Is There an Association Between Disordered Eating Behaviors & Suicide Ideation Among Females Sampled in the Longitudinal Study of Adolescent Health – Wave II?

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Statement of the Problem

➢ Youth suicide:
  - 3rd leading cause of teen deaths¹
  - 2004, 39% of 6th graders reported feeling depressed or sad most days in the year²

➢ Disordered eating:
  - 1/12 HS females report vomiting or taking laxatives to control wt³
  - 15% do not meet DSM criteria for ED³

➢ Healthy People 2010

¹CDC, 2003; ²Youth Suicide Prevention Program, 2004; ³Haines et al., 2006
Eating disorders greater risk of suicide ideation (SI)\(^1,2,3\)

Suicide attempts more prevalent among females with abnormal eating behaviors & strongly correlated with impulsiveness\(^3\)

Strong associations between disordered eating behaviors (DEB), SI, & suicide attempts\(^4\)

\(^1\)Dancyer & Fornari, 2005; \(^2\)Phillips et al., 2005; \(^3\)Kent et al., 1997; \(^4\)Neumark-Stainer et al., 1998
Study Aims

- **Primary** - Association between SI & DEB among adolescent females?

- **Secondary** - Association between an index of suicide & DEB among adolescent females?
Empirical Model
Based on Jessor’s Problem Behavior Theory

Body image distortions

↓ Self-worth

Seek peer approval & thus, susceptible to peer pressure

Disordered Eating Behaviors
Attempt to gain peer approval

Peer approval not received

Depression

Suicide Ideation

¹Costa, 2006
National Longitudinal Study of Adolescent Health (Add Health)

Health-related behaviors of adolescents & their outcomes in young adulthood

Data collection: Wave I, II, III

Representative sample of 7th to 12th graders

Weighted data set
Add Health Participants

- Wave II = 13,568 (females & males)
- Data collected 1995-1996
- Enrolled in public schools
- In-school Q’s & in-home interviews
- Audio-CASI software – suicide & other sensitive questions
Study Participants

- Wave II
- 6,963 adolescent females
- 15-17 years of age
- Have all Wave II weights available
- Linked Wave I & Wave II variables for:
  - Race/ethnicity
  - Parental education
Design

- Cross-sectional
- Wave II data
- Association between SI & DEB among adolescent females
Suicide

- **Suicide ideation**
  - “During the past 12 months, did you ever seriously think about committing suicide?”
  - Responses: yes, no, don’t know

- **Index of suicidal behaviors**
  - Based on a range of suicide behavior questions that reflect increasing risk (ideation, # of attempts, medical attention sought out for attempt).\(^1\)
  - Score range: 0-5 (5 = most severe)

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\(^1\)Thompson & Eggert, 1999
Disordered Eating

- Trying to lose wt:
  - Lose wt, or stay the same wt

- Wt controlling behavior:
  - Made self vomit, took diet pills, or took laxatives

- Extremely low body fat:
  - BMI < 17 + diet and/or excercise$^{1,2}$

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$^1$Granillo et al., 2003; $^2$Scalfi et al., 2002
Statistical Analysis

- Statistical software Stata 9 & SPSS 14
- Correlation coefficients & odds ratio
- Multivariate logistic regression
- Correction for sample selection & design effects
- Frequencies, ANOVA, & t-test

1Harris et al., 2003
Covariates:
- Depression, self-worth, race/ethnicity, parental education, age, ht, & wt

Comparison groups:
- Group I = SI & DEB
- Group II = SI only
- Group III = DEB only
- Group IV = neither SI nor DEB
Results – Overall sample of females

- Mean age – 16 years
- Mean ht – 64 inches (5ft. 4in.)
- Mean wt – 132 pounds

- SI – 13%
- Mean index suicide behaviors – 0.22
- Trying to lose/keep gaining wt – 46%
- Diet – 78%
- Exercise – 49%
Results – Comparison Groups

- **Age:**
  - Oldest females – DEB only (Group III)
  - Youngest females – SI only (Group II)

- **Highest depression score** – SI & DEB (Group I)

- **Lowest self-worth score** – Group I
Results – Associations

- No significant association between SI & DEB
- SI & DEB – strongest prior to controlling for depression
- Significant correlations:
  - Depression
  - Self-worth
  - African American
Discussion

- Adolescent females who exhibit DEB were not at an increased risk for SI when depression, self-worth & other covariates were controlled for.

- Females who reported SI & DEB had ↑ depression & ↓ self-worth scores

- Unique role: depression & self-worth
Discussion cont.

- Possible weak association – DEB not severe enough
- Unexpected finding – African American
- Professionals – should incorporate screening for depression into their assessment & care plans
- Informing policy & prevention models addressing adolescent suicide & DEB
Limitations

- Self-reported – susceptible to information & interviewer bias
  - Decreased somewhat – Audio-CASI to collect sensitive data

- Not be generalized to non-surveyed homeschooled adolescent females
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