



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

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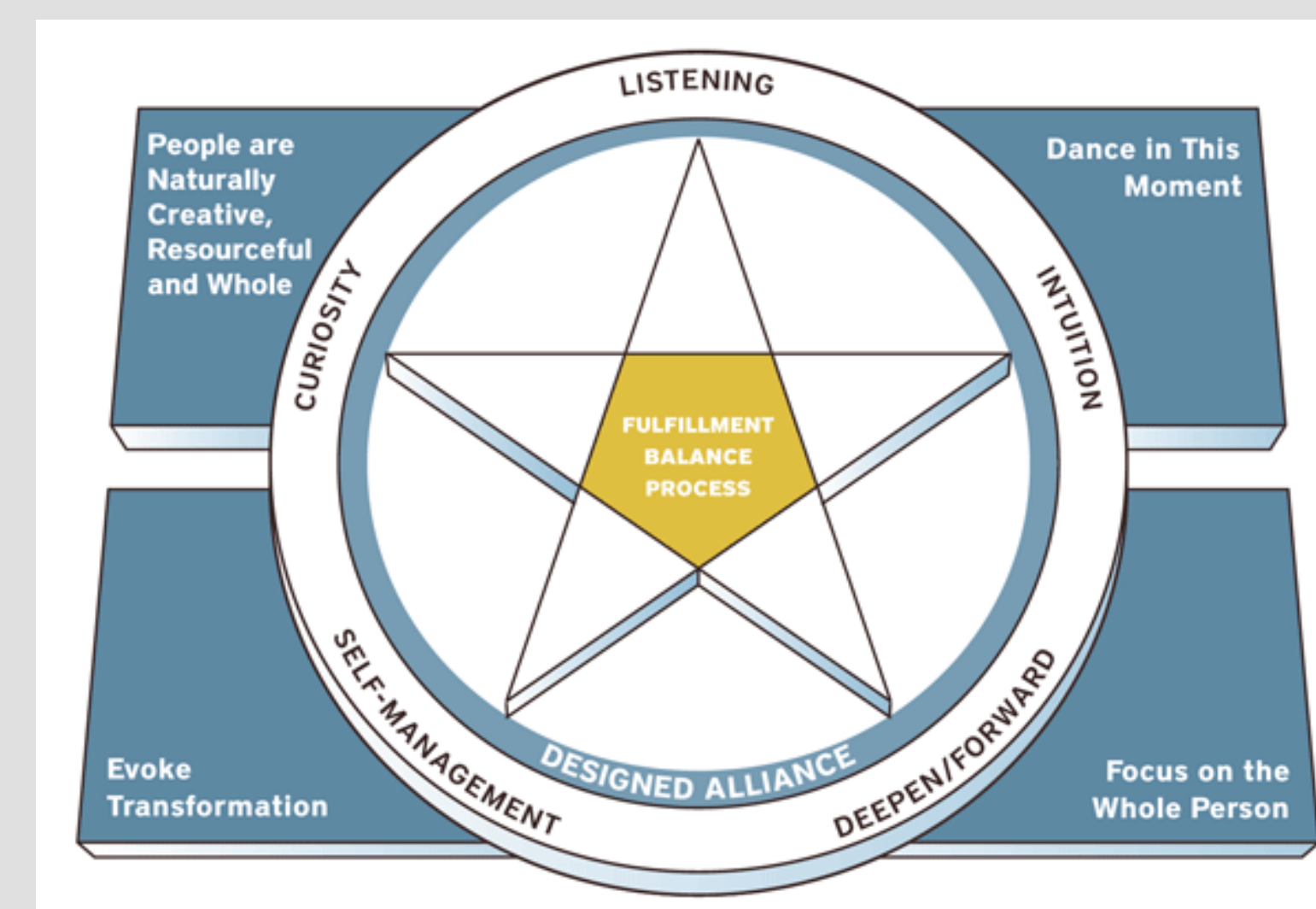
- This research was supported by the Social Sciences and Humanities Research Council of Canada.
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METHODS

- 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 (/100)	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 (/100)	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 (/100)	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 (/30)	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