The Experience and Impact of Motivational Interviewing-via-Coaching Tools on National Smokers' Telephone Hotline Employees

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Abstract

This study's purpose was to assess the experience and impact of Motivational Interviewing-via-Co-Active Life Coaching training on smoking hotline employees' perceived competency to facilitate callers' behaviour changes. In-depth interviews and a Perceived Competency Scale (PCS) were utilized. Themes discussed at baseline included clients barriers and desired changes to practice. Post-training participants described their skill development and feeling re-energized. Three-months post-training, increases in competency and a desire for more training were highlighted. Trends in the PCS were consistent with qualitative findings of increased competency. Implementation constraints were also described. The training had a positive impact on participants' perceived competencies to facilitate behaviour change.

Key words: Behaviour Change Facilitation, Motivational Interviewing, Co-Active Coaching, Smokers' Hotline

Introduction

An estimated 21.8% of Canadians aged 12 years and older, or approximately 5.9 million citizens, were smokers in 2005 (Shields, 2007). Many smokers (as many as 69%) report that they want to quit and in 2010, 52% of them made a quit attempt (Centers for Disease Control and Prevention, 2011). While some quit attempts are done without any form of formalized assistance, many are facilitated by either individual or population-based interventions. One example of population-based cessation interventions is smokers' *hotlines* (hereafter referred to as hotlines). Due to their wide-spread accessibility and no-cost user fees, hotlines have the potential to be an efficacious cessation strategy (Stead, Perera, & Lancaster, 2006). However, despite the potential, from 2005 to 2009, less than a combined seven per cent of Canadian smokers took advantage of hotlines, websites, 'quit and win' contests, and workplace cessation programs (Reid, 2009). However, rates do seem to be increasing and from 2005 to 2006 a Canadian hotline received 15,000 reactive calls and made 4,000 proactive calls, representing a 43% increase from previous years (Canadian Cancer Society, 2012). Despite this drastic increase, hotlines are attracting only a small percentage of smokers

(Lichtenstein, Glasgow, Lando, Ossip-Klein, & Boles, 1996). As such, although hotlines have outstanding potential as a population-based cessation strategy, they represent a current underutilized opportunity to impact many smokers and thus, continued study is warranted.

Hotlines emerged in the 1970s, are now offered all around the world, and their collective success is difficult to determine as few trials have evaluated them. The evaluation difficulty steams from a lack of comparison of hotlines to control groups (Lichtenstein et al., 1996). However, some studies have reported positive results, lending support to the use of hotlines (Lichtenstein et al., 1996; Zhu et al., 2002). Hotlines are free services run typically through non-profit organizations and when called, staff offer confidential support and individualized cessation plans for smokers via the telephone, text-messaging, and/or an online community (Stead, Perar, & Lancaster, 2007). Employees of hotlines are available to answer questions, share current cessation information, and provide advice on specific quit strategies. Moreover, recently hotlines have added a proactive call back component to their service which has proved successful (Pan, 2006). The main approach reportedly utilized by some hotlines to facilitate change is Motivational Interviewing (MI;Lai, Cahill, Qin, & Tang, 2010; Lichtenstein et al., 1996; Zhu, Tedeschi, Anderson, & Pierce, 1996). MI posits motivation as a state of readiness to change as opposed to a personality trait and it works to facilitate behaviour change is through the exploration and resolution of clients' ambivalence (Miller, 1983; Miller & Rollnick, 2002; Rollnick & Miller, 1995). Its creators suggest that MI is unique from other forms of counselling because of its focus on clients' values and desires without the use of coercive tools (Miller & Rollnick, 2002).

Although it is theoretically sound, MI is often criticized for the challenge of translating its core principles or spirit into practice. Hettema and colleagues (2005) and Mesters (2009) propose that despite the tenets of MI being described in many publications, the variability in its implementation may be due to diverse training approaches which have resulted in unpredictable degrees of success. For example, in a study by Soria and colleagues (2006), MI was associated with an 18.4% reduction in smoking rates, while Wakefield, Olver, Whitford, and Rosenfeld (2004) found only an 5% reduction; no or little information was provided to the readers to determine how the principles of MI were actually implemented in either intervention and the training protocol of the MI counsellors was not provided. Moreover, another concern raised by Rubak and colleagues (2005) is the crossover training and implementation of MI skills from non-clinical to clinical settings. Specifically, the authors raise concerns about the inconsistent ability of MI practitioners to transfer skills learned from training into practice (Rubak et al., 2005). Consequently, a need exists for a standardized application of MI to ensure fidelity and adherence with MI principles.

Previous research indicates the tenets and premises of MI are contained entirely within, and brought to fruition via Co-Active Life Coaching (CALC; Newnham-Kanas, Morrow, & Irwin, 2010). Although CALC creators did not design the approach with MI in mind, implementing MI-via-CALC overcomes the aforementioned criticisms of MI because CALC has an extensive training program (five, three-day training courses, totalling over 100 hours, followed by a rigorous 25 week certification program) and concrete skills to facilitate the consistent implementation of core principles (Kimsey-House, Kimsey-House, Sandahl, & Whitworth, 2011; Whitworth, Kimsey-House, & Sandahl, 1998; Whitworth, Kimsey-House, Kimsey-House, & Sandahl, 2007). Furthermore, utilizing

MI-via-CALC has been deemed to offer a practical method for promoting behaviour change (Newnham-Kanas et al., 2010), thereby transcending the non-clinical/clinical barrier, as demonstrated in several behaviour change studies which evaluated the impact of CALC and found significant improvements in the behaviour(s) of focus (Newnham-Kanas, Irwin, & Morrow, 2008; Newnham-Kanas et al., 2010; van Zandvoort, Irwin, & Morrow, 2009). More specific to smokers, a recent pilot study assessed the utility of MI-via-CALC among 18-29 year-old smokers and found 22% of participants were smoke-free at six months post-intervention (Mantler, Irwin, & Morrow, 2010), a rate that is 10% higher than the average quit rate for other cognitive-behavioural interventions (Lancaster & Stead, 2008). Given the previous successes of interventions applying MI-via-CALC at faciliting behaviour change, and in particular the promising results from the above-noted smoking study, integrating MI-via-CALC tools (an easy adaptation as most coaching takes place over the telephone) into a hotline offers an important extension of the existing strategy that overcomes current MI barriers.

Methods

Purpose

The purpose of this study was to assess the experience and impact of a full-day application-based MI-via-CALC training (by two CALC certified individuals) on employees' perceived competence to facilitate behaviour change among callers of a national smokers' telephone hotline.

Participants

Ethical approval was obtained through The University of Western Ontario (now named Western University). Ten employees of a national smokers' telephone hotline (hereafter referred to as hotline), a free service that employs individuals to answer the telephone and make proactive call backs to provide cessation support, were recruited to participate via a workplace advertisement and letter that provided information about an upcoming voluntary training. Interested participants were asked to contact the Research Coordinator (TM) via e-mail or telephone and the only inclusion criterion for this study was that the individual be employed by or volunteer with the hotline in the capacity of manager or 'cessation specialist'. Upon contact, the Research Coordinator explained the study in detail and provided a letter of information and the opportunity to ask questions. All ten participants who contacted the Research Coordinator were included the study. Please see Table 1 for the demographic information of the study participants.

Table 1
Demographic Data for All Study Participants

Measure	*Description*
N	10
Age (years)	27-59 years Average: 41.9 years
Gender	100% Female
Length of Time Working for Hotline	1.5-120 months Average: 49.35 months
Reported number of MI Trainings (prior to training)*	0-18 Average 4.6
Highest Level of Education Achieved	Some university/college – 1 individual University/college- 8 individuals Graduate school- 1 individual

**Note:* Prior training was defined as any MI-related direction provided to an employee that she considered a training, regardless of duration.

Study Design

This mixed method repeated measure design consisted of assessments at baseline, post-training and three-month follow-up. Due to the relatively small sample size, the mixed methods approach allowed for a more comprehensive appreciation of the experience and impact of the training on employees. At baseline, participants completed a demographic questionnaire, and at all three assessment points, they engaged in a 30-45 minute semi-structured interview consisting of 10 to12 questions focusing on participants' current practices, barriers and facilitators to implementing MI, and completed the Self-Perceived Competence questionnaire for facilitating behaviour change questionnaire (PCS; Williams, Freedman, & Deci, 1998). Quality assurance strategies described by Guba and Lincoln (1989) and Irwin and colleagues (2005) were used throughout qualitative data collection (see Table 2). The PCS is a 5-item scale measuring perceived competency for facilitating behaviour change among patients in daily clinical practice, is scored on a 7 point likert scale, and has an internal consistency ranging from Cronbach α 0.80-0.94 (Williams et al., 1998). Two weeks after baseline assessments were completed, the training took place at a local hospital (lunch and snacks were provided for participants). The post-training assessments were completed within three days of the training and the final assessment was conducted three months post-training. During the final assessment, participants were given a small monetary token of appreciation.

Table 2
Measures to Ensure Data Trustworthiness

Measure	*Description*
Credibility	Honesty demands and member checking were done to encourage honest responses and to ensure the researcher correctly understood responses, respectively. Interviews were audio recorded and transcribed verbatim to provide accurate quotations reflecting identified themes.
Dependability	Study process has been identified in detail with the protocol being consistent for all participants.
Confirmability	Inductive content analysis was performed simultaneously and independently by TM and RF/AS. Subsequently, analyses were compared and similarities and differences across time discussed and emergent themes identified.
Transferability	The research process was documented in detail, enabling individuals to draw their own conclusions about the transferability of these results to other settings.

Source: Based on Guba and Lincoln (1989) and adapted from Irwin, et al., 2005.

Training

Two Certified Professional Co-active Coaches also trained in MI, with extensive experience facilitating application-based workshops on MI-via-CALC for health care practitioners (JDI & DM), provided a seven and a half hour interactive and experiential training. This experienced MI-delivery/training team has conducted over 50 MI-via-CALC workshops to allied health care professionals and the focus of the training was on applying components of CALC found to work best in behaviour change situations. Specific tools and skills taught included: helping to anchor behaviour change goals to clients' personal values; adopting a competency worldview; dropping assumptions in service of helping the public change behaviours; learning to ask effective questions; using 'tangible' agreements to help clients follow through on their desired behaviours; and helping people change their perspective in service of making healthier choices(Kimsey-House et al., 2011; Miller, 1983; Miller & Rollnick, 2002; Rollnick & Miller, 1995; Whitworth et al., 1998; Whitworth et al., 2007).

Analysis

Two researchers independently completed inductive content analysis on the interview transcriptions as described by Elo and Kyngas (2008). Once themes were identified, the researchers met to ascertain similarities and resolve differences in emergent themes. Ultimately, common themes were identified for baseline, post-training, and three-month follow-up. Moreover, to capture a more complete understanding of the training's impact (i.e. qualitative and quantitative), trends in the PCS for all three assessments were evaluated.

Results

Baseline Themes

Baseline interviews were designed to contextualize participants' current understandings of what MI entails, confidence about implementing MI, as well as to understand challenges currently experienced. Three themes were identified. The first theme entitled 'understanding MI' captured participants' collective knowledge about MI's principles relative to their work. To gain insight into participants' levels of understanding MI, if any of their descriptions were consistent with Miller and Rollnick's (2002) eight principles of MI, they were deemed to have an accurate understanding (eight participants); if their descriptions conflicted with the basic tenets, they were deemed to have a less accurate understanding (two participants). The second theme of 'client barriers' encapsulated difficulties participants had engaging with clients for various reasons including: a lack of caller responsiveness (six participants); callers' stated unwillingness to engage (four participants); a lack of focus among callers (two participants); client trust issues (two participants); mental health issues of callers (three participants); challenges to building rapport (four participants); and clients trying the same cessation strategies repeatedly without success (three participants). The third theme of 'changes to practice' described structural changes participants wanted implemented including: different software (three participants); more learning opportunities (six participants); and regular MI training sessions (four participants). Illustrative comments supporting each theme are presented in Table 3.

Table 3
Quotations Supporting Each Theme from Baseline Interviews

Understanding MI

"[MI is] an approach that works with the client ... where they're at, at the time. And helps them recognize where they want to be, and moving them towards that goal."

"Motivational interviewing is an approach to elicit change in someone, behaviour change. And, the idea behind is it for [the client] to come up with their own solutions."

"...[Participants] are so passionate at trying to get the caller to change that the advice-giving is just ... first nature."

"[B]ecause if, their motivation doesn't work...they need more advice-giving."

Client barriers

"... [F]orced to quit by a health professional or a family member…."

"...[S]till calling in and have zero interest in quitting, and zero interest in trying anything."

" [Some callers are] very chatty and difficult to keep on topic, and it's hard to sort of guide the conversation any one way."

"Everything else that they've done hasn't worked, so they don't even trust us."

"… [F]or me definitely it's about building the rapport; it's [hard to get the] conversation going so that you can find out a little bit about them."

"…[T]rying to get them to see that what they've done in the past really isn't effective. Because sometimes people don't look back to past quit attempts, I find."

Desired changes to practice

"…[A]lter some of the substructures to make [the service] more MI friendly."

"… [W]e work with a software program that helps support caller interaction, so I thought that maybe there could be some changes we could make in the software program, that would sort of help to flag or you know, sort of help with this process of moving the client along."

"…[T]he opportunity to listen to more [my own] calls."

"If there were opportunities to talk about challenging clients, you know more often, all of that would be more helpful."

"More training!"

Post-Training Themes

Immediately following the training, participants were focused on the similarities and differences of tools learned at the training compared to their current practices. The first of the two themes identified was 'reinforcement of current skills and re-energized participants'; all 10 participants described the training as re-energizing for them and reinforcing some knowledge and tools currently utilized. In the second theme, participants acknowledged several 'new skills' as a result of the training including perspectives work and balance coaching (nine participants), importance of values (nine participants), dropping assumptions (three participants), and realizing the client's whole life is involved in cessation attempts (five participants). Supporting quotations for each theme are presented in Table 4.

Table 4
Quotations Supporting Themes From Post-Training

Reinforcement of current skills and re-energized participants

"…[I]t helped to reinforce many strategies that we've been wanting us to use …and really, I felt that it really re-energized [us]."

"…[The training] was definitely helpful. I felt like it was a refresher in some areas … and to be reminded of how important some of those things are."

"… I found the workshop very valuable, I thought that we discussed a lot of things that some were refreshers and some were new, but … the concepts that we discussed and some of the activities we did, I think focused on really valuable skills."

New skills

"… [T]he one activity related to taking a different perspective... that's not something we've covered …"

"… I think anchoring a value to change, would be very helpful because again, it really solidifies, if you make it important to them then it will help them to remember it and help them to focus on that change."

"… [I]t's really important developing a relationship… an element of respect is very important."

"… [T]he relationship with the client … with every call, the idea of dropping assumptions and coming in with this genuine curiosity."

"… [W]hen people feel heard or understood I think that that fosters stronger relationships and change."

"...the co-active coaching was again the idea of looking at the whole person, because we're really trained to only deal with smoking cessation, I found that I sort forgot about the rest of the person…. And those other parts of their lives really do affect their smoking or them being able to quit."
"…[T]o acknowledge that they have the tools and they have the ability to really move forward and you're just there to help them, identify what those tools are, what the next step is, and it's really them doing the work, it's not you."
"…[T]he take home message was that the client has the answers, and our job is to find the best way to help the client reveal that to themselves."

Three-Month Post-Training Themes

During the three-month post-training assessment, participants revealed feeling re-energized and an overall perspective of increased motivation surrounding their job. Specifically, participants built upon the themes identified during the previous assessment and two salient themes emerged. The first theme that 'training increased confidence to put MI into action' was described by nine participants. The almost unanimous perception was attributed to employees' successful implementation of the new skills learned at the training and the practical training approach. The second theme of a 'desire for continued professional development' via training and learning was identified by all ten participants. Quotations exemplifying each theme are presented in Table 5.

Table 5
Quotations Supporting Three-Month Post-Training Assessment

Increased confidence to put MI into action
"… [T]he accountability piece too right would be like a physical reminder…that was good."
"…I felt really grateful that I was able to participate and I feel like it's something that has changed me, and changed the way I kind of work."
"…[Y]ou know, I feel that I've um, it's, it has given me more self-confidence since I took the course, um, I think mainly, partly because of the examples and the hands-on um, the hands-on experience…."
"…I feel like, you know, my confidence around implementing it is more … because I've had the chance to see it working and … it's really a wonderful thing to hear someone start to think about their life in a different way…."
"I find that as a result of this [training] I'm more on top of my own game … there's a lot of things that have really shifted. Like before, it was a job and I loved it, but I'm liking it even more now."
"I've tried ... changing perspectives and I found that one to be the most helpful. It's the one I've put and used the most."
"… [J]ust about changing your perspective, um, just trying to think of different ways to [quit] because sometimes if you're stuck in a problem and you don't know how to fix it, just kind of changing the way you look at it can sometimes open up a whole new array of possibilities."
"…[We] came from the workshop feeling more motivated, and … [the training] helped to increase their skill level and confidence."

Desire for professional development

"… [I]t's this you know, lifelong learning, right? You can't attend a short seminar and say, 'I'm good' right? …So I think if it was more [training], I'm saying a yearly thing, maybe six months, you attend a seminar."
"…[B]ut some kind of a way to, like, in between follow-ups…maybe like a [tele]phone conference or a webinar…"
"…[I]f you don't make the commitment to yourself to try [new skills], then it's kind of lost. So maybe like having some kind of, you know, an email every couple of weeks or something, like reminding us of one of the skills, and saying, why don't you try this, this week."

Common Theme among Assessment Points: Implementation Constraints

During all three assessments, 'implementation challenges' emerged as a salient theme. Implementation constraints consisted of: limitations around call duration (six participants); having different clients each time (four participants); offering the service over the telephone (four participants); and data collection (four participants). Moreover, the internal structures of the hotline resulted in formal and informal constraints, specifically the aforementioned data collection requirements, and call duration, respectively. Supporting quotations are presented in Table 6.

Table 6
Quotations Illustrating Implementation Challenges Across All Three Assessments

Call Duration
"**…**[I]t's challenging for them and I... because we don't have a full hour."
"… [T]here never seems to be enough time…"
"… [T]ime constraints for each call is a big [challenge]."
"…I had a call yesterday that was like almost an hour long…because we have so many clients if I talk to one person for an hour that's three people that I could've spoken with who didn't get counselling."

Different Clients each time
"… [It is challenging] you don't get the same person every time."
"…[Y]ou may only talk to somebody once, and to somebody else, and somebody else so there's not that continuity."

Offering the Service over the Telephone
"… [T]his is over the [tele]phone, so there are constantly challenges, you know, it's maybe a little bit harder to develop a rapport."

Data Collection
"... [W]e're also gathering data which can take away from the actual counselling session."
"… [W]ell it is our position to gather some information as well, so sometimes those are barriers to actually getting all those other things done…."
"…[P]art of our job is not only to provide that service to clients, but it's also to collect data on the clients…and sometimes [counselling and data collection] can interfere with the other."

Quantitative Results

Quantitatively, due to the small sample size, only averages in the PCS can be reported. Post-training, there was an increase in perceived competence for facilitating behaviour change. These gains, compared to baseline, were maintained at three-month post-training although a slight decrease from post-training was observed (see Table 7). The trend observed in these findings was consistent with the qualitative findings that highlight participants increased confidence over time to put MI-via-CALC into action.

Table 7
Results of the Self-Perceived Competence Questionnaire for Facilitating Behaviour Overtime

Time	*Average PCS (Max=30)*
Baseline	26.33
Post-Training	28.6
Three-Month Follow-Up	28.2

Discussion

The purpose of this study was to assess hotline employees' experience and perceived competency to facilitate behaviour changes of callers as a result of training in MI-via-CALC. Participants attributed this training to increases in competency leading to augmented confidence to use MI in daily practice; these increases were supported by both the qualitative and the quantitative findings. The results of this study suggest that offering an MI-via-CALC training to participants of the smoking cessation hotline had a positive impact on participants' perceived competency to implement MI, reinforcing skills currently being utilized, and providing participants with new concrete behaviour change tools. Prior to the training participants reported a mixed understanding of the tenets of MI, specific barriers in dealing with clients, as well as desired changes to the hotline's internal structures such as informal call duration limitations and data gathering requirements. After the training, participants reported a reinforcement of skills currently being utilized and new skills learned. Participants also identified increased motivation to do their job and feeling re-energized as a result of the training. Finally, three-months post-training, participants reported a continued increase in confidence to put MI into action, as well as a desire for continued professional development and strategies to bring professional development opportunities to fruition. Moreover, implementation constraints in terms inconsistency in clients, and a telephone-based service as well as formal and informal internal structures such as data collection requirement and call duration limitations were identified and reiterated at all three assessments. Quantitatively, trends observed from the PCS over time were congruent with the self-reported increase in perceived confidence and utility of MI-via-CALC training described by participants.

This study provides new and important insights into the perceived impact of integrating MI-via-CALC into the hotline by providing a window into this integration's effectiveness, as assessed from employees' perspectives. The MI-via-CALC training provided a concrete and effective way to improve on the service, resulting in increased employee confidence at delivering the service and thus, enhancing client care regardless of previous training experience and duration of employment.

Additionally, participants' underscored areas for improvement such as the desire for more MI training to further enhance their roles This desire for more MI training was pronounced in the in-depth interviews, and participants displayed an eagerness to provide concrete and tangible solutions to overcome this gap with such ideas as an opportunity to reflect on calls, attend seminars/webinars, and have more training offered through the hotline. The barriers due to formal and informal hotline structures expressed by participants at all three assessments merit further examination and problem-solving by the hotline personnel. The participants perceived implementing MI as challenging for two reasons: short call length and service offered via telephone. However, based on MI and CALC research, lengthy and in-person sessions are not a requirement for success (Butler et al., 1999; Lando, Hellerstedt, Pirie, & McGovern, 1992; Lichtenstein et al., 1996; Rollnick, Butler, & Stott, 1997; Rollnick, Mason, & Butler, 1999). Consequently, there is a need to re-frame these perceived barriers for participants, within training based on empirical evidence that contradicts current participant perceptions in order to overcome this misconception.

The importance of the current study's findings stem from the fact this was the first independent study of its kind examining the impact of an external training on staff at this hotline. This alone underscores the need for continued study of the hotline and the associated impact. At the same time, this need highlights one of the main limitations of this study, namely, the inability to gain access to data on client change. In response to requests for data on cessation rates, call numbers, and service use for the period of time prior to the training and post-training, the research team was informed this information was not available. Consequently, this study is limited to perceived changes reported by participants. Future studies should work in collaboration with the organization's personnel to identify suitable data that can be available to corroborate the impact of training on participants and clients. Moreover, a longer employee follow-up time of one year would be desirable to allow researchers to ascertain if changes were maintained and to determine if any changes to formal or informal internal structures resulted from the study. However, given the time constraints described by the hotline personnel this was unable to occur and the study was required to conclude within three months of the training. Furthermore, the training offered had both participants and managerial staff at the same training; this may have impacted the context in which information from the training was understood. Future studies should offer separate trainings for participants and managers to eliminate any potential bias. To determine which skills and tools are most associated with client behaviour change, future studies should record and analyse e calls, if ethically feasible, to determine what skills are being implemented most and how they correlate to caller smoking behaviours.

Overall, the training was well received by participants and a desire for additional training was expressed. This, in and of itself highlights the success of the training. Further to this, participants also reported the training increased their overall confidence to put MI into action. Additionally, the tools learned in the training allowed for the implementation of these new and useful skills into the hotline and helped to re-energize participants. In conclusion, the marked change in participants' perceptions of the impact of a single, one-day theoretically-based MI-via-CALC training session demonstrates the power of professional development for the participants of this particular hotline. The power of professional development is underscored given that after only one day of MI-via-CALC, the hotline participants increased their feelings of confidence to put MI into action and repertoire of strategies to aid clients in cessation attempts.

Acknowledgements

The authors would like to thank Rebecca Fried (Western University) and Ayah Nayfeh (Western University) for their hard work in transcription and qualitative data analysis. The authors would also like to thank Dr. Anita Kothari and Dr. Angie Mandich for their support throughout the process of the study.

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