

Evidence to Support Adolescents as Healthy Lifestyle Behavior Change Agents for Their Families

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Objectives

1. Describe the healthy lifestyle behavior changes that occurred in parents and families of teens participating in the COPE Healthy Lifestyle TEEN randomized controlled trial.
2. Discuss implications of the findings from the COPE Healthy Lifestyle TEEN randomized controlled trial.



Significance of the Problem

- Currently, 32% of adolescents are overweight (gender and age specific BMI at or above the 85th %) or obese (BMI at or above the 95th %); and the prevalence is higher in Hispanic teens



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Significance of the Problem

- One in 4 adolescents has a mental health problem and less than 25% receive any treatment
- Hispanic and White teens are more likely to report depression and feelings of worthlessness
- There is a higher incidence of mental health disorders in overweight/obese teens
- Our research has shown that the higher level of depressive and anxiety symptoms and the lower self-esteem, the less teens believe they can engage in healthy behaviors



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Significance of the Problem

- Of those intervention studies conducted, most combine nutrition education, activity and behavior modification without a mental health component, which have not tended to produce long-term positive outcomes
- Major flaws exist in prior intervention studies
- *Knowledge alone usually does not change behaviors!*



The High School-Based COPE Trial

A full-scale randomized controlled trial conducted to test the efficacy of the COPE Healthy Lifestyles TEEN (Thinking, Emotions, Exercise and Nutrition) 15 session program on the physical and mental health outcomes of a culturally diverse sample of 779 adolescents



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Overview of the COPE Clinical Trial

- 11 schools were randomly assigned to COPE Healthy Lifestyles TEEN Program or the Attention Control *Healthy Teens* Program
- 779 diverse teens participated
- Teachers attended a day of training on their intervention program and were supplied with all manualized materials, including power points, teen handbooks, and instructor manual
- Teachers integrated their intervention program into their health course curriculum once a week for 50 minute sessions over 15 weeks



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The COPE Healthy Lifestyles TEEN Program

- A 15 session cognitive-behavioral skills building program that includes physical activity in each session
- All sessions are manualized and interactive, with an emphasis on the practice of cognitive-behavioral skills building activities and role playing
- Includes many case-based examples

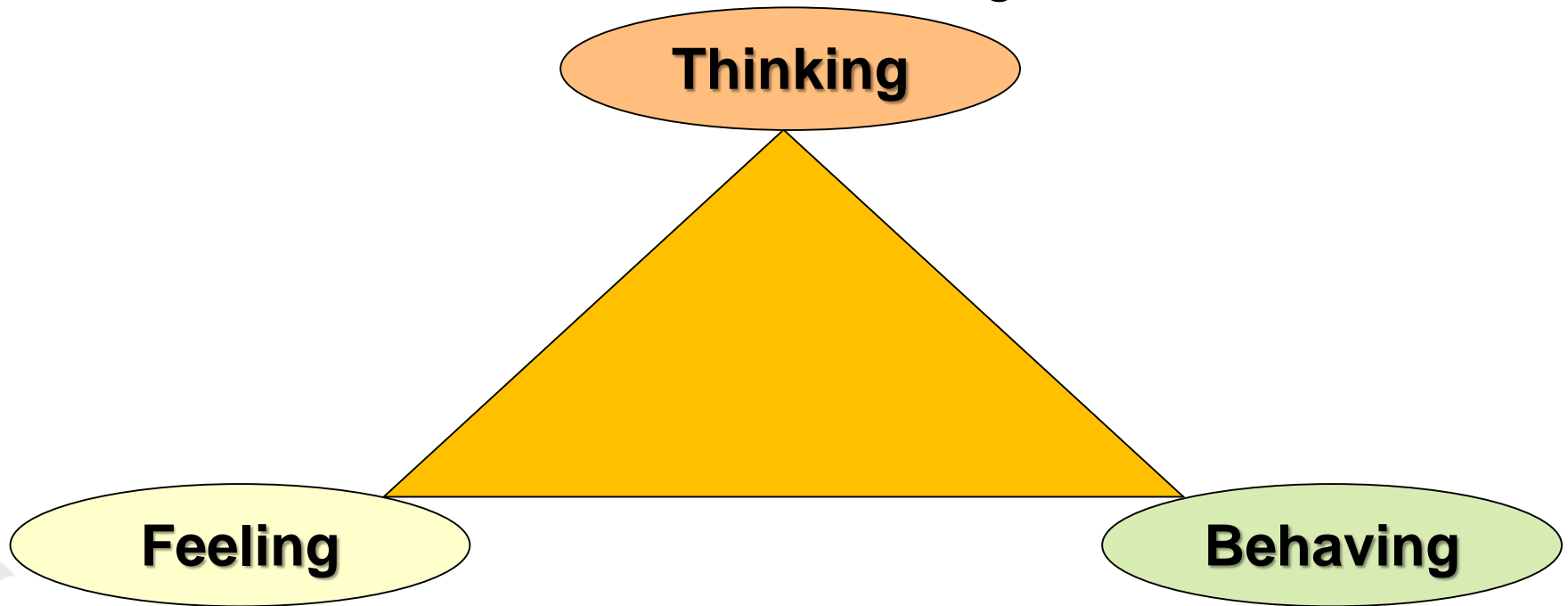


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Cognitive Behavioral Therapy Guides COPE

Consists of cognitive restructuring, problem solving
and behavioral change



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The COPE Healthy Lifestyles TEEN Program

- Limited attendance at parent sessions in prior pilot studies
- Brainstormed more effective means for parents to receive program content
- Parent newsletter to deliver content of program taught by teen
 - Parent receives information
 - Teen's knowledge reinforced by teaching their parent



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Parent Newsletter

- 4 newsletters during the 15-week program
- Key content from COPE TEEN program
- Encouraged dialogue regarding program content between parent and teen
- Asked parents to sign and teen to return signed portion to teacher at school.



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Sample from Newsletter # 1

Session 1: Healthy Lifestyles

We are teaching your teen about how to lead a healthy lifestyle. This includes making healthy choices. Healthy choices include exercise and eating healthy foods. Your teen will learn more about this during the semester.

Your teen is also being taught how to cope with stress in healthy ways instead of smoking or using alcohol or drugs.

Signs that your teen may be stressed are when they feel:

- Anxious
- Nervous
- Depressed
- Irritable
- Angry
- Overwhelmed
- Burned out

Your teen also will be learning about how to make healthy food choices, like eating more fruits and vegetables, instead of foods high in carbohydrates and fats.

Did you know that serving your teen a glass of water instead of a can of soda or juice once a day can keep him from gaining weight or help him or her to lose weight if overweight?

Exercising on a regular basis



Eating more fruits and vegetables



Your teen will be using a pedometer and keeping a log of how much he or she walks every day.



Set a goal with your teen to walk at least 20 to 30 minutes each day.

It would be great if you walk with your teen and do other fun activities together as much as possible.



You can help your teen by being his or her COPE coach.

For example, have your teen help you pick out healthy foods for dinner and go for a walk together after dinner.

If you see these signs of stress, ask your teen to talk about what is bothering him or her. If he or she is really depressed or stressed, it is a good idea to have him or her seen by the doctor or nurse practitioner who can evaluate your teen and further help him or her.

Remind your teen to use the COPE strategies he or she is learning in class to deal with stress in healthy ways (like relaxation and positive self-talk).

Upcoming Newsletter #2

- Learning about Self Esteem
- Setting Goals
- Stress and Coping
- Dealing with Your Emotions in Healthy Ways

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Findings

COPE Teens versus Attention Control Teens had significantly:

- Greater steps per day post-intervention
- Higher average scores on three social skills subscales:
(a) cooperation (b) assertion, and (c) academic competence
- Higher health course grades
- Less alcohol use post-intervention
- Lower mean BMI that sustained 12 months post-intervention
- Less depression in teens who began the trial with severe depressive symptoms that sustained 12 months post-intervention (see Melnyk et al, 2013, in the American Journal of Preventive Medicine)



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Behavior Change

- Research has identified the importance of family support (e.g. parents) in facilitating behavior change in children and teens
- Can teens facilitate change in their family environment?

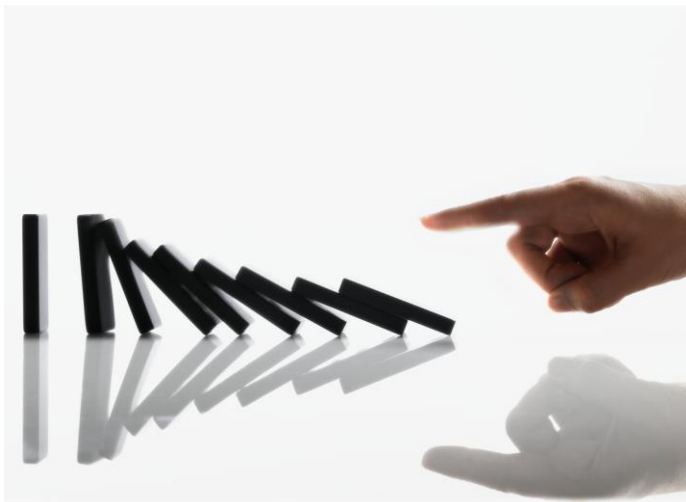


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Methods

- Post-intervention evaluation data from the parents of the teens in the COPE group was reviewed and analyzed.
- Frequencies were calculated, and string data was analyzed and categorized.



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Parent Demographics

Characteristic		COPE (n = 200)	
		<i>M</i>	<i>SD</i>
Age (Years)		40.73	6.83
BMI*		30.07	6.16
		COPE	
		<i>n</i>	%
Annual Household Income	Less than \$7000	30	15.0
	\$7000 - \$10,000	23	11.5
	\$10,001 - \$15,000	23	11.5
	\$15,001 - \$20,000	33	16.5
	\$20,001 - \$30,000	27	13.5
	\$30,001 - \$40,000	19	9.5
	Greater than \$40,000	31	15.5
Parent BMI Categories	Not Reported	14	7.0
	Underweight	0	0.0
	Normal	36	18.0
	Overweight	71	35.5
	Obese	78	39.0
	Not Reported	15	7.5

169 parents completed post-intervention surveys

Note. M = mean; SD = standard deviation

Parent Demographics

Characteristic		COPE	
		<i>n</i>	%
Gender	Female	184	92.0
	Male	16	8.0
Race	American Native	7	3.5
	Asian	4	2.0
	Black	11	5.5
	White	21	10.5
	Hispanic	154	77.0
	Other	2	1.0
	Not Reported	1	0.5
Ethnicity	Hispanic or Latino	154	77.0
Marital Status	Married	115	57.5
	Unmarried	85	42.5
	Not Reported	0	0.00
Education	Less than High School	92	46.0
	High School Graduate	49	24.5
	Some College	40	20.0
	College Graduate	18	9.0
	Not Reported	1	0.5
Public Assistance	No	99	49.5
	Yes	99	49.5
	Not Reported	2	1.0



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Results

Did your teen share any of the information from the program with you?

	n	%
no	29	17.8
yes	134	82.2
Total	163	100.0



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Results

What did your teen share with you?

Category	n	%
Nutrition related	70	50.0
Physical activity	38	27.1
Healthy Lifestyle	11	7.9
All	6	4.3
Alcohol/drugs	3	2.1
Cholesterol	3	2.1
Emotions/depression	3	2.1
Disease	2	1.4
Information	2	1.4
Newsletters	2	1.4
Total	140	100



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Results

Was the program information helpful to you that your teenager shared with you?

	n	%
no	27	17.6
yes	126	82.4
Total	153	100.0

Would you recommend participation in a health program similar to this one to a family member or a friend?

	n	%
no	10	6.1
yes	154	93.9
Total	164	100.0

Results

If yes, what behaviors have you changed?

Have you changed any of your behaviors as a result of the program?

	n	%
no	48	30.8
yes	108	69.2
Total	156	100.0



Category	n	%
Nutrition	71	51.8
Exercise	29	21.2
Communication	9	6.6
More water	6	4.4
Less TV	4	2.9
Less Stress	4	2.9
Emotional regulation	3	2.2
Other	11	8.0
	137	100



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Results

Parent individual responses regarding behavior change:

- “I don’t scream at him anymore we talk in a better way”
- “I have learned to breathe and count to 3 before overreacting to certain things that happen”
- “In my depression and about food”
- “Involved my son in the planning of meals”
- “It helped be also be a better mother to my children”
- “About food tried not to watch too much television and do more exercise with my family”
- “Cooking better healthier foods no soda and more water”



Results

Have you seen any changes in your teens behavior as a result of participating in the program?

	n	%
no	41	25.2
yes	122	74.8
Total	163	100.0

Category	n	%
Nutrition	64	39.0
Exercise	47	28.7
Relationships and communication	8	4.9
Healthier	5	3.0
Water	5	3.0
Better attitude and person	4	2.4
Encourages parent	4	2.4
Happier	3	1.8
Positive	4	2.4
Less TV	2	1.2
More calm	2	1.2
More energy	2	1.2
Lose weight	2	1.2
Emotional regulation	1	0.6
Goals for college	1	0.6
More aware of issues in school	1	0.6
More respect for others	1	0.6
Says will not drink alcohol	1	0.6
Sleeps better	1	0.6
Studies more	1	0.6
Talked about health a little more (always has been conscious)	1	0.6
Thinks before eating something unhealthy	1	0.6
Wakes up early to go to school	1	0.6
Way of doing things	1	0.6
Wants to do more things after school	1	0.6
Total	164	100

Results

- Parent individual responses regarding teen's behavior change:
 - “she's a better person gets along better with her sister and cousins eats healthier thank you for helping me with this”
 - “their way of thinking is different than before”
 - “she is trying to make changes in her eating habits no sodas more herbal teas no candy more fruit”
 - “more active rather than playing so much video games and he also has begun to drink more water”
 - “I see her more active and positive”
 - “he walks more and wants me to buy apples”
 - “she is becoming more closer with her family more active in school and home time”



Contact Information

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