

Intervention for Stress among University Students

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ABSTRACT

The **Purpose** of this semester-long pilot study was to assess the impact of Motivational Interviewing via Co-Active Life Coaching (MI-via-CALC) on the stress management experiences of 30 full-time, English-speaking students aged 17-24 years. **Methods:** Participants' experiences were assessed quantitatively using the previously validated Perceived Stress Scale and Hospital Anxiety and Depression Scale (which is divided into Anxiety and Depression scales) at pre-, mid-, and post-intervention.

Findings: Three one-way, repeated-measures ANOVAs were completed for each scale and statistically significant differences ($p < .05$) in stress reduction were found for all scales between pre-intervention to mid-intervention, and between pre-intervention to post-intervention; no statistically significant differences occurred between mid-intervention to post-intervention. Inductive content analysis of the qualitative interviews at pre-, mid-, and post-intervention revealed participants' positive experiences with the intervention and improved stress management proficiencies. Methods were employed throughout to enhance qualitative data trustworthiness.

Conclusion: MI-via-CALC is a promising approach for university students struggling with stress and additional research on a larger sample is warranted.

BACKGROUND & RATIONALE

- 20% of Canadians experience a mental health issue each year; 33% say needs are entirely or partially unmet¹.
- People aged 15-24 are in the most vulnerable age group with regard to suffering from mental illnesses¹.
- 56% of Western students rated their overall stress levels as “more than average” or “tremendous” within the past 12 months².
- 33% of Western students reported academic performance is affected by stress, and 27% reported their performance is impacted by anxiety².
- Western’s Psychological Services has seen a 77.5% increase over 4 years, with a 3-month wait to be seen.
- Innovative approaches are needed to support students.

PURPOSE

- To assess the impact of MI-via-CALC on the stress management experiences of undergraduate students experiencing high stress.

ELIGIBILITY CRITERIA

- Full-time, English-speaking students aged 17-24 years;
- Not on medications for stress, anxiety, or any other mood/ mind-altering drugs;
- Not receiving counselling or therapy; and
- Experiencing stress that interferes with daily life and activities, and feels unmanageable.

METHODS & DATA ANALYSIS

- Data was collected at 3 time points (pre-, mid-, and post-intervention):
- *Qualitative*: Semi-structured interviews used to gather first-hand experiences from participants. Themes compiled using inductive content analysis³.
- *Quantitative*: The Perceived Stress Scale (PSS)⁴ and the Hospital Anxiety Depression Scale (HADS)⁵ were used. Three one-way repeated measures ANOVAs determined changes.

WHY MOTIVATIONAL INTERVIEWING VIA CO-ACTIVE LIFE COACHING (MI-via-CALC)?

- MI-via-CALC is a one-on-one approach in which the coach and client work together in service of meeting the client's needs.
- Approach used to overcome MI's reported weaknesses of putting tenets into action^{6,7,8}.
- Studies observing the impact of MI-via-CALC on obesity and smoking cessation have been positive – e.g., results indicated a reduction in waist circumference and reduced rates of smoking, respectively^{9,10,11,12}.
- In previous studies, albeit quite different in nature, participants described increased levels of self-esteem, functional health status, and lower levels of stress, and changes in stress management skills were illustrated qualitatively and quantitatively.
- Therefore, MI-via-CALC seemed to be an appropriate approach to utilize for this pilot study.



FINDINGS

Qualitative

Pre-Intervention.

- Themes: above normal stress levels, health issues, worry, lack of balance, procrastination, and a longing for increased self-awareness and coping skills.

Mid-Intervention & Post-Intervention:

- Same themes arose at mid- and post-intervention: decreased & more manageable levels of stress, seeing stress from different perspectives, increased self-awareness, self-reliance, and positive experiences with the coaching sessions.

Quantitative

- PSS: Pre-intervention ($M = 25.21$, $SD = 5.69$), Mid-intervention ($M = 16.92$, $SD = 5.57$), Post-intervention ($M = 15.92$, $SD = 7.19$).
- HADS Anxiety: Pre-intervention ($M = 12.04$, $SD = 2.99$), Mid-intervention ($M = 9.20$, $SD = 3.12$), Post-intervention ($M = 7.79$, $SD = 3.87$).
- HADS Depression: Pre-intervention ($M = 6.54$, $SD = 3.52$), Mid-intervention ($M = 4.87$, $SD = 2.43$), Post-intervention ($M = 3.70$, $SD = 2.78$).
- Statistically significant differences were found on all scales from pre-intervention to mid-intervention, and from pre-intervention to post-intervention
- PSS: [$F(2, 46) = 28.49$, $p < .05$], HADS Anxiety: [$F(2, 46) = 16.09$, $p < .05$], HADS Depression: [$F(2, 46) = 9.30$, $p < .05$]
- Statistically significant differences not found from mid- to post-intervention, on all scales.



STUDY LIMITATIONS

- No control group possible due to ethical considerations; next study should use comparison group.
- 13 certified coaches may have introduced variability of approach.
- 20% attrition rate ($n = 6$) may have resulted from random coach-participant matching, or participants not ready to make change, or unsurprising given study required one more task in stressed students' lives.

CONCLUSION

- Follow-up assessments planned at 4-months post-intervention.
- At this point, it seems MI-via-CALC is a promising approach for university students struggling with stress and additional research on a larger sample is warranted.

REFERENCES

- 1) Centre for Addiction and Mental Health. (2012). Statistics on mental illness and addictions. Retrieved from http://www.camh.ca/en/hospital/about_camh/newsroom/for_reporters/pages/addictions-mental-health-statistics.aspx
- 2) American College of Health Assessment. (2013). *American college health association-national college health assessment II: Western university executive summary spring 2013* (p. 1- 17). Hanover, MD: American College Health Association.
- 3) Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). London, UK: Sage.
- 4) Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396.
- 5) Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica*, 67(6), 361-370.
- 6) Mesters, I. (2009). Motivational Interviewing: Hype or hope? *Chronic Illness*, 5(3), 3-6.
- 7) Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology*, 1, 91-111.
- 8) Rubak, S., Sandboek, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: A systematic review and meta-analysis. *British Journal of General Practice*, 55(513), 305-312.
- 9) Pearson, E. S., Irwin, J. D., Morrow, D., Battram, D. S., & Melling, C. W. J. (2013). The CHANGE program: Comparing an interactive vs. prescriptive approach to self-management among university students with obesity. *Canadian Journal of Diabetes*, 37(1), 4-11.
- 10) Newnham-Kanas, C., Irwin, J. D., & Morrow, D. (2008). Co-Active life coaching as a treatment for adults with obesity. *International Journal of Evidence Based Coaching and Mentoring*, 6(2), 1-12.
- 11) Newnham-Kanas, C., Irwin, J. D., & Morrow, D. (2011). Participants' perceived utility of motivational interviewing using co-active life coaching skills on their struggle with obesity. *Coaching: An International Journal of Theory, Research and Practice*, 4(2), 104-122.
- 12) Mantler, T., Irwin, J. D., & Morrow, D. (2010). Assessing motivational interviewing through co-active life coaching tools as a smoking cessation intervention: A demonstration study. *International Journal of Evidence Based Coaching and Mentoring*, 8(2), 49-63.