Stress, Anxiety, Depression, and Violence: Findings from an Urban Community College and Implications for Practice

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Who are BCC students?

- **Population**: 11,500
- **Gender**: 58% women 42% men
- **Ethnicity**: 61% Latino/Hispanic, 33% Black, non-Hispanic
- **Age**: 34% over 25 years old
- **Socioeconomic Status**: 45% household income < $15,000
- **Marital Status**: 16% married or domestic partner
- **Parental Obligations**: 31% support children ≤ 18 years
- **Care Provider**: 60% provide care to other people 1 or more hrs/wk
- **Work for pay**: 45% work for pay 1 or more hrs/wk
ACHA Data Collection

- Spring 2012 semester
- Randomized class sections from MTH 05, ART 11 and MUS 11
- 58 classes surveyed (85 contacted, 68% response rate)
- 1062 students participated (1363 recruited, 78% response rate)
- Trained research assistants collected data from individual classes
<table>
<thead>
<tr>
<th><strong>BCC</strong></th>
<th><strong>National</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>( n = 1,081 )</td>
<td>( N = 90,666 )</td>
</tr>
<tr>
<td>Average age = 24.12</td>
<td>Average age = 22.59</td>
</tr>
<tr>
<td>Sex = 50.8% female</td>
<td>Sex = 64.2% female</td>
</tr>
<tr>
<td>27.6% male</td>
<td>33.5% male</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Race/Ethnicity</td>
</tr>
<tr>
<td>52.5% Hispanic/Latino</td>
<td>8.4% Hispanic/Latino</td>
</tr>
<tr>
<td>19.7% black/African American</td>
<td>6.4% black/African American</td>
</tr>
<tr>
<td>4.3% white</td>
<td>72.6% white</td>
</tr>
</tbody>
</table>
Health Behaviors

• 36% of females reported **using condom or other protective barrier** within last 30 days during vaginal intercourse compared with 49% nationally.

• 9 times as likely to experience **unplanned pregnancy** compared to national reference group.

• 33% of females and 49% of males meet **national fitness guidelines**.

• 3 times as many students reported eating **no servings of fruits and vegetables** each day compared to national reference group.

• 50% of females and males consider themselves **overweight**.

• 63% have **tested for HIV** compared to 27% nationally.
Trauma, Violence, Mental Health Symptoms and Stress
Trauma or Difficulties
Within the last 12 months, college students reported experiencing:
Violence
Within the last 12 months, college students reported experiencing:

- A physical fight
- A physical assault
- A verbal threat
- Stalking
- An emotionally abusive intimate relationship

The chart compares the rates of these experiences between national statistics and those from BCC men and women.
Mental Health

Students reported experiencing the following within the last 12 months:

- felt things were hopeless
- felt exhausted (not from physical activity)
- felt overwhelmed by all you had to do
- felt lonely
- felt very sad
- felt overwhelming anxiety
- felt so depressed that it was difficult to function
- felt overwhelming anger
- seriously considered suicide
- attempted suicide
- intentionally injured yourself

Bar chart showing the comparison between BCC and National data.
Stress
Within the last 12 months how would you rate the overall level of stress experienced?

- **tremendous stress**
- **more than average stress**
- **average stress**
- **less than average stress**
- **no stress**

**n (BCC)**

**N (National)**
Fishing Expedition

Exploratory Analysis of Data:

• Chi-square calculations of associations between independent variables and dependent variables.

• **Independent variables**: gender, age, race, ethnicity, relationship status, enrollment status (full-time/part-time).

• **Dependent variables**: stress, mental health symptoms, violence.
## Stress
(no stress, some stress, high stress)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Stress – statistically significant associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Females higher (36% vs. 26% males)</td>
</tr>
<tr>
<td>Age</td>
<td>No differences</td>
</tr>
<tr>
<td>Race</td>
<td>Bi-racial/multiracial most likely to report high stress (59%)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>No differences</td>
</tr>
<tr>
<td>Relationship status</td>
<td>No differences</td>
</tr>
<tr>
<td>Full-time/part-time student</td>
<td>No differences</td>
</tr>
</tbody>
</table>
Mental Health Symptoms

- Hopeless
- Overwhelmed
- Exhausted
- Sad
- Depressed
- Anxiety
- Anger
- Injured self
- Considered suicide
- Attempted suicide
# Mental Health Symptoms

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Statistically significant associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td><strong>Females</strong>: hopeless, overwhelmed, exhausted, lonely, sad, depressed and anxiety</td>
</tr>
</tbody>
</table>
| Age                         | **Ages 18-20**: injured self, considered suicide  
**Ages 21-24**: hopeless, lonely, depressed, anxiety, anger, injured self, considered suicide |
| Race                        | Bi-racial/mulitracial: considered suicide                                                               |
| Ethnicity                   | No differences                                                                                         |
| Relationship status         | **Not in a relationship**: anger, considered suicide, depressed, lonely, sad                              |
| Full-time/part-time student | No differences                                                                                         |
Violence Variables
In the last 12 months experienced:

- Physical fight
- Physically assaulted
- Verbally assaulted
- Sexually touched without consent
- Sexual penetration without consent

- Victim of stalking
- Emotionally abusive relationship
- Physically abusive relationship
- Sexually abusive relationship
## Violence

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Statistically significant associations</th>
</tr>
</thead>
</table>
| Gender                                    | **Males**: physical fight, physically assaulted, verbally threatened  
**Females**: sexual penetration attempted without consent, victim of stalking, emotionally abusive relationship, physically abusive relationship |
| Age                                       | **Ages 21-24**: verbally threatened, victim of stalking, emotionally abusive relationship, physically abusive relationship |
| Race                                      | No differences                                                                                           |
| Ethnicity                                 | Non-Hispanic: physically assaulted                                                                       |
| Relationship status                       | No differences                                                                                           |
| Full-time/part-time student               | **Part-time student**: sexually touched without consent, sexual penetration attempted without consent    |
Why do students report low levels of stress and other mental health indicators for anxiety and depression?
Hypotheses

1. Stress and mental health symptoms may be manifest as physical health symptoms rather than perceived as a mental health problem.

2. The perception of stress and mental health may be different in BCC students due to culture.

3. Mental health symptoms may be under-reported due to cultural prohibitions.

4. There may be protective effects or resilience related to school or culture that serves to reduce levels of stress and mental health symptoms.
Violence, Stress, and Somatic Syndrome

- Studies have shown a connection between women's health problems and DV in conditions such as Stress Related Somatic Syndrome characterized by pain, fatigue, mood disorder, cognitive dysfunction, and sleep disturbance.
- These syndromes include but are not limited to fibromyalgia, chronic fatigue syndrome, temporomandibular disorder, and irritable bowel syndrome.
- Exposure to the stressor of violence is likely to create a state of vulnerability for the stress-related somatic syndromes and also to contribute to symptom expression and severity.
- Understanding the relationship between violence, stress, and somatic syndromes will help in clarifying the consequences of violence exposure to long-term health and health-related quality of life.
Depression, Anxiety and Allergies

• The research into allergies and depression anxiety, clearly demonstrates another of the many physical causes of depression anxiety, and backs up the thesis that depression anxiety is a physical condition which affects the body, brain, mood and behavior.

• Besides allergies, other physical causes of depression anxiety include antibiotics, alcohol, junk food, and pollution.
Allergens enter your body and bloodstream triggering an inflammatory immune histamine response, which in turn releases cytokines that can enter the brain and cause inflammation, leading to depression and anxiety.

Allergies indirectly cause depression and anxiety.

Impact of allergy treatment on the association between allergies and mood and anxiety in a population sample.

Goodwin RD, Galea S, Perzanowski M, Jacobi F.

Source

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### Percentage of Respondents Who Reported Physical Health Symptom by Each Mental Health Symptom (N = 1081)

<table>
<thead>
<tr>
<th>Mental Health Symptom</th>
<th>Allergies</th>
<th>Asthma</th>
<th>Back pain</th>
<th>Migraines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopeless</td>
<td>25.6%*</td>
<td>13.7%</td>
<td>21.2%**</td>
<td>14.9%***</td>
</tr>
<tr>
<td>Overwhelmed</td>
<td>26.6%***</td>
<td>13.3%</td>
<td>20.7%***</td>
<td>13.9%***</td>
</tr>
<tr>
<td>Exhausted</td>
<td>26.3%***</td>
<td>14.0%**</td>
<td>21.9%***</td>
<td>13.8%***</td>
</tr>
<tr>
<td>Lonely</td>
<td>25.0%*</td>
<td>13.4%</td>
<td>21.6%**</td>
<td>15.6%***</td>
</tr>
<tr>
<td>Sad</td>
<td>25.0%*</td>
<td>13.9%*</td>
<td>22.0%***</td>
<td>15.7%***</td>
</tr>
<tr>
<td>Depressed</td>
<td>25.5%*</td>
<td>12.2%</td>
<td>24.3%***</td>
<td>16.5%***</td>
</tr>
<tr>
<td>Anxiety</td>
<td>27.5%**</td>
<td>15.9%**</td>
<td>24.0%***</td>
<td>15.9%***</td>
</tr>
<tr>
<td>Anger</td>
<td>26.3%**</td>
<td>13.9%</td>
<td>22.1%**</td>
<td>14.7%**</td>
</tr>
<tr>
<td>Intentional injury</td>
<td>25.5%</td>
<td>23.9%*</td>
<td>31.1%*</td>
<td>19.6%*</td>
</tr>
<tr>
<td>Considered suicide</td>
<td>17.9%</td>
<td>10.4%</td>
<td>22.4%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td>33.3%</td>
<td>20.8%</td>
<td>29.2%</td>
<td>17.4%</td>
</tr>
</tbody>
</table>

* p value < .05  
** p value < .01  
***p value < .001
Implications & Recommendations

• Domestic Violence is a serious public health issue that occurs within the context of a family, or in other situations such as dating violence, sexual assault, and stalking.

• DV requires a comprehensive understanding and interventions.
Implications ...

• Increasing education and awareness –
  – Identifying Warning signs in dating relationships that may lead to later violence.
  – Increase understanding of the health consequences of DV.
  – Address many of our students view about violence against women.

• Some students believe DV is mainly physical – Not aware of emotional, mental, and other forms of abuse.

• Others believe the emotional abuse more serious than the physical abuse.
Implications…

• Encourage young adults to build relationship based on trust.
• Encourage them to avoid relationships that confuse “love” with power, control and jealousy.
• Increase awareness with educational posters.
• Provide resource brochure that list services available on and off camps with a “plan for quick escape”.
Implications …

• Screen for IPV
  • Titanium Schedule – Data Base web based intake
    CCAPS measures college assessment of psychological symptoms – depression, hostility and sleep disturbance screen for IPV.
  • Decided – Screen for IPV at every intake.
  • Searched for short IPV screening and we HITS (Hurts/Insults/Threatens/Screams.)
Implications...

• Awareness and Education via creative methods
  – Psycho-educational Workshops
    • Community Resources – Majors Office
    • Multi-cultural Resources – inviting to college
    • Drama Club – skits on DV from a diverse perspective
  – Digital Story Telling and DV (Silence Speaks)
  – The Dream Table – reaching all student and increasing awareness on many issue – DV was the issue this week.
Implications …

• Stress Reduction, Self esteem and Emotion Regulation – Via groups and workshops using DBT strategies, Mindfulness and Acceptance Based workshops
  – Mindfulness (to facilitate attention control, reduce judgments toward the self and others, and to build self-awareness and self-management skills);
  – Interpersonal effectiveness (to help reduce chaos and invalidation and build social support);
  – Emotion regulation (to reduce emotional vulnerability, reactivity, and misery, and to facilitate emotion modulation and self-management);
  – Distress tolerance (to interrupt negative emotion escalation and urges to engage in out-of-control behavior, and to “accept” things in life that are very undesirable but unchangeable).
• ACT – for Depression Workshop
Mindfulness and Acceptance

- In Mindfulness and Acceptance for Counseling College Students, clinical researcher Jacqueline Pistorello explores how mindfulness and acceptance-based approaches such as acceptance and commitment therapy (ACT), dialectical behavioral therapy (DBT), mindfulness-based cognitive therapy (MBCT), and mindfulness-based stress reduction (MBSR) are being utilized in higher education settings around the world to treat student mental health problems like severe depression, substance abuse, and eating disorders, and/or to help students thrive—both in and out of the classroom.
References


Brandy
Duke, Kingston, Suki