**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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**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)3 and a validated lifestyle treatment following the LEARN® Program for Weight Management5 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 life3
- Motivational Interviewing (MI) has been recognized as a sound behavior change approach, although standardized applications are needed5,6
- 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 client1,2
- Recent small-scale MI-via-CALC studies (n ≤ 20) have elicited positive results among adults with obesity4,5
- 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

**METHODS**
- University students aged 19-24 with a Body Mass Index ≥ 30kg/m², 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 (CPC) 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,12 Short-Form 36-item Functional Health Status Scale,11 and a semi-structured Program Experience Questionnaire were completed
- Blood lipids 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-[5-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)

**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 healthily; the relationship between calories and weight; social support; stimulus control; cognitive restructuring
- Participants were trained in behavioral self-monitoring skills

**QUALITATIVE RESULTS**

**QM VIA-CALC GROUP**
- "Just being able to talk to someone who really listened and made sense of some of the jumbled thoughts in my head, kept me motivated..."
- "(Having someone believes in me and give me) the confidence to make even little changes."
- "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."

**QM GROUP**
- "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 for 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."
- "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**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Baseline</th>
<th>Mid-week</th>
<th>Post-12-week</th>
<th>3-month follow-up</th>
<th>6-month follow-up</th>
<th>LEARN Group (n = 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health (100)</td>
<td>63.2 (14.8)</td>
<td>70.7 (13.7)</td>
<td>76.5 (16.2)</td>
<td>75.7 (15.8)</td>
<td>77.2 (14.6)</td>
<td>69.2 (13.7)</td>
</tr>
<tr>
<td>Mental Health (100)</td>
<td>57.7 (18.1)</td>
<td>66.1 (16.9)</td>
<td>74.9 (18.1)</td>
<td>70.9 (21.8)</td>
<td>70.4 (21.8)</td>
<td>57.3 (19.3)</td>
</tr>
<tr>
<td>Overall Health (100)</td>
<td>63.8 (15.4)</td>
<td>70.9 (14.5)</td>
<td>78.6 (16.9)</td>
<td>76.3 (18.1)</td>
<td>76.9 (17.0)</td>
<td>66.4 (16.0)</td>
</tr>
<tr>
<td>Self-Esteem (20)</td>
<td>20.8 (5.1)</td>
<td>21.4 (6.0)</td>
<td>24.5 (4.8)</td>
<td>24.3 (5.6)</td>
<td>23.4 (6.7)</td>
<td>19.8 (6.1)</td>
</tr>
<tr>
<td>Body Weight (kg)</td>
<td>221.7 (36.8)</td>
<td>220.3 (38.8)</td>
<td>219.1 (40.9)</td>
<td>218.2 (39.7)</td>
<td>216.4 (31.9)</td>
<td>220.7 (22.4)</td>
</tr>
<tr>
<td>Total Cholesterol (mmol/L)</td>
<td>4.39 (0.9)</td>
<td>4.30 (1.0)</td>
<td>4.39 (1.0)</td>
<td>4.39 (1.0)</td>
<td>4.39 (1.0)</td>
<td>4.39 (1.0)</td>
</tr>
<tr>
<td>Total Daily Calories</td>
<td>3179.1 (585)</td>
<td>1944.8 (786)</td>
<td>1616.3 (781)</td>
<td>1770.8 (786)</td>
<td>1664.7 (771)</td>
<td>2060.3 (776)</td>
</tr>
</tbody>
</table>

**ACKNOWLEDGEMENTS**
- This research was supported by the Social Sciences and Humanities Research Council of Canada
- The authors gratefully acknowledge the coaches and volunteers who contributed their time towards the study, as well as Dr. Kelly Brownell for allowing us to include the LEARN® Program in this research

**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 comparatively 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 changes14,16
- 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 effects16
- 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