cognitive (re)framing
- Healthy physical habits

Connectedness to Others

Service

Individual

Self Awareness
How can we build student resilience?

Opportunities for service to society through:
  • Engaged learning, service learning, work and volunteer opportunities

Opportunities for mastery and autonomy through:
  • Leadership, positive risk taking

Opportunities for connectedness to others through
  • Relationship and trust building activities and opportunities

Opportunities for self-awareness & self-regulation through
  • Education and training (lexicon and skills), opportunities to practice skills, feedback on skills (curricular, public messaging and modeling)
Next Steps

• Apply framework to existing student opportunities to identity areas of strength and gaps

• Begin infusing resilience framework language, messaging, and approaches into existing student focused initiatives, programs, and approaches

• Apply framework to individuals in staff and faculty roles

• Adapt framework to collective level systems to identify opportunities for building resilience within groups, programs, and organizations