Correlates Among Self-concept, Anxiety, Depression, Anger, and Disruptive Behavior in Vulnerable Middle School Youth

Jacqueline Hoying, PhD, RN, NEA-BC
The Ohio State University
<table>
<thead>
<tr>
<th>Faculty Name:</th>
<th>Jacqueline Hoying, PhD, RN, NEA –BC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflicts of Interest:</td>
<td>None</td>
</tr>
<tr>
<td>Employer:</td>
<td>The Ohio State University</td>
</tr>
<tr>
<td>Sponsorship:</td>
<td>Sigma Theta Tau Epsilon Chapter</td>
</tr>
</tbody>
</table>
Goals and Objectives

- **Session Goal:**
  - Discuss the correlations of the variables in two vulnerable middle school age populations

- **Session Objectives:**
  - Discuss relationships among study variables including self-concept, anxiety, depression, anger, and disruptive behavior between Urban and Appalachian middle school youth
  - Discuss implications for clinical and future research
Middle schools from two vulnerable environments
Vulnerable Adolescents Viewed Differently
Two sub-cultures with different stressors

**URBAN**
- Increased exposure to violence
- Neighborhood chaos
- Urban school districts

**RURAL APPALACHIA**
- Rural residence
- Unique culture environment
Similarities in Adverse Health Outcomes: Overweight/Obesity and Mental Health Concerns

- Occurrence is higher in minority youth from lower socioeconomic status families
Overweight/Obesity in Adolescents

- Childhood obesity is associated with a 70% increased prevalence of adult obesity
- 61% increased risk factors for coronary artery disease
- 26% increased risk of having two or more risk factors and premature death

- U.S. overall rate 34.2%
- African American youth 39.5%
- Appalachian youth 38%
Mental Health Concerns in Adolescents

• Significant association exists between adolescent obesity and depression

Mental Health Disorders
• U.S. overall rate 17%
• Low-income youth 21%
• 1 in 4 adolescents experience mental health issue
Adaptive vs Maladaptive Coping

Understanding the differences and similarities in the baseline variables can assist in guiding interventions

Anxiety
Depression
Self-concept
Anger
Disruptive behavior
Anxiety in Adolescents

- Youth with anxiety and depression symptoms experience impairment in academic, social, family, and personal health accompanied by increased risk for adult anxiety and depressive disorders, and substance abuse issues.
- Anxiety disorders are the most common mental health disorder.
- Adolescents worry about social competence, health issues, and school performance.
Depression in Adolescents

- Suicide remains the third leading cause of death among 12- to 17-year-olds.
- Suicide rates for African American youth (5-11 yrs.) are significantly higher (and have increased for the first time) compared to a decrease in Caucasian peers.
Self-Concept in Adolescents

• Developmentally, adolescents’ become increasingly self-conscious and have heightened awareness of how they are perceived by others.

• An indispensable element of mental health is the positive regard one has for self.
• Self-esteem is an individual’s collection of thoughts and feelings about their own worth and importance.
Anger in Adolescents

- Although anger is a common and natural emotion, or internal event, problems associated with the inappropriate expression of anger remain among the most serious concerns of parents, educators, and the mental health community.

- Anger, frustration, and violence in minority adolescents (particularly males) is often mistaken for behavior problems and depression.
Disruptive Behavior in Adolescents

- Disruptive Behavior defined broadly as noncompliance, aggression, disruptive classroom behavior, or delinquent behavior as the primary disorder.
- Anger/disruptive behavior in combination with school experiences of overt or covert discrimination and prejudice, may increase depressive symptomatology among minority students increasing mental vulnerability, academic performance issues, and/or high-risk behaviors.
Methods

- A descriptive correlation design was used for this study
- Students from two middle schools in the Midwest were recruited to participate
# Baseline Characteristics

<table>
<thead>
<tr>
<th></th>
<th>URBAN</th>
<th>APPALACHIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>11.54 (.62)</td>
<td>13.6 (.56)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>11 (36%)</td>
<td>14 (48%)</td>
</tr>
<tr>
<td>Female</td>
<td>20 (65%)</td>
<td>15 (52%)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>18 (58%)</td>
<td>0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>9 (29%)</td>
<td>0</td>
</tr>
<tr>
<td>Caucasian</td>
<td>4 (13%)</td>
<td>29 (100%)</td>
</tr>
<tr>
<td><strong>Public Assistance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>15 (75%)</td>
<td>14 (48%)</td>
</tr>
<tr>
<td>No</td>
<td>5 (25%)</td>
<td>15 (52%)</td>
</tr>
<tr>
<td>I don’t know</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthy Weight</td>
<td>27 (87%)</td>
<td>15 (52%)</td>
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<tr>
<td>Overweight</td>
<td>3 (10%)</td>
<td>5 (17%)</td>
</tr>
<tr>
<td>Obese</td>
<td>1 (3%)</td>
<td>9 (31%)</td>
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</table>
## Appalachian Baseline Correlations

<table>
<thead>
<tr>
<th></th>
<th>Anxiety</th>
<th>Depression</th>
<th>Self-concept</th>
<th>Anger</th>
<th>Disruptive Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>1</td>
<td>.566**</td>
<td>-.164</td>
<td>.549**</td>
<td>.704**</td>
</tr>
<tr>
<td>Depression</td>
<td>.566**</td>
<td>1</td>
<td>-.666**</td>
<td>.903**</td>
<td>.272**</td>
</tr>
<tr>
<td>Self-concept</td>
<td>-.164</td>
<td>-.666**</td>
<td>1</td>
<td>-.644**</td>
<td>.013</td>
</tr>
<tr>
<td>Anger</td>
<td>.549**</td>
<td>.903**</td>
<td>-.664**</td>
<td>1</td>
<td>.228**</td>
</tr>
<tr>
<td>Disruptive Behavior</td>
<td>.704**</td>
<td>.272**</td>
<td>.013</td>
<td>.228**</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level
## Urban Baseline Correlations

<table>
<thead>
<tr>
<th></th>
<th>Anxiety</th>
<th>Depression</th>
<th>Self-concept</th>
<th>Anger</th>
<th>Disruptive Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>1</td>
<td>-.674**</td>
<td>-.485**</td>
<td>.681**</td>
<td>.346**</td>
</tr>
<tr>
<td>Depression</td>
<td>.674**</td>
<td>1</td>
<td>-.775**</td>
<td>.761**</td>
<td>.598**</td>
</tr>
<tr>
<td>Self-concept</td>
<td>-.485**</td>
<td>-.775**</td>
<td>1</td>
<td>-.713**</td>
<td>-.644**</td>
</tr>
<tr>
<td>Anger</td>
<td>.681**</td>
<td>.761**</td>
<td>-.713**</td>
<td>1</td>
<td>.811**</td>
</tr>
<tr>
<td>Disruptive Behavior</td>
<td>.346**</td>
<td>.598**</td>
<td>-.644**</td>
<td>.811**</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level
Results

• Correlations were examined at baseline among the study variables for each set of participants

• Negative and significant correlations (p=.01) existed between the participants’ self-concept and depression and self-concept and anger. As the students’ self-concept decreased, their depressive symptoms and anger increased for both groups

• Additionally, self-concept and anxiety, and self-concept and disruptive behavior were negatively correlated with the urban population. As their self-concept decreased their anxiety and disruptive behavior increased
Results

• Additionally, positive and significant correlations \((p = .01)\) existed between depression and anxiety, depression and anger, and depression and disruptive behavior. This suggested that as the students’ depressive symptoms increased so did the students’ anxiety, anger, and disruptive behavior.

• Furthermore, positive and significant correlations existed between anxiety and anger, and anxiety and disruptive behavior. As the students’ anxiety increased so did their anger and disruptive behavior.
Results

• Finally, positive and significant correlations (p=.01) existed between anger and disruptive behavior. Suggesting that as the students’ anger increased so too did their disruptive behavior.

• These positive and significant correlations were found in the urban and rural student groups for the same variables.
Conclusions

• The middle school years are often stressful for students, specifically for youth who are from underserved areas and subject to health disparities

• Understanding similarities in baseline correlations among students who are similar can guide behavior interventions to improve healthy lifestyle choices and healthy lifestyle behaviors in middle schoolers
Conclusions

• Of particular significance is understanding the importance of the findings surrounding self-concept and realizing that positive self-concept can serve as a protective factor to support positive behavioral outcomes when guiding behavior interventions (i.e. cognitive behavioral skills building)
Future Implications

• Important to this particular age group are depression and anxiety screening, along with reducing current obesity trends

• This study underlines the similarities in vulnerable youth populations which appear dissimilar and supports the promising potential to improve mental health outcomes (e.g., anxiety, depression, and suicidal ideation), improved self-concept and decreased maladaptive coping for anger and disruptive behavior through behavior interventions for youth in real-world school settings
Contact Information

Jacqueline Hoying

614-688-1641

hoying.80@osu.edu

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