



THE CHANGE PROGRAM

Comparing an interactive Co-Active coaching approach with a prescriptive lifestyle treatment for obesity: A summary of project findings

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CHANGE: Coaching towards Healthy Actions Naturally through Goal-related Empowerment

PURPOSE

- To compare the effectiveness of an interactive versus prescriptive 12-week telephone-based behavioral intervention on psychological and physiological indices among university students with obesity
- Motivational Interviewing administered using Co-Active Life Coaching (MI-via-CALC)^{1,2} and a validated lifestyle treatment following the LEARN® (Lifestyle, Exercise, Attitudes, Relationships, Nutrition) Program for Weight Management³ were compared

BACKGROUND

- 1 in 4 Canadians with some post-secondary education is obese⁴
- University years are important in the development of lifestyle behaviors that impact future quality of life⁵
- Motivational Interviewing (MI) has been recognized as a sound behavior change approach, although standardized applications are needed^{6,1}
- Co-Active Life Coaching (CALC) includes the tenets of MI, and promotes an alliance whereby coach and client work as equals to meet the needs of the client^{1,2}
- Recent small-scale MI-via-CALC studies ($n \leq 20$) have elicited positive results among adults with obesity⁷⁻⁹
- There is a paucity of large-scale MI-via-CALC obesity research that includes *sufficient statistical power and the use of a comparison group*

HYPOTHESIS

- In light of MI-via-CALC's demonstrated effectiveness in previous small-scale studies, it was hypothesized that this interactive condition would elicit results comparable to the more prescriptive, previously validated LEARN® treatment among the dependent variables examined

ACKNOWLEDGEMENTS

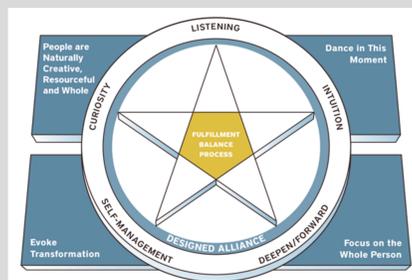
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METHODS

- University students aged 18-24 with a Body Mass Index $\geq 30\text{kg/m}^2$, and free from co-morbidities were enrolled
- Participants ($n = 78$) were randomized to a 12-week: (a) personalized MI-via-CALC program whereby a Certified Professional Co-Active Coach (CPCC) worked with participants to achieve goals through dialogue; or (b) standardized lifestyle modification treatment following the LEARN® Program for Weight Management administered by trained research assistants
- The Rosenberg Self-Esteem Scale,¹⁰ Short-Form 36-item Functional Health Status Scale,¹¹ and a semi-structured Program Experience Questionnaire were completed
- Blood lipid profiles, weight, height, and waist circumference were measured, in addition to food consumption patterns
- Repeated measures ANOVAs were used to assess differences between variables by group over time (baseline, mid- [6-weeks], immediately following [12-weeks], and 3- and 6-months post-intervention)
- Only those who completed the 12-week program and at least one follow-up assessment were included in the analysis ($n = 45$)

MI-VIA-CALC CONDITION

- Volunteer CPCCs conducted sessions in accordance with their CALC training (i.e., topics determined by participant)
- Per the Co-Active model^{2,12} (right), a variety of techniques were employed (e.g., open-ended questions; being curious about the client experience; acknowledging client and his/her actions; holding client accountable to actions)
- Content of calls remained between coach and participant exclusively



LEARN® CONDITION

- Step-by step educational lessons were provided on modification of food, activity, and thinking patterns
- Lesson material delivered in lecture style format
- Specific topics: setting goals; barriers/facilitators to living healthy; the relationship between calories and weight; social support; stimulus control; cognitive restructuring
- Participants were trained in behavioral self-monitoring skills

QUALITATIVE RESULTS

What did you find most helpful about the study and why?

MI-via-CALC

- "Just being able to talk to someone who really listened and made sense of some of the jumbled thoughts in my head; kept me/got me back on track."
- "[H]aving someone believe in me and give [me] the confidence to make even little changes."



LEARN

- "The dietary and calorie information because it made me realize I could be healthy, lose weight, and still enjoy food – it is not a struggle anymore."
- "Small changes in your lifestyle make a big difference to losing weight. It makes losing weight seem more possible."



What did you find least helpful about the study and why?

MI-via-CALC

- "Unclear about what was to be discussed with coach."
- "The group I was placed in didn't motivate or make clear ways to lose weight. My goals changed because of this. I needed clear direction but it was up to me to figure out how to do so. Made things difficult and frustrating at times."



LEARN

- "The study was based on an introductory level and I feel it was not useful for anyone who already has the knowledge and intro base of weight loss."
- "No real personal contact/connection with specialist. Felt like it was a set program for everyone and not tailored to me."



QUANTITATIVE RESULTS

Variable	MI-via-CALC Group (n = 25)					LEARN Group (n = 20)				
	Baseline	Mid 6-week	Post 12-week	3-month follow-up	6-month follow-up	Baseline	Mid 6-week	Post 12-week	3-month follow-up	6-month follow-up
Physical Health (r100)	63.2 (14.8)	70.7 (13.7)	76.5 (16.2)	75.7 (15.8)	77.2 (14.6)	69.2 (13.7)	75.2 (13.9)	78.3 (16.7)	76.1 (17.0)	77.9 (16.9)
Mental Health (r100)	57.5 (18.1)	66.1 (16.9)	74.9 (18.1)	70.9 (22.8)	70.4 (21.8)	57.3 (19.3)	63.2 (19.1)	70.9 (23.2)	72.5 (19.8)	72.9 (18.4)
Overall Health (r100)	63.8 (15.4)	70.9 (14.5)	78.6 (16.9)	76.3 (18.1)	76.9 (17.0)	66.4 (16.0)	71.6 (15.1)	77.0 (19.4)	77.3 (17.7)	78.3 (16.9)
Self-Esteem (r30)	20.8 (5.1)	21.4 (6.0)	24.5 (4.8)	24.3 (5.6)	23.4 (6.7)	19.6 (6.1)	21.5 (4.9)	23.2 (5.7)	22.1 (5.0)	22.6 (4.5)
Body Weight (lb)	221.7 (36.8)	220.3 (38.8)	219.1 (40.8)	218.2 (39.7)	216.4 (39.1)	220.7 (32.6)	216.8 (31.3)	212.9 (29.5)	212.7 (28.6)	212.6 (28.6)
Total Cholesterol (mmol/L)	4.29 (0.6)	----	4.03 (0.7)	4.09 (0.7)	4.13 (0.7)	4.38 (0.8)	----	4.32 (1.0)	4.50 (0.9)	4.34 (1.0)
Total Daily Calories	2279 (858)	1946.8 (836)	1616.3 (671)	1770.6 (606)	1849.7 (721)	2050.3 (776)	2017.0 (792)	1940.9 (914)	1775.5 (965)	1869.3 (727)

DISCUSSION

- While no between group effects or group by time interactions were observed, significant time effects were shown for all variables with the most salient changes occurring during the intervention period
- The MI-via-CALC condition fared comparably to the previously validated LEARN® Program across all variables examined; thus, both treatments appear effective at improving physiological and psychological indices associated with obesity in this population
- Common to both conditions, contact time, social support, and the experience of engaging in the program itself may have contributed towards these changes^{13,14}
- Nearly 50% of those who dropped out cited lack of treatment fit as their reason; consideration of personal learning styles and needs is important
- Integrating the two treatments based on individual preferences may have additive effects¹⁵
- Future large-scale studies with longer follow-up periods are warranted to isolate the specific intervention components contributing towards these changes

IMPACT ON COACHING PRACTICE

- This is the largest MI-via-CALC study conducted to date and the first to use a validated comparator
- MI-via-CALC is a tangible model to elicit positive health-related changes for those with obesity
- Per the qualitative feedback, MI-via-CALC participants focused on self-responsibility and -understanding as primary outcomes of their experience, while the LEARN group stressed appreciation of practical knowledge gained.
- According to the Co-Active model, clients are the experts in their lives; these findings highlight the importance of focusing on a client's personal learning style when seeking to improve health
- As MI-via-CALC is typically delivered via telephone, this type of coaching represents an accessible, convenient self-management-based treatment with the potential to reach a large number of individuals in a cost-effective manner¹⁶

TAKE HOME MESSAGE

- MI-via-CALC compares favorably with LEARN as an obesity treatment and both appear similarly effective in this context with respect to improving physiological and psychological variables