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COLLEGE OF NURSING

Correlations Among Disruptive Behavior, Mental Health, Substance Use, and Healthy Lifestyle Behaviors in Latino High School Adolescents

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Transforming health, Transforming lives



Disclosure

Authors

- Colleen McGovern, Dr. Bern Melnyk, Dr. Kim Arcoleo, Dr. Lisa Militello

Conflict of Interest

- None for C. McGovern, K. Arcoleo, L. Militello
- B. Melnyk has a company, COPE2THRIVE, which disseminates the COPE program

Funding

- The full-scale trial was funded by the National Institutes of Health/ National Institute of Nursing Research 1R01NR012171 (Bernadette Melnyk, PI)



Learner Objectives

- Investigate correlations among mental health, substance use, disruptive behaviors, and healthy lifestyle behaviors related to a sample of Latino adolescents
- Examine clinical, practice, and research implications related to correlations among mental health, disruptive behaviors, and healthy lifestyle behaviors in a sample of Latino adolescents



Background

- The onset of many mood, anxiety and behavior disorders begin during childhood (Reinke, Eddy, Dishion, & Reid, 2012)
- In the United States, 31% of adolescents have an anxiety disorder, 14% have a mood disorder, and 19% have a disruptive behavior disorder (United States Census 2010, 2011)
- Substance use declined from between 2002 - 2013 (Centers for Disease Control [CDC], 2014)



Background

- Latino population ranked highest for depression, and more so for females
- Latinos have the second highest proportion of adolescents who binge on alcohol or other substances (CDC, 2014)





Purpose of Study

- The purpose of this study was to examine the correlations among disruptive behavior, mental health, substance use, and healthy lifestyle behaviors in Latino adolescents.





Methods

- Baseline measures from a randomized controlled trial evaluating the efficacy of the 15-session COPE (Creating Opportunities for Personal Empowerment) Healthy Lifestyles TEEN (Thinking, Emotions, Exercise, and Nutrition) Program
- Latino sample ($n = 522$) was separated out for analysis



Methods

- **Measures:**
 - **Beck Youth Inventories: disruptive behavior, anger, depression, anxiety, self-concept**
 - **Healthy Lifestyles Behavior scale**
 - **Healthy Lifestyle Beliefs scale**
 - **Perceived Difficulty scale**
 - **Youth Risk Behavioral Surveillance Survey items for substance use**
 - **Internal consistencies of all measures $> .85$**



Data Analysis

- Pearson's Correlations
- Linear Regression





Results - Demographics

Variable	Frequency (Percent) <i>N</i> = 522
Age	Mean Age = 14.69 Years
14 years	241 (46.2)
15 years	206 (39.5)
16 years	71 (13.6)
17 years	4 (.8)
Gender	
Male	252 (48.3)
Female	270 (51.7)
Receiving Public Assistance	
Yes	253 (48.5)
No	142 (27.2)
Missing	127 (24.3)



Results - Correlations with Disruptive Behavior

Anger	Depression	Anxiety	Self Concept	Binge Drinking	Drug Use	Healthy Beliefs	Healthy Behaviors
.724**	.546**	.428**	-.389**	.446**	.594**	-.390**	-.383**

* $p < .05$; ** $p < .01$

For Disruptive Behavior, Linear Regression Indicated Significance With Depression, Anger, Anxiety, Self Concept, Healthy Beliefs, Perceived Difficulty

($R^2 = .584$; $F = 99.060$; $p = < .001$)



Correlations Among Mental Health Variables and Healthy Lifestyle Behaviors

Measure	Depression	Anger	Anxiety	Self Concept	HL Beliefs	Difficulty
Depression	1					
Anger	.737**	1				
Anxiety	.765**	.675**	1			
Self Concept	-.469**	-.408**	-.378**	1		
HL Beliefs	-.314**	-.333**	-.240**	.534**	1	
Difficulty	.281**	.299**	.275**	-.420**	-.559**	1
HLB	-.317**	-.371**	-.317**	.564**	.612**	-.559**

** $p < .01$



Correlations Among Mental Health Variables and Healthy Lifestyle Behaviors

Depression	Anger	Anxiety	Self Concept	Belief	Difficulty
-.317**	-.371**	-.317**	.564**	.612**	-.644**

** $p < .01$

- The thought measures (Self Concept, Healthy Lifestyle Beliefs, and Perceived Difficulty [negatively]) were found to be more strongly correlated with Healthy Lifestyle Behaviors



Linear Regression With Mental Health Variables and Healthy Lifestyle Behaviors

Regression of Self Concept, Healthy Lifestyle Beliefs, Perceived Difficulty, Anger, Depression, and Anxiety on Healthy Lifestyle behaviors						
Predictors	R^2	F	B (SE)	95% C.I.	t-value	p-value
Self-Concept			.209 (.035)	.140, .278	5.946	.000
Healthy Lifestyle Beliefs			.290 (.041)	.201, .371	7.094	.000
Perceived Difficulty			-.392 (.044)	-.478, -.306	-8.931	.000
Anger			-.093 (.045)	-.181, -.004	-2.065	.040
Depression			.085 (.054)	-.020, .190	1.592	.112
Anxiety	.584*	99.060*	-.063 (.045)	-.152, .026	-1.386	.166

* R^2 included Self-Concept, Healthy Lifestyle Beliefs, Perceived Difficulty, Anger, Depression, and Anxiety



Correlations Among Substance Use

	Alcohol use (Past 30 Days)	Binge Alcohol Use ¹	Illegal Drug Use (Past 30 Days)	Marijuana use (Past 30 Days)
Alcohol Use (Past 30 Days)	1			
Binge Alcohol Use (Past 30 Days)	.890**	1		
Illegal Drug Use (Past 30 Days)	.432**	.833**	1	
Marijuana	.138 (<i>p</i> = .354)	.175 (<i>p</i> = .246)	.153 (<i>p</i> = .559)	1
Anger	.195*	.249*	.092 (<i>p</i> = .643)	.265**

p* < .05; *p* < .01

¹Binge drinking is 5 alcoholic drinks within 2 hours



Discussion

- In this sample, disruptive behavior correlated with other mental health conditions
- Latino youth with disruptive behaviors should be screened for mental health conditions as well as substance use
- It is imperative that we screen and treat adolescents for mental health issues as these significantly impact engagement in healthy lifestyle behaviors



Implications

- Resources including cognitive behavior skills building should be provided for youth and their families
- Interventions implemented sooner rather than later can strengthen this population's ability to participate in healthy lifestyle behaviors





Implications

- Adolescence is a time when healthy lifestyle habits are still malleable
- Trends – In the United States, the National Institutes of Health is currently calling for applications for non-pharmacological interventional research for mental disorders
- Trends - The recognition of acculturation factors can contribute to mental health service utilization and guide outreach
- Trends – Inclusion of epigenetic markers



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¿Questions?





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