

Closing the mental health treatment gap for rural adolescents: An evidence-based collaboration in a public high school

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BACKGROUND AND SIGNIFICANCE: MENTAL HEALTH DISORDERS

The most common disease in childhood and adolescence in the US

In 2019, 7.8% of youth were diagnosed with an anxiety disorder;
post-pandemic numbers are higher (Mangione, et al., 2022)

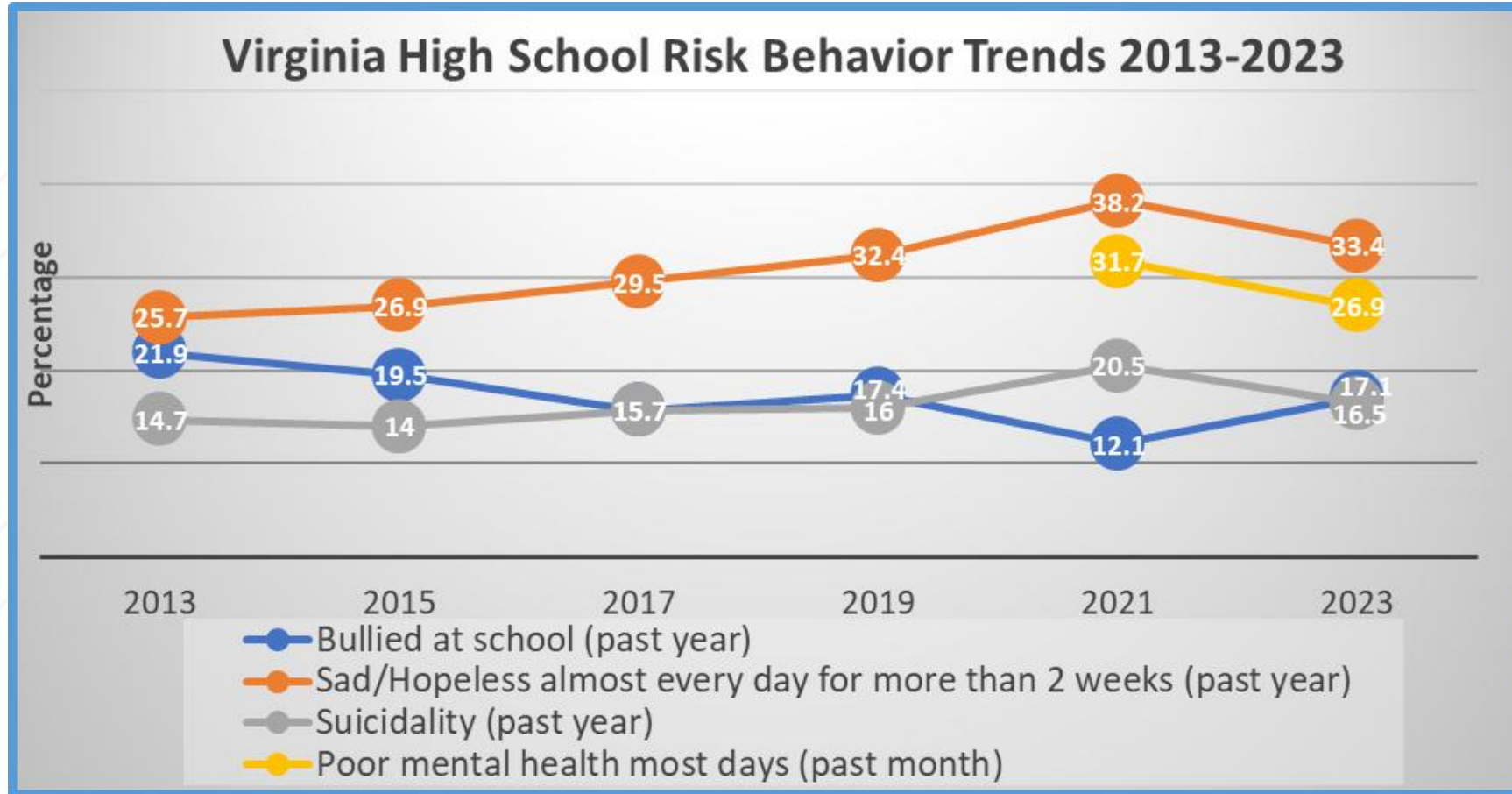
Public health advisory

BACKGROUND AND SIGNIFICANCE: DISPARITY AMONGST RURAL YOUTH

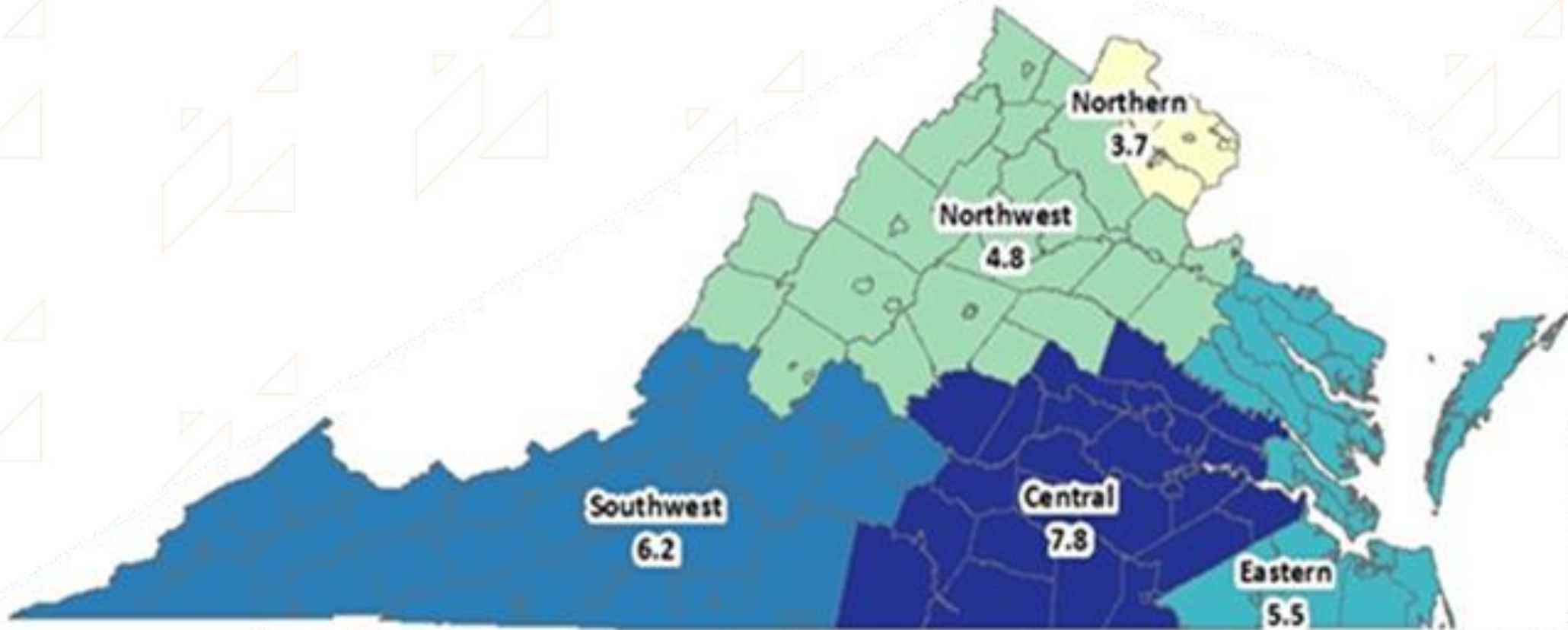
Higher rates of **unemployment, teen pregnancy, obesity, substance abuse, and suicide**

More difficulty with **accessibility, availability, affordability and acceptability** of care (National Rural Health Association, 2024)

BACKGROUND AND SIGNIFICANCE: VIRGINIA TRENDS



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BACKGROUND AND SIGNIFICANCE: TREATMENT FOR ANXIETY AND DEPRESSION

Clinical practice guideline (2020)

Cognitive-behavioral therapy (CBT) is first-line

Severe shortage of behavioral health specialists

Need for pediatric providers to expand access to care

BACKGROUND AND SIGNIFICANCE:

CREATING OPPORTUNITIES FOR PERSONAL EMPOWERMENT (COPE)



Promising evidence-based intervention for youth with anxiety

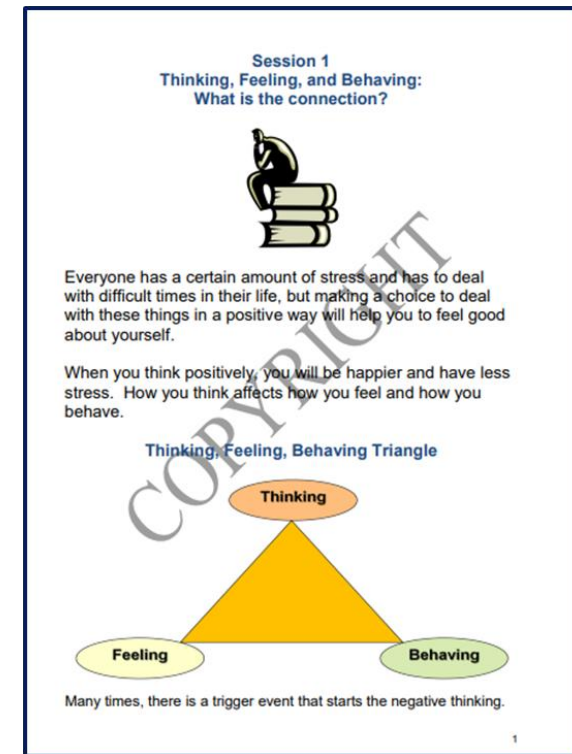
Developed by Bernadette Melnyk, PhD, APRN-CNP, FAANP, FNAP, FAAN

BACKGROUND AND SIGNIFICANCE:

CREATING OPPORTUNITIES FOR PERSONAL EMPOWERMENT (COPE)

Session topics:

1. Thinking, Feeling, and Behaving Triangle
2. Self-Esteem, Positive Thinking, Self-Talk
3. Goal Setting and Problem Solving
4. Stress and Coping
5. Emotional and Behavioral Regulation
6. Effective Communication
7. Barriers to Goal Progression



IOWA MODEL STEP 1: IDENTIFY THE ISSUE

Setting:

A primary care clinic in rural Virginia

Issue:

Increased need for access to cognitive behavioral therapy

IOWA MODEL STEP 2: FORM A QUESTION

In rural adolescents with mild to moderate anxiety, does participation in COPE affect anxiety scores?

IOWA MODEL STEP 3: FORM A TEAM

Advisor: Kathryn Reid, PhD, RN, FNP-C, CNL

Second Reviewer: Amy Boitnott, DNP, RN, FNP-BC, CPNP-PC

Practice Mentor: Rosie Taylor-Lewis, DNP, RN, PMHNP-BC, ANP-BC, GNP

Project Team: Shamane Day, M.Ed, NCC, Director of Counseling, and Rachel Reutinger, Director of Student Services

IOWA MODEL STEP 4: ASSEMBLE, APPRAISE, AND SYNTHESIZE THE EVIDENCE

Systematic literature review performed

Primary goal:

Explore interventions utilized by primary care providers to
treat anxiety in adolescent patients

IOWA MODEL STEP 4: ASSEMBLE, APPRAISE, AND SYNTHESIZE THE EVIDENCE

Themes:

1. CBT-based interventions should continue to be recommended
2. Brief (7-16 week) interventions may provide an alternative to traditional therapy
3. COPE showed statistically significant and clinically significant improvement

An aerial photograph of a campus, likely the University of Virginia, showing a large green lawn, several buildings, and a parking lot. In the background, there are rolling hills and mountains under a cloudy sky. The image is overlaid with a semi-transparent blue filter.

The evidence supports the clinical
question.



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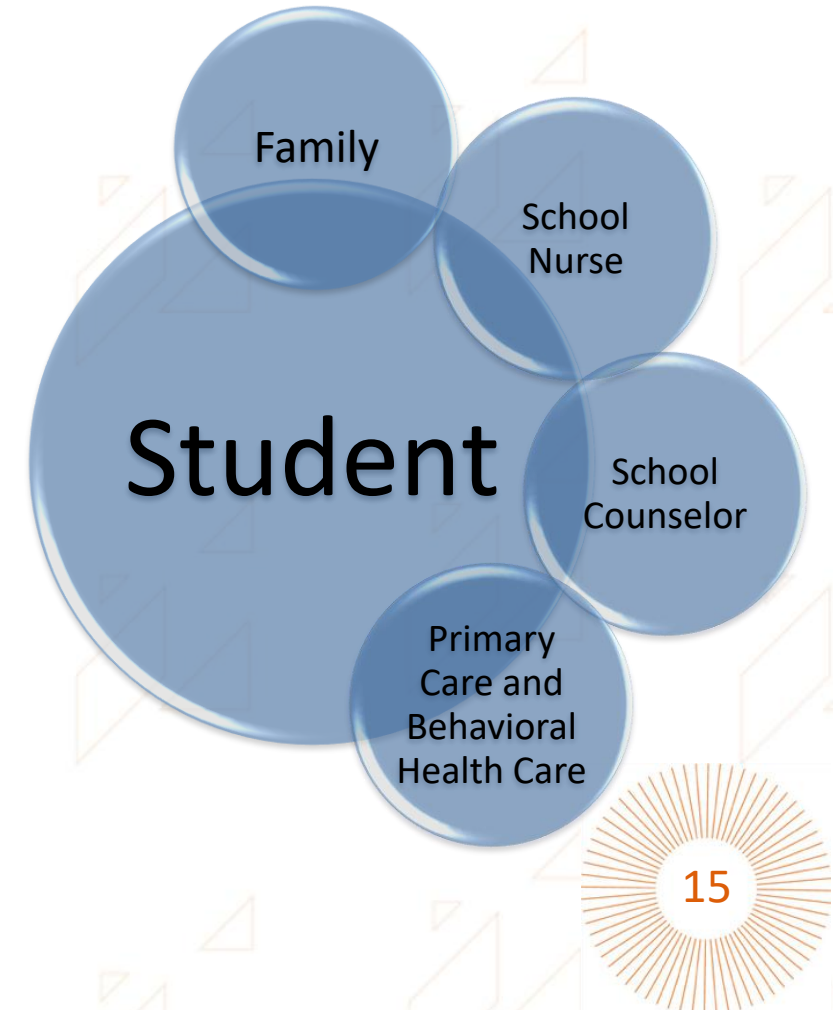
IOWA MODEL STEP 5: DESIGN AND PILOT THE PRACTICE CHANGE

Initial design:

Integrate COPE into rural primary care clinic

Adjustment to meet stakeholder's needs:

Disseminate COPE to patients and students at the local high school



IOWA MODEL STEP 5: DESIGN AND PILOT THE PRACTICE CHANGE

Project Outcome Development:

Primary aims:

Expand screening for mental health disorders and symptomatology in the school system

Increase access to cognitive behavioral therapy through implementation of COPE

IOWA MODEL STEP 5: DESIGN AND PILOT THE PRACTICE CHANGE

Permissions:

- ✓ Rural health center
- ✓ Public school system
- ✓ UVA Institutional Review Board (IRB); considered an exempt study
- ✓ Individual participants and their guardians

IOWA MODEL STEP 5: DESIGN AND PILOT THE PRACTICE CHANGE

Funding:

Rodriguez Nursing Student
Research and Leadership
Award



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A 7-Session Cognitive Behavioral Skills Building Program

Teen

Created by:
Bernadette Mazurek Melnyk, PhD, RN, CPNP/PMHNP, FAANP, FNAP, FAAN

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IOWA MODEL STEP 5: DESIGN AND PILOT THE PRACTICE CHANGE

COPE IMPLEMENTATION

September 2024	October 2024	November 2024	December 2024	January 2025
Enhanced mental health screening Review of results	Recruitment Pre intervention data COPE sessions begin	Weekly COPE sessions continue Mid intervention data check	Completion of COPE sessions Post intervention data Outcome evaluation	Analysis of Data Dissemination Sustainability Plan

IOWA MODEL STEP 5: DESIGN AND PILOT THE PRACTICE CHANGE

Results:

Significant decrease in anxiety from baseline ($M=12.3$, $SD=6.3$) to post-intervention ($M=10.2$, $SD=5.5$), $t(5)=-2.4$, $p=.029$, $g=-.84$

No significant decrease in depression from baseline ($M=13.5$, $SD=7.2$) to post-intervention ($M=14$, $SD=8.76$), $t(5)=.213$, $p=.420$, $g=.073$

100% of participants who completed COPE reported it was helpful



IOWA MODEL STEP 5: DESIGN AND PILOT THE PRACTICE CHANGE

Participants

Enjoyment with group collaboration
A sense of belonging
Help with calming
Help with anger
Less stress
Less anxiety

Counselors

Less frequent visits from participants
Better eye contact
Less peer conflict
Brighter affect
Improved attendance
Improved grades

IOWA MODEL STEP 6: INTEGRATE AND SUSTAIN THE PRACTICE CHANGE

High School
Continue expanded screening
Begin new COPE groups
Follow prior participants

Middle School
First COPE group currently meeting

Rural Health Clinic
Evaluation and treatment as needed
Possible COPE integration into clinic

IOWA MODEL STEP 7: DISSEMINATE THE RESULTS

- ✓ UVA School of Nursing
Compassionate Care Research
Symposium
- ✓ Virginia Rural Health
Association conference

- ☐ School administrators
- ☐ Rural health clinic providers
and staff
- ☐ UVA Libra repository
- ☐ The Journal of School
Nursing

CONSIDERATIONS FOR DIVERSITY, EQUITY, AND INCLUSION

Higher rates of anxiety and depression:

- Female adolescents

- Black, Latino, and multi-racial adolescents

Higher rates of death by suicide:

- Rural adolescents

- Black and Latino adolescents

ETHICAL AND SAFETY CONSIDERATIONS

Beneficence

Autonomy

Confidentiality



FINANCIAL CONSIDERATIONS FOR COPE IN THE SCHOOL SETTING

\$25,585 cost savings per year if one hospitalization prevented

	First Year of Intervention	Second Year of Intervention	Third Year of Intervention	Three Year Total
License (\$385/2yr)	\$385			
Renewal (\$285/yr)			\$285	
Manuals (\$23/ea)	\$230	\$230	\$230	
Facilitator Time (\$45/hr)	\$450	\$450	\$450	
Ancillary cost (\$50/session)	\$350	\$350	\$350	
	\$1415	\$1030	\$1315	\$3760
2020 Cost for mental health hospitalization in Virginia (\$27,000)	\$27,000	\$27,000	\$27,000	\$81,000



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IOWA MODEL STEP 2: FORM A QUESTION

In rural adolescents with mild to moderate anxiety, does participation in COPE affect anxiety scores?



IMPACT OF COPE IMPLEMENTATION

“The impact has been profound; participating students have shown significant improvements across multiple dimensions...likely due to the emphasis on interpersonal skills and emotional regulation. Perhaps most importantly, participants demonstrate an enhanced capacity to self-regulate, a critical skill for navigating the challenges of anxiety.”

—Ms. Shamane Day, Director of School Counseling

CONCLUSION AND FUTURE IMPLICATIONS

Clinical significance in decreasing adolescents' anxiety

COPE was enjoyed by participants, who reported that it was helpful and should be continued

Small group size was effective

Difficulties included missed academic time for student participants

Improvement in school attendance and academic performance may help with future support

Further implementation studies are indicated

THANK YOU!



Please email any questions: gr5u@virginia.edu



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