8-11-2011 12:00 AM

Motivational Coaching: Its Efficacy as an Obesity Intervention and a Profile of Professional Coaches

Courtney E. Newnham-Kanas, *The University of Western Ontario*

Supervisor: Dr. Jennifer Irwin, *The University of Western Ontario*
Joint Supervisor: Dr. Don Morrow, *The University of Western Ontario*
A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Health and Rehabilitation Sciences

MOTIVATIONAL COACHING: ITS EFFICACY AS AN OBESITY INTERVENTION AND A PROFILE OF PROFESSIONAL COACHES

(Spine title: Motivational Coaching's Efficacy and its Interventionists)

(Thesis format: Integrated-Article)

by

Courtney Newnham-Kanas

Graduate Program
in
Health & Rehabilitation Sciences

A thesis submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

The School of Graduate and Postdoctoral Studies
The University of Western Ontario
London, Ontario, Canada

THE UNIVERSITY OF WESTERN ONTARIO
THE SCHOOL OF GRADUATE AND POSTDOCTORAL STUDIES

CERTIFICATE OF EXAMINATION

Co-Supervisor

_____
Dr. Jennifer D. Irwin

Co-Supervisor

_____
Dr. Don Morrow

Supervisory Committee

_____
Dr. Linda Miller

_____
Dr. Angela Mandich

Examiners

_____
Dr. Jamie Melling

_____
Dr. Craig Hall

_____
Dr. Aniko Varpalotai

_____
Dr. Meizi He

The thesis by

Courtney Newnham-Kanas

entitled:

Motivational Coaching: Its Efficacy as an Obesity Intervention and a Profile of Professional Coaches

is accepted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy

Date_____ _____
Chair of the Thesis Examination Board

Abstract

The primary purpose of this dissertation was to examine Motivational Interviewing (MI) using Co-Active life coaching (CALC) skills as an intervention for individuals struggling with obesity. The secondary purpose was to investigate the characteristics of the interventionists, the Certified Professional Co-Active Coaches (CPCCs).

Study 1 quantitatively assessed the immediate and six-month-post intervention impact of receiving six-months of MI, administered via CALC skills, on weight and waist circumference and psycho-social outcomes of eight women struggling with obesity. Study 2 qualitatively assessed participants' and the volunteer CPCC's experience of the intervention. The purpose of Study 3 was to develop a comprehensive, applied coaching profile using a global sample of CPCCs (n=390). To expand on the characteristics of CPCCs, Study 4 explored the reasons CPCCs enjoyed their work as coaches.

In Study 1, weight decreased for all participants by the end of the intervention. At six-months follow-up, four participants continued to decrease or maintain their weight-loss. Post-intervention, participant effect sizes for the psycho-social outcomes indicated clinically significant improvements.

In study 2, participants attributed a variety of insights, and esteem and coping improvements to the intervention. The CPCC identified the most frequently used and influential strategies during sessions and suggestions for future interventionists.

Study 3's results revealed that all participating CPCCs came from pre-existing professional backgrounds, the majority had a college degree or equivalent, and half were part-time coaches. Online referral services were not deemed useful; CPCCs did not attend the annual ICF conference; and they did not use research in their practices.

Study 4's findings were that witnessing clients change their lives, the sense of satisfaction and fulfillment from coaching, the collaborative relationship with clients, the autonomy and flexibility of the profession, and the gratification received from using their skill set were the main reasons CPCCs enjoyed coaching.

MI via CALC skills was effective in aiding individuals fighting obesity. The profile of CPCCs provided baseline information needed to forward research that evaluates coaching services and in turn, contributes to the growing body of information needed to advance the professional field of coaching.

Keywords: Co-Active life coaching, Motivational Interviewing, Obesity, Life coaches, Behaviour change

Co-Authorship

The material presented in this dissertation is my original work. However, I would like to acknowledge the important contributions and collaborations of three co-authors. First and foremost, I would like to thank my advisors, Dr Jennifer D. Irwin and Dr. Don Morrow, for their guidance, insight, and support with regard to all aspects of the four studies included in this dissertation. Second, I would like to thank Dr. Danielle Battram for her assistance in analyzing the nutrition data for study 1.

Acknowledgements

The successful completion of this dissertation would not have been possible if it were not for the support, guidance, and assistance of several important individuals. First and foremost, I would like to thank my Masters and Doctoral advisors, Dr. Jennifer Irwin and Dr. Don Morrow. Jen and Don, you have far exceeded the traditional expectations of supervisors by demonstrating how to be an outstanding teacher, researcher, leader and most importantly, fostering my development as a compassionate and strong woman. Because of your guidance and friendship, my time at Western has been incredibly fulfilling and a tremendous learning experience. I value highly our friendship and look forward to continued grammar lessons, tea's at "the lab", and ongoing healthy living advice.

I would also like to thank the professors who served on my doctoral thesis examining board (Dr. Jamie Melling, Dr. Meizi He, Dr. Craig Hall, and Dr. Aniko Varpalotai) and on various other committees over the years (Dr. Linda Miller and Dr. Angela Mandich). In addition to offering me invaluable advice, insight, and encouragement, you all inspired me to follow through with my vision for this project. I am so grateful to you for your time, feedback, and assistance during my graduate experience.

To my colleagues, collaborators, and friends that I have met at Western – particularly Dr. Trish Tucker, Dr. Meg Popovic, Tara Mantler, Erin Pearson, Dr. Amy Hiuser, Kendra Wighton, Kara Polson, Sam Radoncic, Kim Simpson, Dr. Andrew Johnson, Dr. Danielle Battram, and all those at Campus Recreation – thank you for your continuous support and encouragement. Most of all, thank you for reminding me to laugh and enjoy life! I feel extremely fortunate to have met every one of you.

Lastly, to my entire family, all of whom have supported me throughout this process during the good times, and most importantly, during the rough times. They have always and will always be an integral part of my life and I am forever indebted for the love and patience they have demonstrated through my doctoral work. My sincere appreciation to my Mom, Dad, Caitlin, Gary, Nancy, Fitz, Twiggy, and Spencer.

My Mother, Linda, deserves a special acknowledgement for her unwavering support and relentless encouragement throughout this process. Mom, you have taught me a number of invaluable lessons during this journey, including: the art of processing and finding opportunities in the challenges that life throws my way; sharing the kindness I have towards others with myself; viewing everyone's intention as good unless proven otherwise; and having compassion, understanding, and interest for those who are different from myself. You are an incredible woman and I am blessed to have you in my life.

Lastly, I could not have completed this final year of graduate work with such excitement and drive if it were not for Morgan. You pushed me when I was stuck, provided a soft place to land when I needed to fall, and celebrated every success along the way. I could not have done this without you – I love you and thank you!

TABLE OF CONTENTS

List of Tables

Study 4

List of Figures

Introduction

Study 1

List of Appendices

Purpose and Introduction

Purpose

The primary purpose of this dissertation was to examine Motivational Interviewing (MI) using Co-Active life coaching (CALC) skills as an intervention for individuals struggling with obesity. The secondary purpose was to investigate the characteristics of the interventionists, the Certified Professional Co-Active Coaches (CPCCs). To fulfill the primary and secondary purposes, four distinct yet thematically-connected studies were undertaken. Although the number of empirical studies using coaching as an intervention is growing, studies of longer duration remain needed. The first study quantitatively assessed the immediate and six-month-post intervention impact of receiving six-months of MI, administered via CALC skills, on the weight, waist circumference, self-esteem, self-efficacy, quality of life, physical activity, dietary intake, and functional health status of eight women struggling with obesity (aged 35-55; body mass index values greater than 30). The second study was undertaken to provide a more complete picture of how the intervention impacted participants qualitatively using in-depth individual interviews and a focus group. An additional purpose of study two was to examine, using qualitative feedback from an in-depth structured interview, what it was like for the study's CPCC to work with individuals struggling with obesity and to garner suggestions for future coaches. Study three was conducted because very little is known about the coaches who deliver the behavioural interventions, such as their prior professions, training, coaching practices, and client demographics. Unlike traditional therapeutic helping professions such as psychologists, psychotherapists, and psychiatrists who are regulated and carefully governed, there are no regulatory bodies governing life coaches and their training. It is crucial that a common knowledge-base about coaching be developed in order to forward research and track trends in

professional coaching. In turn, this knowledge-base will contribute to and further research needed to advance the professional field of coaching. Therefore, the purpose of study three was to develop a comprehensive, applied coaching profile using a global sample of English-reading and –writing CPCCs (n=390). To expand on the characteristics of CPCCs, study four qualitatively assessed and explored the reasons CPCCs enjoyed their work as coaches.

The dissertation was written using the integrated-article format, in which each chapter represents a separate manuscript that focuses on the efficacy of MI using CALC skills as an intervention for obesity and the professional coaches who apply the model. Specifically, all four studies in this dissertation relate to MI using CALC skills. This process is identified in the literature as motivational coaching (MC). MC, in turn, is a client-centered behaviour change intervention, in this case, for adults struggling with obesity. Consequently, some of the information presented in the present introduction and in each of the subsequent chapters may be overlapping and repetitive.

The remainder of this chapter will provide an overview of the obesity epidemic, including prevalence rates, physiological and psycho-social complications of obesity, and components necessary for effective interventions. An innovative intervention known as Motivational Interviewing (MI) will be explored along with the challenges associated with implementing its principles into practice. To alleviate the challenges associated with MI, Co-Active life coaching will be introduced to explain how the application-based tools offered within the Co-Active model may be used to put MI tenets into practice using MC as a client-centered behaviour change intervention.

Introduction[1]

Adult obesity

Global obesity rates have reached epidemic proportions. The condition is afflicting over 400 million adults and it is projected that by 2012, obesity levels will rise to 700 million adults worldwide (World Health Organization, 2006). While obesity was once believed to be a problem in high-income countries, rates are climbing substantially in low- and middle-income countries (WHO, 2006). The recent 2007-2009 Canadian Health Measures Survey (Shields, Tremblay, Laviolette, Craig, Janssen, & Gorber, 2010) reported that over the past 25-30 years, Canadian adults have become heavier for their heights (Tjepkema, 2006). This has resulted in 19% of males and 21% of females aged 20 to 39 years being classified as obese in 2009. Disturbingly, the number of obese females aged 40-59 doubled from 1981 to 2007-2009 (Sheilds et al.). These disturbing rates and trends not only impose considerable physical and psychological consequences on individuals' lives, but this avoidable and non-communicable condition also has a considerable economic impact on Canada's health care system (Shields et al.).

Katzmarzyk and Janssen (2004) reported that health care costs associated with obesity represented over 200 billion dollars of the total health care costs in Canada. The most financially expensive diseases associated with obesity included coronary heart disease ($1.3 billion), hypertension ($979 million), and osteoarthritis ($881 million). In 2000/01 GPI Atlantic, a non-profit research organization, commissioned several reports to ascertain figures of obesity's impact on each province's health care budget. Obesity in Ontario accounted for a direct cost of 5.3% and indirect costs of an additional 2.4 million dollars to the provincial health care budget (Starky, 2005).

[1] A version of this chapter has been published in the International Journal of Evidence Based Coaching and Mentoring (2010), 8(2), 27-49. A copyright release can be found in Appendix A.

Adults struggling with obesity may experience considerable health consequences such as being at higher risk for certain types of cancer, including colon, breast, endometrium, kidney, oesophagus, gastric cardia, pancreas, gallbladder, and liver cancers (Calle & Kaaks, 2004). In the United States, it has been estimated that 15-20% of cancers result from increased rates of overweight and obesity (Calle & Kaaks). Colorectal and prostate cancers were more prominent in overweight or obese men and significantly higher rates of endometrial, gallbladder, cervical, ovarian, and breast cancers were reported in overweight or obese women (Pi-Sunyer, 1993). Individuals struggling with obesity have a greater risk for type 2 diabetes, hypertension, respiratory disorders, myocardial infarction, and gallbladder disease (Starky, 2005). Researchers have suggested that cardiovascular consequences of obesity are cumulative: the length of time one is obese is an important risk factor all on its own (Whincup & Deanfield, 2005).

While food consumption and lack of physical activity have been routinely considered the principle causes of obesity, Vanesse, Demers, Hemiari, and Courteau (2006) argued that results from their cross-sectional population-based analysis from the 2003 Canadian Community Health Survey contradict these assumptions. Their research revealed that all three major metropolitan areas of Canada – Vancouver, Toronto, and Montreal – displayed a lower prevalence for obesity even though their citizens' levels of physical activity and fruit and vegetable consumption were low. As well, low leisure-time activity reported in southern Quebec, the southern part of the Prairies, and in the Maritimes, and higher leisure-time activity along the Pacific Coast up to the Yukon highlight that climate was not a main factor for inactivity. Vanesse et al. suggest there may be other determinants influencing physical activity levels. One such determinant may be the underestimated psycho-social problems that contribute to and result from obesity (Warschburger, 2005). These psycho-social challenges

include negative self-esteem, increased anxiety, and elevated depression levels (Warschburger). Moreover, being the recipient of weight-based discrimination has been found to impact vital areas of living such as within education, employment, and health care arenas (Puhl & Brownell, 2003).

Given the reported trends and the projection of even higher rates of obesity in the future, there is clearly a need for treatments that not only help individuals manage their weight, but also work to create a healthy lifestyle that can be maintained once the formal intervention is complete. Lau, Douketis, Morrison, Hramiak, and Sharma (2007) reported that a comprehensive treatment plan for individuals struggling with obesity must include nutritional therapy, physical activity, and cognitive-behaviour therapy (CBT). Shaw, O'Rourke, Del Mar, and Kenardy (2007) reiterated the need for and utility of CBT as a crucial element in helping individuals manage their weight. Moreover, it is essential that treatments be client-centered whereby each is tailored specifically to the needs of the individual (Egger, Pearson, & Pal, 2006; Kausman & Bruere, 2006). Even though obesity rates are rising and integral components of treatment are outlined, new clinical approaches for treating/reducing obesity are lacking and innovative approaches are needed (Hardeman, Griffin, Johnston, Kinmonth, Wareham, 2000; Slevin 2004). One such innovative and client-centred approach for addressing obesity is Motivational Interviewing (MI).

Motivational Interviewing (MI)

MI is a 25-year old interview style that was designed to resolve client ambivalence in service of moving toward change (Arkowitz, Westra, Miller, & Rollnick, 2008). Historically, MI represented a significant paradigm shift from other counselling techniques in that MI focuses on the behaviour of the counsellor as a key element in creating a relationship within which clients can accomplish change easily, rather than focusing only on the behaviour of the

client. MI is considered more of an adjunct style of therapy (adjunct to existing therapeutic specialties) grounded on a set of principles (express empathy, develop discrepancy, roll with resistance, and support self-efficacy) rather than a set of particular techniques (Miller & Rollnick, 1995). As a definition, MI's founders state that it is "a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence" (Miller & Rollnick, 2002, p.25).

MI is characterized by the following seven key points (Rollnick & Miller, 1995):

1) change must be elicited by the client and not imposed by the counsellor;

2) clients are responsible for articulating and resolving their own ambivalence;

3) counsellors do not persuade their clients to resolve ambivalence;

4) counsellors generally take a gentle approach that elicits change from clients;

5) counsellors are focused in helping clients examine and resolve ambivalence;

6) readiness to change fluctuates depending on the interpersonal interaction between counsellor and client; and

7) the counsellor/client relationship is a partnership within which the counsellor respects the client's autonomy.

The founders of MI (Miller and Rollnick) conceptualized the MI process in two phases. Phase I centres on building motivation for change. Some clients enter counselling already convinced that there are multiple reasons to change. These clients may have little use for Phase I except to clarify and articulate those reasons from their own perspective. Clients who are not as clear about their reasons for change first must determine how important change is to them as well as their confidence that they can actually make the changes needed to meet their desired goals. The idea in Phase I is to explore clients' status quo of their 'status talk' in order to support them moving toward 'change talk.' Often, MI practitioners describe

the shift from status talk to change talk as one involving a change from a 'deficit world view' to a 'competent world view'. Phase II focuses on strengthening the commitment to change. This phase is entered when clients have reached a point of readiness, itself the *essence* of MI, and the counsellor recognizes that change should be initiated. Clients are expected both to elicit and be explicit about what they want and plan to do. This change plan involves: 1) setting goals; 2) considering change options; 3) arriving at a plan; and 4) obtaining commitment. Commitment to a change plan concludes the cycle of MI. This method is a style of counselling and psychotherapy which stems from a flexible approach that can be used on its own, in conjunction with another approach, or as an adjunct to another therapy (Arkowitz et al., 2008). Information obtained about this method was acquired predominantly from Miller and Rollnick, (1995; 2002), as well as from Arkowitz et al. (2008), and contextualized and re-framed from a two-day, intensive training given by a certified MI trainer.

Individuals seeking training in MI are often health care professionals or individuals in the helping professions. A challenge voiced by health professionals is the difficulty in applying MI principles (Mesters, 2009). Our perception is that the skills utilized in Co-Active life coaching (CALC) are a means to put MI tenets into practice.

Co-Active Life Coaching

Life coaching is a relatively new practice that has gained attention, recognition, and criticism from a variety of different professions. Traditionally, life coaching has been associated with business executives. However, over the last ten years coaching has been utilized in the health field in areas such as diabetes (Joseph, Griffin, Hall, & Sullivan, 2001); fitness (Tidwell, Holland, Greenberg, Malone, Mullan, & Newcomer, 2004); mental health (Grant, 2003); obesity (Newnham-Kanas, Irwin & Morrow, 2008; van Zandvoort, Irwin &

Morrow, 2008; 2009); and cancer (Brown, Butow, Boyer, & Tattersall, 1999) to name a few (for a full overview of coaching-related health studies see Newnham-Kanas, Gorczynski, Morrow & Irwin, 2009). Traditionally, the prevailing trend and professional training in health care has relied on providing patients and clients with information about health (together with the assumed client impact-factor of professional status); specifically, health information has been directed toward primary care and the treatment of illness to the detriment of a complementary focus on prevention (see Elder et al., 1999). The use of coaching and other motivational, behavioural change methods is an important, emergent process.

Perhaps the most recent partnership example of coaching with health care is that of the Institute of Coaching; in 2009, the Institute became allied with the McLean Hospital, a Harvard Medical School affiliate, a fortuitous merger demonstrative of the perceived health impacts of coaching. There are numerous coaching training schools throughout North America each of which advocates its own method and techniques. However, most research using coaching as a treatment or intervention has not focused on a specific coaching method. Thus, there is a discernible inability to assess the reliability and validity of the generic use of "coaching" as a treatment or intervention for any behaviour change (Newnham-Kanas et al., 2009). Over the past two years, three studies assessing coaching's impact on obesity (Newnham-Kanas et al., 2008; van Zandvoort et al., 2008; 2009), one on physical activity (Gorczynski, Irwin, & Morrow, 2008), and one on smoking cessation (Mantler, Irwin, & Morrow, 2010) have evaluated one specific method of coaching, that of Co-Active coaching (the form of coaching taught by the International Coach Federation-accredited Coaches Training Institute) as a behaviour change intervention. The reported results of these studies

attest to the utility of this particular coaching paradigm in achieving powerful health behaviour changes.

The Co-Active model. The Co-Active model depicts the nature of Co-Active coaching (hereafter referred to as coaching) delivered by its creators (see Figure 1; Whitworth, Kimsey-House, and Sandahl, 1998; 2007). Whereas MI is more conceptual, the Co-Active coaching model is more readily applied in terms of its actual use with clients. The *Co-Active* portion of its title refers to the collaborative interaction between coach and client based on the assumption of strength and capability of the client to determine what is best for him or her. It is a directed and structured *conversation* because it is emboldened by respect, openness, compassion, empathy, and authenticity on behalf of the coach and client all of which are made explicit in the designed alliance between the two principals. The coach's role is to empower clients to make choices based on their values (hence, the client is represented as the star configuration at the centre of the model); to hold clients accountable for their decisions and actions; and to support clients either in self-learning and/or moving forward towards their goals. The remainder of the model is described below.

Designed Alliance. The process of designing the alliance places clients in control of the coaching relationship and ultimately the changes they make in their own lives. It is the power of this relationship that enables change to take place. Although both the coach and client have a mutual responsibility to define and design the relationship, it is the clients who play the most important role in asserting how they want to be coached. As a team, both the coach and client create a relationship that fits their working and learning styles and is respectful of the communication approach that works best for them. The process of designing the alliance places the client in control of the relationship and ultimately the changes they make in their lives. Key features of the designed alliance include: logistics (around

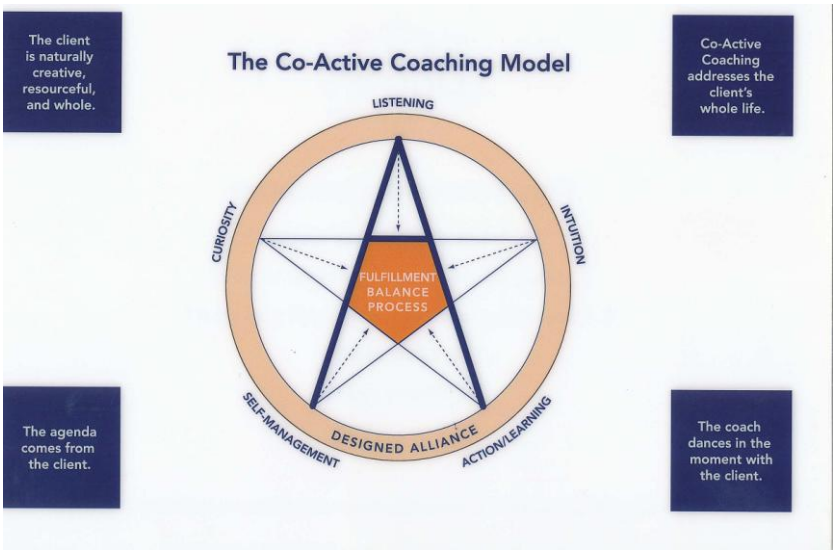


Figure 1: The Co-Active Coaching Model. Note. From "Co-Active coaching: New skills for coaching people toward success in work and life," by L. Whitworth, K. Kimsey-House, H. Kimsey-House, & P. Sandahl, 1998. Scanned and reprinted with permission from the authors.

fundamental ground rules and administrative procedures); the current state of the client (where is the client in this moment emotionally, physically, spiritually, etc.); and designing the future (what the client wants to change). The designed alliance is represented by the capsule that surrounds the star/client in the model.

Four cornerstones. Coaching is based on the fundamental principle, from the coach's point of view, that nothing is wrong with the client and that the client is neither broken nor in need of fixing but in fact, the client is *naturally creative, resourceful, and whole* (NCRW). The clients are recognized as being the ones who know what is best for them and have the answers or are capable of finding the answers they need. The coach is there to ask questions and invite discovery. By asking powerful questions the coach assists clients in discovering how well they know themselves, their strengths, and their limitations. By answering the questions posed by the coach, clients are often amazed that they are able to uncover what

they know to be true about themselves – that they do know what they want, what they fear, what motivates them, their vision, and their purpose. When clients create their own answers, their solutions are more resourceful and effective, resulting in a higher level of commitment (and self-efficacy). This enables and empowers clients to follow through with action in the direction towards their change (Irwin & Morrow, 2005).

The client in a coaching relationship determines the agenda, not the coach. This cornerstone (*the client's agenda*) highlights that coaching is exclusively centered on achieving the results clients' want. The coach's role is to hold the 'Big A agenda', determined by the designed alliance where the client specified what he/she wanted from the coaching experience. By "holding the client's agenda", the coach makes certain that the client is always working towards fulfillment and balance and are fully experiencing the process of their life.

Coaching sessions often involve constant shifting of themes and topics depending on the client's responses to questions posed by the coach and as such they, *dance in the moment*. This cornerstone involves listening at a very deep level to determine what is most important for clients based on their agenda. 'Dance in the moment' refers to the flexibility and willingness of the coach to change direction in the moment to meet the needs of the client.

As the coaching process evolves, change experienced by clients spreads to all aspects of their life, which is why coaching involves *addressing the client's whole life*. The coaching model recognizes that the agenda that clients bring to their coaching session often will impact on other parts of their lives. Although individual sessions may address one issue that involves one particular component of a client's life, the choices made move the client towards creating a life that is more fulfilling, achieves better balance, and has a more successful life process.

Five coaching contexts. *Listening* in coaching involves not only the words that are spoken but also what is behind them. Nuances to a client's voice, emotion, and energy permit the coach to receive a vast array of information communicated by the client. The real listening of coaching takes place on a very deep level and this listening context occurs on three levels. Level I listening is internal, focusing on what the information means to the coach. Level II is listening focused on the client. Level III is a wide range of listening that picks up on clients' emotion, the coach's intuition, and the environment. This would include sensory information as well as mood, pace, and energy. Coaches need to be listening at level II and level III.

A coach's *intuition* is incredibly valuable to the coaching relationship. When coaches are able to fully trust their intuition, it provides an opportunity for clients to explore ideas, thoughts, and feelings that may not have been conscious to the client. By experiencing the coach's intuition, clients may in turn connect with a greater awareness to their own intuition.

The main purposes of the coaching relationship are to *forward action and/or deepen the learning*. Without these two components, coaching sessions would resemble an ordinary conversation. Action and learning are the responsibility of the client and forward and deepen are the responsibility of the coach. Coaches forward and deepen the action and learning using a variety of different skills within the context of authenticity, connection, aliveness, and courage with the client, for the client. Action and learning usually take place for the client between coaching sessions.

Self-management is about self-awareness and recovery. It is the role of the coach to become aware of when they are distracted and it is their responsibility to reconnect back with the client. As proficient as a coach may be, there are times when the coach is pulled into level I listening and times when clients trigger a thought, feeling, or judgment that distracts the

coach. It is the responsibility of the coach to self-manage the urge to provide opinions and advice in situations such as these in order to keep focus on what best serves the interest of the client.

The last context, *curiosity* is demonstrated in the art of asking questions. It is referred to as the context that starts the coaching process and the energy that keeps it going. Given that coaching is about asking and not telling, powerful questions is a form of curiosity that provides clients with the opportunity to look deeper into their minds, hearts, souls, and intuition. Open-ended questions are paramount to this model and allow for personal exploration.

Core principles. This model uses three life principles as forms of coaching; the structure utilized is dependent on the client's needs. Fulfillment coaching is used to explore what it means for each client to live true to his/her values (fulfil those values) in his/her life; balance coaching is selected to provide alternative perspectives on recurring issues (ones where the client is stuck or overwhelmed) and to develop potential, planned, alternative courses of action to which a client can commit; and process coaching is chosen to address the internal emotional experience of the client and what is happening within him/her in the way s/he experiences life at the present moment in time. Information obtained regarding this model was acquired from Whitworth et al. (1998; 2007) and contextualized through five levels of practical training.

Theoretical considerations. Coaching is disparate from MI in that most coaching schools, unlike counselling training programs, inclusive of CTI, emphasize coaching skills acquisition without any attention to theory mastery or professional background of prospective coaches. At the same time, comparable to the work of Elder et al. (1999) in explicating the theoretical and applied effectiveness of health-behaviour theories and models,

so too has the Co-Active model been deemed to be theoretically grounded (Irwin & Morrow, 2005). Behaviour theories provide essential understanding and guidance regarding what needs to be in place in order for meaningful behaviour change to take place (McKenzie & Smeltzer, 2001). Specifically, Social Cognitive Theory (Bandura, 1986), the Theory of Reasoned Action (Fishbein & Ajzen, 1975), the Theory of Planned Behaviour (Ajzen, 1988), and Self-Determination Theory (Deci & Ryan, 2000, 2002) have been utilized to help explain why Co-Active coaching is an effective behaviour change model. The following theoretical underpinnings of Co-Active coaching have been paraphrased from the work of Irwin and Morrow (2005) and Pearson (under review).

Social Cognitive Theory. Basic to Social Cognitive Theory (SCT; Bandura 1986) is the assumption that individuals are motivated to learn a new behaviour through direct observation of another individual modelling the desired behaviour. When the observed behaviour is imitated, the coveted behaviour would solidify and be rewarded by positive reinforcement. Through positive reinforcement, the individual's level of self-efficacy is strengthened and the behaviour is maintained. Elements of SCT that are evident in the Co-Active model include expectations; expectancies; self-efficacy; and reinforcement and acknowledgement.

Expectations represent the cognitive capacity of individuals to anticipate the probable consequences of their behaviour in a particular situation (Bartholamew, Parcel, Kok, & Gottlieb, 2001). Expectancies are the values associated with a particular outcome they expect (Bartholamew et al.). When a particular outcome is valued highly, individuals are more likely to engage in the desired behaviour than if the outcome held little value. In *fulfillment* coaching, the coach explores with the client what is and is not important to the client, which forms the foundation of what the client truly values (Irwin & Morrow, 2005). In turn, the

coach and client work together to make changes in his/her life that honour those values. It is through fulfillment coaching that clients explore and honour their expectations and expectancies.

Self-efficacy is described as the belief that one is capable of performing a certain task (Bandura, 1986). Self-efficacy is considered a crucial component of behaviour change and one way to increase individuals' self-efficacy is through verbal persuasion (McKenzie & Smeltzer, 2001). One tenet within the Co-Active model that provides a solid understanding and effective application toward increasing individuals' perceived self-efficacy is through *Championing* (Irwin & Morrow, 2005). In championing, "…the focus is on supporting clients rather than identifying traits. You champion clients by standing up for them when they question their abilities" (Whitworth et al., 2007, p.116). Verbal persuasion and championing are similar concepts that support the client in accessing their abilities to accomplish an outcome they desire.

Reinforcement is essential in order for a behaviour to be learned and can be achieved through three means: 1) direct reinforcement – when favourable feedback is received by the individual after they engaged in a particular behaviour; 2) vicarious reinforcement – when an individual is witnessing another person receiving praise for a particular behaviour which in turn may encourage the individual to engage in that behaviour; and 3) self-management – when individuals monitor their own behaviour and reward themselves upon engaging in that particular behaviour (Bandura, 1986). There are several tools within the Co-Active model, including but not limited to *challenges*, *accountability*, *acknowledgement*, and *championing*, that reinforce behaviour (Irwin & Morrow, 2005). Each of these tools work to cue and reinforce clients desired behaviour.

‘Acknowledging’ is a skill that “recognizes the inner character of the person to whom it is addressed” (Whitworth et al., 2007, p.45). Whitworth et al. stated that acknowledging is used to reinforce when a value is honoured and to celebrate clients’ internal strength. And when the coach acknowledges that inner strength, it allows clients more access to it, which increases clients’ beliefs that they can engage successfully in that desired behaviour. Each of these elements of the Co-Active model align with SCT and focus on the influence of reinforcement and personal expectations as key components to successful behaviour change.

Theory of Reasoned Action and Theory of Planned Behaviour. The Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975) states that individuals’ behaviour is predicated on their behavioural intention, attitude, and subjective norm. In turn, individuals’ behavioural intention is influenced by their attitude toward engaging in a particular behaviour and the perceived belief regarding what others believe they ought to do. The Theory of Planned Behaviour (TPB; Ajzen, 1988) builds on the TRA by addressing issues that may not be under the volitional control of the individual. They may not engage in a desired behaviour because they believe there are confounding factors out of their control that limit their ability to engage in the behaviour. In turn, clients may be ‘stuck’ in a particular perspective. Through *balance* coaching, clients explore different perspectives of the subjective norm and encourage them to investigate how those perceptions are impacting their ultimate goals (Irwin & Morrow, 2005). The five steps of balance coaching described by Whitworth et al. (2007, p 144-150) include: 1) identify the client’s current perspective and expand on additional perspectives; 2) clients explore different perspectives and ultimately choose one; 3) clients explore a range of action options; 4) clients commit to an action plan; and 5) clients, outside of the coaching session, engage in their action plan. Through exploring

different perspectives and creating an action plan, clients increase their self-efficacy and move toward their desired behaviour change.

Self-Determination Theory. Self-Determination Theory (SDT) is an approach to behaviour change that examines human motivation and personality as factors that impact whether individuals will acquire motivation to engage in a behaviour and maintain that behaviour (Deci & Ryan, 2000, 2002). Three psychological needs that support self-motivation include autonomy, competence, and relatedness (Deci & Ryan, 2000). Constructs from SDT have also been identified within the Co-Active model (Pearson, under review). In particular, *fulfillment* coaching, *powerful questions*, *acknowledgement*, and the coach viewing the client as *NCRW* all contribute to the client being autonomous and thereby responsible for the choices he/she makes which increases the probability of engaging in and maintaining the choices made. *Balance* coaching, *championing*, *accountabilities*, and *challenging* are all tools/principles of coaching that reinforce clients' sense of competence by aiding them in creating an action plan and reinforcing their confidence that they can meet their goals successfully. Finally, the *designed alliance*, *process* coaching, *listening*, and *self-management* are skills/principles that support the co-active relationship between coach and client which strengthens the relatedness by clients that they are being seen and heard by the coach.

Health practitioners – dieticians, nurses, nurse practitioners, diabetes' educators, and nutritionists among many other health change professionals – are in need of potent techniques that can be employed to motivate their clientele toward impactful, healthful behaviour change (e.g., Goldberg & Gournay, 1997). Our own work focussed on MI applied via the Co-Active model has led us to explore the commonalities of these change processes. By comparing and contrasting these behaviour change therapies, the following analysis

sought to create clarity via a newly-derived model of *motivational coaching (*MC*).* MC amalgamates the central threads from the MI principles and the Co-Active coaching method in order to close the gap on this practical need on the part of health care practitioners.

Motivational coaching (MC)

A comparison between techniques utilised by MI and coaching is provided and amplified by summary Table 1 following an introduction to current research using each concept as a behaviour change treatment.

As mentioned previously, life coaching is a relatively new area of research with respect to its application in the health field. Over the past two years, six studies have evaluated and reported the effectiveness of Co-Active coaching as a behaviour change intervention in the areas of obesity, physical activity, and smoking cessation (Newnham-Kanas, Irwin, & Morrow, under review; Newnham-Kanas, Morrow & Irwin, under review; Newnham-Kanas et al., 2008; Gorczynski, Irwin, & Morrow, 2008; Mantler 2010; van Zandvoort, Irwin, & Morrow, 2008; 2009). Although coaching research in general is in its infancy, MI has been used for several years as a successful intervention in research with a specific emphasis on addictions or addictive behaviours primarily associated with alcohol use (Brown & Miller, 1993; Miller, 1998; Miller, Yahne, & Tonigan, 2003). However, more recently, MI has been utilized with continued success to address health behaviours and conditions in areas such as: smoking (Butler, Rollnick, Cohen, Bachman, Russell, & Stott, 1999); diet (Berg-Smith, Stevens, Brown, Van Horn, Gernhofer, Peters, et al., 1999); physical activity (Harland, White, Drinkwater, Chinn, Farr, & Howel, 1999); medical screening (Taplin, Barlow, Ludman, MacLehose, Meyer, Seger et al., 2000); diabetes control (Doherty, Hall, James, Roberts, & Simpson, 2000); and medical adherence (DiIorio,

Resnicow, McDonnell, Soet, McCarty, Yeager, 2003). The results from studies that assessed coaching's and MI's findings regarding health behaviour changes are summarized in Table 2.

The findings from the studies presented in Table 2 highlight the utility of MI and coaching as client-centered behaviour change interventions. However, in the studies using MI, there was not a standardized set of instructions on how to apply the tenets, which would make replicating the study findings difficult.

Table 1

Comparison Between Techniques Utilized by MI and Coaching

Model/Method	Motivational Interviewing	Co-Active Life Coaching
Therapeutic Alliance	In MI, motivation can arise from the interaction between two people. The client is viewed as an expert and the counsellor is viewed as a catalyst in accelerating change by aiding the client in clarifying their reasons for change and helping them create a change plan.	Referred to as the Designed Alliance whereby the coach and client create a relationship that fits their working and learning styles and is respectful of the communication approach that works best for them. The coach is viewed as the catalyst for change and the power of coaching is in the designed alliance.
View of Client	It is presumed by counsellors that the client is able to increase intrinsic motivation and provide solutions to serve his/her own goals and values in order to facilitate change.	Coaching is based on the fundamental principle, from the coach's point of view, that nothing is wrong with the client and that the client is neither broken nor in need of fixing but is *naturally creative, resourceful, and whole* (NCRW). Clients are recognized as being the person who knows what is best for them and have the answers or are capable of finding the answers they need.
Agenda Selection	Determined by the client	Determined by the client
Aspect of client's life involved	Focused on specific aspects of a client's life. Impact of change on the client's whole life not stressed.	Involves client's whole life.

Flexibility of coach/counsellor	Counsellors move with their clients and in order to maintain positive therapeutic outcomes, counsellors must "roll with resistance" rather than challenge it. Resnicow and colleagues (2002) stated that MI is more like a dance rather than a wrestling match.	"Dance in the moment" refers to the flexibility and willingness of the coach to go in the client's direction to meet the needs of the client. It involves listening at a very deep level to determine what is most important for clients based on their agenda.
Process used to facilitate change	Two phases: 1) Building motivation for change; and 2) Strengthening the commitment to change.	Three principles: 1) Fulfillment; 2) Balance; and 3) Process.
Listening	Referred to as reflective listening. The key to this technique is how the counsellor responds to what clients say. The essence of this form of listening is about making a guess as to what the client really means.	Includes three levels of listening: Level I – coach's internal dialogue Level II – focused listening on the client Level III – wide range of listening that picks up on clients' emotion, and the surrounding environment.
Self-Management	MI counsellors work diligently to self-manage by reconnecting with clients if they slip into their internal dialogue. Counsellors will provide advice if it is requested or permission is granted by clients and it is viewed as aiding clients to meet their goals.	Self-management is about awareness and recovery. It is the role of coaches to become aware of when they are distracted and it is their responsibility to reconnect back with the client. Coaches manage the urge to provide opinions and advice in situations such as these in order to keep focus on what best serves the interest of the client. However, advice is provided if requested or

		in service of the client's goals.
Intuition	Based on reflective listening, the counsellor's intuition is essential in determining what the client really means. It is not implicitly stated or defined in MI, but based on the coaching definition, it is present in both phases. The counsellor's intuition is imperative in determining whether the client is ready to move from phase I to phase II of the MI method. A client may not always be aware of whether they are capable of making the leap into action – counsellor intuition and expertise are heavily relied on during this transition.	A coach's *intuition* is incredibly valuable to the coaching relationship. When coaches are able to fully trust their intuition, it provides an opportunity for clients to explore ideas, thoughts, and feelings that may not have been conscious to the client. By experiencing the coach's intuition, clients may in turn connect with a greater awareness to their own intuition.

Table 2

Summary of Study Results Utilizing MI or Coaching in Health Behaviour Interventions

Authors	Year Published	Participants	Results
Berg-Smith, S. M., Stevens, V. J., Brown, K. M., Van Horn. L., Gernhofer, N., Peters, E. et al.	1999	Youth and adolescents (13-17 yrs) dealing with dietary issues.	Overall, the intervention successfully re-engaged participants in personalized goal setting, and appeared to increase and renew adherence to the DISC dietary guidelines.
Butler, C.C., Rollnick, S., Cohen, D., Bachman, M., Russell, I., & Stott, N.	1999	Cigarette smokers (28-55 yrs).	Significantly more patients in the motivational consulting group reported not smoking in the previous 24 hours (P = 0.01), delaying their first cigarette of the day more than five minutes after waking (P = 0.01), making an attempt to quit lasting at least a week during follow-up (P = 0.04), and being in a more ready stage of change (P = 0.05).
DiIorio, C., Resnicow, K., McDonnell, M., Soet, J., McCarty, F., Yeager, K.	2003	Women with HIV.	Mean scores on ratings of missed medications were lower for participants in the intervention group than those in the control group. Although there were no significant differences in the number of medications missed during the past 4 days, participants in the MI group reported being more likely to follow the medication regimen as prescribed by their health care provider.
Doherty, Y., Hall, D., James, P.T., Roberts, S.H., & Simpson, J.	2000	Health care workers.	This was a feasibility study that examined whether skills in counselling behaviour change may help staff working in diabetes care to facilitate self-management in people with diabetes. The findings suggest that the stages of change model, motivational interviewing and behavioural techniques are relevant to work in this area.
Gorczynski, P., Morrow, D., & Irwin, J.D.	2008	Inactive youth (12-14).	Physical activity increased for one participant while the other participants' physical activity remained unchanged. No significant changes occurred in self-efficacy, social support, and perceived

			behavioural control with specific regard to becoming more physically active.
Harland, J., White, M., Drinkwater, C., Chinn, D., Farr, L., & Howel, D.	1999	Adults (40-64 yrs)	More participants in the intervention group reported increased physical activity scores at 12 weeks than controls (38% *v* 16%, difference 22%, 95% confidence interval for difference 13% to 32%), with a 55% increase observed in those offered six interviews plus vouchers. Vigorous activity increased in 29% of intervention participants and 11% of controls (difference 18%, 10% to 26%).
Miller, W.R., Yahne, C.E., & Tonigan, S.J.	2003	In- and outpatients entering public agencies for treatment of drug problems.	Contrary to prior reports, MI showed no effect on drug use outcomes when added to inpatient or outpatient treatment, although both groups showed substantial increases in abstinence from illicit drugs and alcohol.
Newnham-Kanas, C., Irwin, J.D., & Morrow, D.	2008	Obese adults (35-55).	Significant decreases in waist circumference ($p = 0.032$) and increases in self-esteem ($p = 0.01$) and functional health status ($p = 0.01$) were found. Qualitatively, participants reported an increase in daily physical activity and healthier dietary choices, feelings of optimism, and greater self-acceptance.
van Zandvoort M., Irwin, J. D., & Morrow, D.	2009	Female university students (17-24 yrs)	At the conclusion of the study period, participants attributed enhanced self-acceptance; living healthier lifestyles; and making themselves a priority to their coaching experience. They appreciated being treated as the expert in their lives.

van Zandvoort M, Irwin J.D., Morrow, D.	2008	Female university students (17-24 yrs)	Visual inspection revealed no change in BMI for three, a decrease for one, and a slight increase for one participant. Waist circumference decreased for three participants and remained stable for two. The effect sizes and qualitative statements indicated *clinically significant* increases in participants' self-esteem and physical, mental, and overall health statuses upon completion of the intervention.

Motivational Interviewing (Miller & Rollnick, 2002) and Co-Active coaching (Whitworth et al., 1998; 2007) were compared descriptively with the following six questions guiding the comparison's components to determine whether they could amalgamate into MC as an effective behaviour change model:

- How is the therapeutic alliance created; what is the purpose of the alliance?
- How is the client perceived by the coach/counsellor?
- How is the agenda determined for individual coaching/counselling sessions?
- How is each method/model sensitive to the needs of the client; in short, in what way/s is the method/model client-centered?
- What aspects of the client's lived experiences are involved in the coaching/counselling session?
- What process is used by the coach/counsellor to assess the client's need and/or readiness for change?

How is the therapeutic alliance created; what is the purpose of the alliance?

Similarities and differences exist when considering the therapeutic alliance for MI and coaching. Both systems view the client as expert and assert that the power of the coaching/counselling relationship enables change to take place for the client. In MI, the first session involves establishing the fundamental ground rules and administrative procedures, exploring the current state of the client, and designing what the future looks like for clients. All of these features are similar to those employed in coaching. However, in MI, there is not an explicit mutual responsibility to define and design the counselling relationship. Clients are not involved in determining how they are going to be counselled. For example, the counsellor does not inquire whether clients want homework, how they want to be held accountable, or if they would prefer a gentler counsellor or one who is more direct. In addition, more emphasis

is placed within MI on the counsellor's role than is the case with coaching's reliance on the client's ability to make changes in his/her life. In coaching, if resistance appears, the coach views this as an opportunity to explore what is behind that resistance with emphasis on the client's experience of resistance (the coach would use process coaching to explore that resistance). In MI, if resistance increases within the client, it is viewed as a difficulty in the interpersonal context between client and counsellor. Specifically, in MI, perceived resistance is more attributed to the counsellor's style of counselling, not to anything about the client. Readiness is the key variable in the change process within MI. While the apparent difference in this readiness feature might point toward coaching's more client-empowered approach to the collaborative relationship between coach and client, it also might reflect the semantics of the MI approach in not pushing past client readiness.

How is the client perceived by the coach/counsellor? The most fundamental aspect of MI and coaching is the reliance on asking questions of the client versus providing answers, advice, or solutions for the client. The most impactful questions are those that are open-ended ones that invite the client to explore and experience *what* is happening with him or her rather than analyze or assess *why* and/or *how* events or issues are affecting him/her. Thus, the most potent questions tend to be ones like, *What is important about _____ to you? What is _____ like for you? Say more about _____*. Part of the power in asking questions comes from how the client is perceived by the coach or counsellor. Coaching is based on the premise, from the coach's point of view, that nothing is wrong with the client and that the client is neither broken or in need of fixing. Instead, in coaching (CTI) terminology, the client is perceived as *naturally creative, resourceful, and whole* (NCRW). The coach's primary role is to ask open-ended questions that invite discovery, learning, and potentially, change. By asking powerful questions, the coach assists clients in discovering how well they know themselves, their

strengths, and their limitations. By answering the questions posed by the coach, clients are able to uncover what they know to be true about themselves, that is, they are encouraged to and can articulate and do know what they want, what they fear, what motivates them, their vision, and their purpose. When clients create their own answers, their solutions are more adhesive, resourceful, and effective, thereby often resulting in a higher level of commitment to change. This enables and empowers clients to follow through with action in the direction of their desired change.

Within the underlying spirit of MI, the term autonomy highlights the importance of the client taking responsibility for his/her change. It is assumed that the client is *creative* and *resourceful* with an individual ability to increase intrinsic motivation and provide solutions to serve his/her own goals and values in order to facilitate change. Even though MI traditionally has dealt with clients who have addiction issues, MI, comparable to the coaching model, does not subscribe to labels, such as 'alcoholic'. MI deals with client behaviours and avoids clinical terms that may take away from, compartmentalize, or minimize the subjective experience.

How is the agenda determined for individual sessions? The client in a coaching relationship determines the agenda, not the coach. This cornerstone of the coaching model (*agenda from client*, see Figure 1) highlights that coaching is centred on achieving the results clients' want. The coach's role is to hold the overall or main agenda determined during the designed alliance wherein the client specified what s/he wanted from the coaching experience (e.g. to lose weight and increase physical activity). By assuming responsibility for maintaining the client's agenda, the coach makes certain that the client is always working towards fulfillment and balance and is experiencing fully the process of one's life even while

exploring ‘smaller’ agendas (e.g., being late for work, having a squabble with a family member) in individual sessions.

Counsellors using MI believe that having the client set the agenda facilitates active participation in the counselling process and supports their belief in the autonomy of the client. At first glance, MI seems focused and goal directed towards the resolution of ambivalence. This might raise the question of whether the agenda actually comes from the client. However, it could be argued that clients seeking coaching are also in a state of fluctuation with the inability to make choices. Therefore, MI and coaching do align with respect to agenda determination.

How is each method/model sensitive to the needs of the client; in short, in what way/s is the method/model client-centred? Coaching sessions often involve constant shifting of themes and topics depending on the client’s responses to questions posed by the coach; client and coach are said to *dance in the moment*. Dancing in the moment refers to the flexibility and willingness of the coach to change conversational direction to meet the needs of the client, while always maintaining a focus or connection to the larger client-defined agenda. This aspect of the coaching model involves listening at a focused level of awareness in order to determine what is most important for clients based on their overall or main agenda.

The notion of dancing in the moment is not stated explicitly in the MI method. However, its inherent existence is evident when resistance surfaces in the client. In order to maintain positive therapeutic outcomes, counsellors must “roll with resistance” rather than challenge it (Resnicow, Dilorio, Soet, Borelli, Hecht, & Ernst, 2002, p.445). Resnicow and colleagues (2002) stated that MI is more like a *dance* rather than a wrestling match between counsellor and client – a feeling of compliance and ease with the dance than the more

frustrating sense of wrestling against a client. Also, this dance aspect is visible when one considers how the counsellor holds the client's agenda while following the client in the direction that is most suitable to her/his needs. Similar to coaching, the client is the real lead in this dance.

What aspects of the client's lived experiences are involved in the coaching/counselling session? As the coaching process evolves, change experienced by clients permeates into all aspects of their life; this is the reason that coaching involves *addressing the client's whole life*. The coaching model recognizes that the agenda that clients bring to their coaching session often will impact other parts of their lives. In the same way that the body's fascia tissue is completely interconnected – such that a change in the integrity of fascia in one area of the body impacts a seemingly disparate region of the body – so too does a seemingly unrelated aspect of a client's life impact their overall or whole life. Although individual sessions may address one issue that involves one particular component of a client's life, the choices made move the client towards creating a whole life that is more fulfilling, achieves better balance, and/or embodies a more successful life process.

The client's whole life is not explicitly highlighted as an important aspect of the MI method. This method of helping is a form of focused or guided counselling. When MI counsellors explore the advantages to change, other aspects of the client's life may emerge. Therefore, the awareness of how changes will impact other areas of the client's life is not overtly stressed in MI but seems implicit in the notion of enhancing intrinsic motivation to change by exploring and resolving ambivalence.

What process is used by the coach/counsellor to assess the client's need and/or readiness for change? Whitworth and colleagues (2007) state that the foundation of coaching is based on a belief in three key, interactive life principles – *fulfillment*, *balance*,

and *process*. These, in turn, encapsulate what is referred to as the three core principles of the Co-Active model. The co-active style of coaching is predicated on the coach knowing from which life principle or coaching style s/he should access in order to serve the needs of each client in the best fashion.

Clients often seek coaching to address their longing for a feeling of being truly alive and complete. *Fulfillment* coaching is designed to assist clients in envisioning and moving toward a more gratifying life or lifestyle. Clients know they are not living a life that is a true reflection of who they are and are looking toward the coaching process to help determine what will fill their heart and soul. This principle creates an opportunity for clients to discover and clarify their *values* in order for coaches to challenge clients to live a fulfilling life based on or in line with their values. Indeed, within coaching, values are regarded as the lights illuminating each client's path of fulfillment. Coaches use a number of practical ways to help their clients identify and clarify their personal definition of fulfillment. These may include: exploring clients' level of satisfaction in their life by using a 'wheel of life' representation of their values and other tools to determine areas that need improvement; determining whether clients are honouring their values in the decisions they make; helping clients envision their desired or 'future' self; co-creating an alluring or compelling life purpose; and investigating the different forms of dissonance that may arise when values are not being honoured.

The *balance* principle is a dynamic style of coaching used to explore additional opportunities and perspectives that clients are unable to see on their own. When clients are stuck in a particular perspective (the way it is, or, reminiscent of the often hyperbolized definition of insanity as the process of doing the same thing over and over again but expecting different results) the coach can utilize the balance style of coaching to move the client from a position of inertia/stuck-ness to one of being able to explore and evaluate

possibilities leading to action. The coach and client work together to identify the current perspective of the client and to explore new perspectives. The development of new perspectives creates an opportunity for the client to realize he/she is in a position of choice and is actually capable of shifting to a new perspective. The concept is to focus on how to manage a life situation in a less stressful or onerous way rather than trying to change the situation. For example, for a client dealing with a difficult family member, the situation is likely not addressed best by trying to change the family member; instead, working toward changing the client's perspective on being with that family member can yield dramatic results. Once a choice of perspective has been made, the coach and client brainstorm ways to make the new choice a reality. Finally, the coach and client determine ways for the client to commit to this new choice and a concomitant plan of action. Subsequent coaching sessions might be used to refine the plan of action; however the action plan itself is initiated outside of the coaching sessions *per se*.

Whereas fulfillment and balance are concerned with action, the *process* principle involves the internal, emotional experience of the client in the present moment of his/her life. Process coaching provides the client with an opportunity to slow down and become aware of the experience that is going on in his/her life. It is believed that through the process principle, clients learn to be present in their life with a view toward guiding them to greater awareness. The impact of process coaching often results experientially in richer highs and stronger lows in a strong assumption that this process can lead to a life that is fully experienced. There are five steps in the process pathway: 1) the coach hears the life disturbance or "turbulence" and names it; 2) the coach explores it with the client; 3) the client experiences it; 4) a shift occurs, and the client integrates it; and 5) movement happens. Process coaching allows clients to explore in the present moment the positive and negative emotions they experience.

The MI method is primarily concerned with changing a particular issue, such as alcohol abuse, and not specifically with helping clients live a more fulfilling life. Although feelings of being alive and complete may result from a change in behaviour, it is not a fundamental principle or objective of the method. Instead, for change to take place, the client needs to become aware of the discrepancy between his/her own experiences and *values*. It is through the exploration of values that the coaching model and MI share common aspects of coaching's fulfillment principle. Miller and Rollnick (2002) devote an entire chapter of *Motivational Interviewing: Preparing People for Change* to the important role of values in MI counselling especially utilizing the MI principles of client empathy and developing discrepancy (the latter refers to revealing awareness between current behaviour that is not aligned with broader values). The technique of reflective listening is particularly important in this exploration as counsellors use this skill to demonstrate empathy, affirm client thoughts and feelings, and help clients continue through the discovery process. In MI, reflective listening sets the foundation for the action established in phase II. With respect to fulfillment and values, one commonality between coaching and MI is the use of envisioning the client's future self. This is a form of change talk that the counsellor applies during counselling sessions to help clients visualize what change would look like from their perspective. Like a coach, the MI counsellor encourages the client to view the future without judgment or worry of how that vision will be attained.

An MI counsellor, like a Co-Active coach, holds the client's overall agenda while moving the conversation in a direction of action thereby ensuring that the action aligns with the client's values. While a visual representation of the client's whole life is not employed in the MI method, as it is in the coaching model, a like-minded rating scale often is used to determine a client's confidence regarding a given task and the client's perceived level of

importance of that task to his/her life – the same technique as coaching but with an intention that is anchored, within the MI framework, in client readiness for change.

The notion of balance (the principle of balance in the coaching model) is considered the core principle of the MI method and is used in both phases of the treatment plan. The similarities between both methods are strikingly apparent in this principle. In the second phase of MI, the steps involved in negotiating a change plan closely resemble the steps in coaching's balance 'formula'. The comparable balance coaching principle and the MI second phase of negotiating a change plan are summarized in Table 3. The first step in MI (setting goals) encompasses the *perspective* and *choice* stage in the coaching model. Specifically, it is imperative that counsellor and client determine what perspective the client currently inhabits in order to determine the discrepancy between the client's goals and his/her present state. Although multiple perspectives are explored in MI, they are concerned with advantages to change and/or disadvantages to maintaining the status quo – exploring advantages of the status quo in the MI method are not encouraged as they do not elicit change talk or aid in increasing intrinsic motivation to change. The second stage in the MI method aligns with the *planning* stage in the coaching model. Herein, clients explore ways to achieve their goals. Brainstorming is a key aspect of this stage and clients are encouraged to provide as many options as possible without judgment or fear of being unable to produce the desired goal. At the end of this stage, clients are able to choose a possible behaviour that aligns with their values.

The third stage (arriving at a plan) of the MI method parallels the *commitment* stage of the balance principle. The counsellor and client formulate a plan that addresses the client's goals, needs, intentions, and beliefs. In the final stage (eliciting commitment), commitment is determined and the client has a clear plan to follow. It is also a stage where clients can

determine in whom they will confide to honour their commitment to change. Like the coaching model, MI clients initiate action outside of the counselling session. Although the coaching model has a fifth stage (action), this phase is implied in the final stage of the MI model. Clients are encouraged to stay in contact with their counsellor to monitor progress. Table 3 illustrates how the MI stages fit within the stages outlined in the balance principle.

The process principle is not evident in MI even though certain techniques that mirror process coaching are often utilized. For example, the notion of presence is akin to what CTI calls listening (at all three levels). It involves being with or over there with the MI client. Also, being present allows MI counsellors to be with the client in his/her resistance. MI works with clients in the present moment but not with the intention of slowing down and becoming aware of their internal emotional experience. Instead, as always in MI, the purpose is to explore client readiness. Process coaching techniques are predominately used in phase I of the MI method. Four methods from the MI model are frequently used to move the client towards change; these methods resemble the steps used in process coaching: affirming; reflecting; summarizing; and eliciting change talk.

Table 3

Balance coaching compared to MI stages of balance method

Co-Active Coaching	Motivational Interviewing
1) Perspectives	1) Setting goals
2) Choice	
3) Planning	2) Considering change options
4) Commitment	3) Arriving at a plan
5) Action	4) Eliciting commitment

Coaches will use level III listening (described in Table 1), which is diffuse or situational listening, to name the turbulence (stage one in process coaching), whereas MI counsellors use reflective listening in their commitment to presence. The latter technique is considered one of the most important procedures in MI and the most challenging. It most closely resembles level II listening (full attention devoted on the client) in coaching with the added component of reflecting back to the client.

Affirming and supporting the client are ways to build rapport with the client in MI and facilitate open exploration. This is similar to the second step in the process coaching principle. The summary stage in MI is used to summarize and reinforce material that has been discussed. Eliciting change talk in MI integrates the fourth (a shift happens) and fifth (movement happens) steps of the coaching model. This is where resolving ambivalence starts to occur in MI. This stage is considered consciously directive and allows clients to present their arguments for change.

Given the traditional MI clientele (individuals with addiction issues), it is surprising that more emphasis is not placed on celebrating client achievements when change occurs, as a logical inference for an addiction treatment technique such as MI. This may be a result from clients not continuing on with a counsellor when change is initiated. Table 4 demonstrates how the four methods in MI articulate with the stages outlined in the process principle of coaching.

Table 4

Process coaching compared to MI stages of interviewing

Co-Active Coaching	Motivational Interviewing
1) The coach hears the turbulence and names it	Reflecting
2) The coach explores it	Affirming and supporting
3) The client experiences it	
4) A shift happens and the client integrates it	Eliciting change talk
5) Movement happens	

Motivational coaching summary. Throughout this comparison between Co-Active coaching and MI, similarities and differences were presented. What is glaringly consistent and distinctive is the overwhelming synonymy across the two methods. Given the similarities between these two methods, it cannot be said that either of them are necessarily unique in their core principles or tenets. Their uniqueness lies in the way that they are packaged and delivered. In juxtaposing MI and coaching, what is clear is the overlap between these two important methods of behaviour change. Whereas MI's method or principles are embedded in counselling traditions/practices, Co-Active coaching has developed an applied or experiential framework that may be more readily applied than the more principle-oriented MI. The derivation and similarities between MI and Co-Active coaching would suggest that a blended form of the two concepts – motivational coaching – is a viable concept.

Working with health professionals from a wide variety of sectors, the refrain that is heard is the paramount need to motivate clients to make important health behaviour changes. Health professionals have a wealth of knowledge and experience; however, a real issue they face is the gap between a client knowing what they want and making the actual behavioural changes needed to get there. Closing that gap, resolving client ambivalence, and working with clients to motivate them to make changes is imperative to health change. In service of more successful outcomes in effecting health behaviour change, what we have conceptualized in Figure 2 is a model of *Motivational Coaching* (*MC*) that is informed by this comparative analysis of the two methods analyzed in this introduction.

Our intent is to distil into one framework the key components of two overlapping methods used in working toward behavioural changes. The *MC* integrated model is cast as a canister framework with full feedback loops through/to each phase; that is, the phases – Who, What, Where/How – represent the process of MC, a process we envisioned as a spiral in

nature rather than linear. The Figure might be better imaged as a revolving, vertical 3-D cylinder rather than a flatter, one-dimensional representation. At the core of the *MC* model are powerful, open-ended questions (represented by the watermark question-marks) that underlie every aspect of the model; learning to ask powerful questions is the primary skill that needs to be acquired and honed and applied throughout every phase of *MC*. Holding clients NCRW (naturally creative, resourceful, and whole) is fundamental to the *MC* process as is the facilitator's vigilance for all indicators of readiness for change. The *Who* phase (*who* is my client in the fullest sense) consists of integrated elements (from the two methods assessed in this paper) relating to characterizing the client and the co-relational aspects of client with facilitator. The *What* phase – wherein '*what*' mirrors the most potent, 'what-format' questions (for example, What is important about _____?) that facilitators can pose to clients in service of exploring change possibilities – incorporates the processes and techniques that can be utilized to explore and promote change. The *Where/How* phase (*where* in the client's life and behaviour can change be made and *how* can those new changes be made impactful) includes key elements in effectuating or making behaviour change real, consistent, and long-term. Clearly, health professionals require help in becoming adept at the skills and processes that might be utilized in each phase. Envisioning *MC* in the fashion depicted in Figure 2, provides an integrated framework that encapsulates and reconfigures the significant features of Motivational Interviewing and the Co-Active Coaching Model in service of effective health behaviour change for health professionals and their clients.

***Motivational Coaching*: An Integrated Model for Effective Health Behaviour Change**

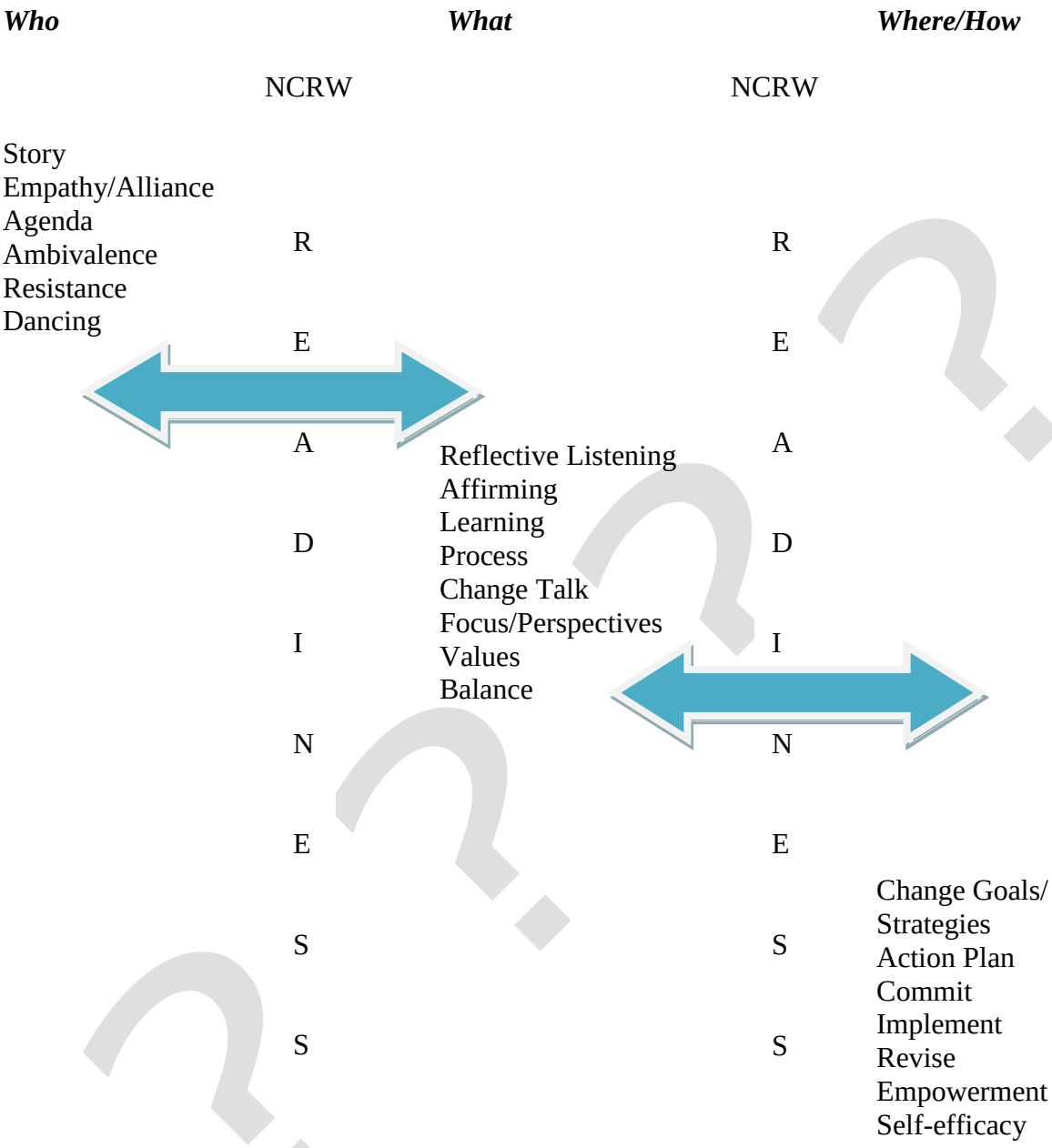


Figure 2: A Functional Juxtaposition of MI and Co-Active Coaching Methods for Health Behaviour Change. Note. From "Motivational Coaching: A Funcitonal Juxtaposition of Three Methods for Health Behaviour Change: Motivational Interviewing, Coaching, and Skilled Helping," by C. Newnham-Kanas, D. Morrow, and J.D. Irwin, 2010, International Journal of Evidence Based Coaching and Mentoring, 8(2), p.48. Reprinted with permission of the journal.

The primary purpose of this dissertation was to examine Motivational Interviewing (MI) using Co-Active life coaching (CALC) skills as an intervention for individuals struggling with obesity. The secondary purpose was to investigate the characteristics of the interventionists, the Certified Professional Co-Active Coaches (CPCCs). To address the primary purpose stated above, two studies were conducted and will be presented in turn. First, Newnham-Kanas, Irwin, and Morrow (under review) conducted a multiple-baseline, single-subject research study to assess the impact of six-months of MI using CALC skills on the weight, waist circumference, self-esteem, self-efficacy, quality of life, physical activity, dietary intake, and functional health status of eight women struggling with obesity. This study comprises the next chapter.

References

AbuSabha, R., & Achterberg, C. (1997). Review of self-efficacy and locus of control for nutrition- and health-related behavior. *Journal of the American Dietetic Association, 97*(10), 1122-1132.

Arkowitz, H., Westra, H.A., Miller, W.R., & Rollnick, S. (Eds.) (2008). *Motivational interviewing in the treatment of psychological problems*. New York: The Guilford Press.

Ajzen, I. (1988) *Attitudes, personality, and behavior*. Chicago: Dorsey Press.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Brown, R., Butow, P. N., Boyer, M. J., & Tattersall, M. H. N. (1999). Promoting patient participation in the cancer consultation: evaluation of a prompt sheet and coaching in question-asking. *British Journal of Cancer, 80(1/2),* 242-248.

Brown, J.M., & Miller, W.R. (1993). Impact of motivational interviewing on participation and outcome in residential alcoholism treatment. Psychology *of Addictive Behaviors, 7*(4), 211-218.

Berg-Smith, S. M., Stevens, V. J., Brown, K. M., Van Horn. L., Gernhofer, N., Peters, E. et al. (1999). A brief motivational intervention to improve dietary adherence in adolescents. *Health Education Research, 14*(3), 399-410.

Butler, C.C., Rollnick, S., Cohen, D., Bachman, M., Russell, I., & Stott, N. (1999). Motivational consulting versus brief advice for smokers in general practice: a randomized trial. *The British Journal of General Practice, 49*(445), 611-616.

Calle, E.E., & Kaaks, R. (August 2004). Overweight, obesity and cancer: Epidemiological evidence and proposed mechanisms. *Nature Reviews, 4*, 579-591.

Deci, E. L., & Ryan, R. M. (2000). The "what" and the "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268. doi: 10. 1207/S15327965PLI1104_01

Deci, E. L., & Ryan, R. M. (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester.

DiIorio, C., Resnicow, K., McDonnell, M., Soet, J., McCarty, F., Yeager, K. (2003). Using Motivational Interviewing to Promote Adherence to Antiretroviral Medications: A Pilot Study. *Journal of the Association of Nurses in AIDS care, 14*(2), 52-62.

Doherty, Y., Hall, D., James, P.T., Roberts, S.H., & Simpson, J. (2000). Change counselling in diabetes: the development of a training programme for the diabetes team. *Patient Education and Counseling, 40*, 263-278.

Donnelly, J.W., Eburne, N., & Kittleson, M. (2001). *Mental health*. Massachusetts: Allyn & Bacon.

Egger, G., Pearson, S., & Pal, S. (2006). Individualising weight loss prescription: A management tool for clinicians. *Australian Family Physician, 35*(8), 591-594.

Elder, P. Guadalupe A.X., Harris, S. (1999). Theories and Intervention Approaches to Health-Behavior Change in Primary Care. *American Journal of Preventive Medicine*, 17(4), 275-284.

Fishbein, M.. & Ajzen, I. (1975) *Belief, attitude, intention and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

Goldberg, D., Gournay, K. (1997) - The general practitioner, the psychiatrist and the burden of mental health care. Maudsley Discussion Paper No 1: Institute of Psychiatry, London.

Gorczynski, P, Morrow, D. & Irwin, J. (2008). The impact of Co-Active coaching on physically inactive 12 to 14 year olds in Ontario. *International Journal of Evidence Based Coaching and Mentoring, 6(2),* 13-26.

Grant, A.M. (2003). The impact of life coaching on goal attainment, metacognition and mental health. *Social Behavior and Personality, 31*(3), 253-263.

Hardeman W, Griffin S, Johnston M, Kinmonth AL, Wareham NJ (2000). Interventions to prevent weight gain: a systematic review of psychological models and behaviour change methods. International Journal of Obesity and Related Metabolic Disorders, 24, 2, 131-143.

Harland, J., White, M., Drinkwater, C., Chinn, D., Farr, L. & Howel, D. (1999). The Newcastle exercise project: a randomised controlled trial of methods to promote physical activity in primary care. *British Medical Journal, 3*19, 828-832.

Irwin, J.D., & Morrow, D. (2005). Health Promotion Theory and Practice: An Analysis of Co-Active Coaching. *International Journal of Evidence Based Coaching and Mentoring*. 3(1), 29-38.

Joseph, D.H., Griffin M., Hall, R., & Sullivan, E. (2001). Peer coaching: an intervention for individuals struggling with diabetes. *Diabetes Educator, 27*, 703-710.

Kausman, R. R., & Bruere, T. T. (2006). If not dieting, now what?. *Australian Family Physician, 35(8)*, 572-575.

Katzmarzyk, P.T., & Janssen, I. (2004). The conomic costs associated with physical inactivity and obesity in Canada: An update. *Canadian Journal of Applied Physiology, 29*(1), 90-115.

Lau, D.C.W., Douketis, J.D., Morrison, K.M., Hramiak, I.M., & Sharma, A.M. (2007) '2006 Canadian clinical practice guidelines on the management and prevention of obesity in

adults and children'. *Canadian Medical Association Journal,* 176(8 Supplemental), S1-13.

Mantler, T., Irwin, J.D., & Morrow, D. (Under review). Assessing motivational interviewing through co-active life coaching tools as a smoking cessation intervention: A demonstration study. It is submitted to the International Journal of Mental Health and Addiction.

McKenzie, J.F., & Smeltzer, J.L. (1997). Planning, implementing, and evaluating health promotion programs. Third Edition. Needham Heights, MA: Allyn and Bacon.

Mesters, I. (2009). Motivational Interviewing: hype or hope?, *Chronic Illness, 5*(3), 3-6.

Miller, W.R. (1998). Toward a motivational definition and understanding of addiction. *Motivational Interviewing Newsletter for Trainers, 5*(3), 2-6.

Miller, W.R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people for change*. (2nd ed.). New York: The Guilford Press.

Miller, W.R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people to change addictive behavior*. New York: The Guilford Press.

Miller, W.R., Yahne, C.E., & Tonigan, S.J. (2003). Motivational interviewing in drug abuse services: A randomized trial. *Journal of Consulting and Clinical Psychology, 71*(4), 754-763.

Newnham-Kanas, C.E., Gorczynski, P., Irwin, J.D., & Morrow, D. (2009). Annotated bibliography of life coaching and health research. International *Journal of Evidence Based Coaching and Mentoring,* 6 (2), 1-12.

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (2008). Life coaching as an intervention for individuals with obesity. *International Journal of Evidence-Based Coaching and Mentoring,* 6(2), 1-12.

Newnham-Kanas, C., Morrow, D., & Irwin, J.D. (2010). A functional juxtaposition of three methods for health behaviour change: Motivational Interviewing, Coaching, and Skilled Helping. *International Journal of Evidence-Based Coaching and Mentoring, 8*(2), 27-48.

Newnham-Kanas, C., Irwin, J.D., Morrow, D, & D. Battram. (under review). Motivational interviewing using co-active life coaching skills as an intervention for adults struggling with obesity. *International Coaching Psychology Review.*

Newnham-Kanas, C., Morrow, D., & Irwin, J.D. (under review). The impact of motivational interviewing using co-active life coaching skills on adults struggling with obesity. *Coaching: An International Journal of Theory, Research and Practice.*

Pearson, E. (under review). The "how-to" of health behaviour change brought to life: a theoretical analysis of the Co-Active coaching model and its underpinnings in self-determination theory. *Coaching: An International Journal of Theory, Research and Practice.*

Pi-Sunyer, F. (1993). Medical hazards of obesity. *Annals of Internal Medicine, 119*(7), 655-660.

Puhl, R., & Brownell, K.D. (2001). Bias, discrimination, and obesity. *Obesity Research, 9(12),* 788-805.

Resnicow, K., Dilorio, C., Soet, J.E., Borelli, B., Hecht, J., & Ernst, D. (2002). Motivational interviewing in health promotion: it sounds like something is changing. *Health Psychology, 21(5),* 444-4451.

Shaw, K., O'Rourke, P., Del Mar, C., & Kenardy, J. (2007). Psychological interventions for overweight or obesity (review). *Cochrane Database of Systematic Reviews*. Issue 2. Art No.:CD003818. DOI 10.1002/14651858.CD003818.pub2.

Shields, M., Tremblay, M.S., Laviolette, M., Craig, C.L., & Janssen, I. (January 2010). Fitness of Canadian adults: results from the 2007-2009 Canadian health measures survey. *Health Reports (Statistics Canada, Catalogue no. 82-003-XPE), 21*(1), 1-15.

Slevin, E. (2004). High intentsity counselling or behavioural interventions can result in moderate weight loss. *Evidence-Based Health Care and Public Health*, *8*(3), 136-138.

Starky, D. (2005). The Canadian Obesity Epidemic. *Parliamentary Information and Research Service*. Retrieved November 12, 2005, from http://www2.parl.gc.ca/Content/LOP/ResearchPublications/prb0511-e.pdf

Tidwell, L., Holland, S., Greenberg, J., Malone, J., Mullan, J., & Newcomer, R. (2004). Community-based nurse health coaching and its effect on fitness participation. *Lippincott's Case Management*, 9(6), 267-279.

Tjepkema, M. (2006). Adult obesity. *Health Reports (Statistics Canada, Catalogue 82-003), 17*(3), 9-25.

Vanasse, A., Demers, M., Hemiari, A., & Courteau, J. (2006). Obesity in Canada: where and how many? *International Journal of Obesity, 30*, 677-683.

Warschburger, P. (2005). The unhappy obese child. *International Journal of Obesity, 29*, s127-2129.

Whincup, P., & Deanfield, J. (2005). Childhood obesity and cardiovascular disease: the challenge ahead. *Clinical Practice Cardiovascular Medicine*, 2, 432-433.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., Sandahl, P. (2007). *Co-Active Coaching: New Skills for Coaching People Toward Success in Work and Life* (2nd ed.). California: Davies-Black Publishing.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (1998). *Co-Active coaching: New skills for coaching people toward success in work and life.* California: Davis-Black Publishing.

World Health Organization. *Obesity and overweight*. (September 2006). Retrieved from http://www.who.int/mediacentre/factsheets/fs311/en/index.html

van Zandvoort M.M., Irwin, J.D., & Morrow, D. (2009). The impact of Co-active life coaching on female university students with obesity. *International Journal of Evidence-Based Coaching and Mentoring, 7(1),* 104-118

van Zandvoort, M.M., Irwin, J.D., & Morrow, D. (2008). Co-active Coaching as an intervention for obesity among female university students. *International Coaching Psychology Review*, 3(3), 191 - 206.

Study 1

The Quantitative Assessment of Motivational Interviewing Using Co-Active Life Coaching Skills as an Intervention for Adults Struggling with Obesity [2]

This chapter represents a specific, health-related application of MI using CALC skills as an intervention for decreasing obesity; obesity is an international crisis and worthy of innovative interventions, such as motivational coaching. Specifically, the World Health Organization (WHO) reports that globally, at least 400 million adults were obese in 2005 (WHO, 2006). Based on these numbers, it is projected that by 2012, obesity levels will rise to 700 million adults worldwide. While obesity was once believed to be a problem in high-income countries, rates are climbing substantially in low- and middle-income countries (WHO, 2006). The recent 2007-2009 Canadian Health Measures Survey (Shields, Tremblay, Laviolette, Craig, Janssen, & Gorber, 2010) reported that over the past 25-30 years, Canadian adults have become heavier for their heights (Tjepkema, 2006). As a result, 19% of males and 21% of females aged 20 to 39 years were considered obese in 2009 and the percentage increased to one-third for ages 60 to 69. From 1981 to 2007-2009, the number of obese females aged 40-59 years doubled. Based on current waist circumference (WC) measurements, 31% of females and 21% of males aged 20 to 39 years old are at high risk for health problems and for ages 60 to 69 years, those percentages rose to 65% and 52%, respectively. Body mass index (BMI) has been deemed limited in assessing general health because it does not take the overall distribution of body fat into account. Therefore, WC, which assesses abdominal fat (a predictor of increased risk of disease for both sexes), is used in conjunction with BMI to reflect overall health (Janssen, Heymsfield, & Ross, 2002; Janssen, Katzmarzyk, & Ross, 2002; Janssen, Katzmarzyk, & Ross, 2004). If these trends

[2] A version of this chapter has been published in the International Psychology Review (2011), 6(2), 211-228. A copyright release can be found in Appendix A.

continue, in 25 years, half of all males and females in Canada will be considered obese. These alarming rates of obesity have considerable physical, psychological, and economic consequences for an avoidable non-communicable disease (Shields et al.).

Because on the drastic rise in obesity in a relatively short period of time (i.e., shorter than needed for genetic changes in a population to be expressed), it is believed that behavioural factors play a more pivotal role rather than biological factors in shaping the development and maintenance of obesity (Stice, Presnell, Shaw, & Rhode, 2005; Wadden, Brownell, & Foster, 2002). While it has been reported widely that inactivity and food consumption are at the root causes of increased rates of obesity, these two behavioural challenges may, in part, be symptoms of other psycho-social challenges (e.g., depression, low self-esteem). Although this problem of underestimating the psycho-social contribution to the obesity epidemic is gaining widespread attention within academic journals and medical sources, new clinical approaches for treating/reducing obesity are lacking (Hardeman, Griffin, Johnston, Kinmonth, Wareham, 2000; Slevin, 2004). One such treatment is Motivational Interviewing (MI). MI is a directive, client-centered counselling style for eliciting behaviour change by helping people explore and resolve their ambivalence for change (Miller & Rollnick, 2002). Previous research and experiences indicate that the tenets and premises of MI are contained entirely within, and brought to fruition via the skills of Co-Active Life Coaching (CALC; Whitworth, Kimsey-House, & Sandahl 1998; 2007; Gorczynski, Morrow, & Irwin, 2008; Irwin, & Morrow, 2005; Newnham-Kanas, Morrow, Irwin, 2010; Newnham-Kanas, Irwin, & Morrow, 2008; Newnham-Kanas, Gorczynski, Irwin, & Morrow, 2009; van Zandvoort, Irwin, & Morrow, 2008; 2009).

When using MI administered via CALC tools as an intervention for obesity, previous research has demonstrated a statistically significant decrease in WC and increases in self-

esteem and functional health status. Qualitatively, participants reported an increase in daily physical activity and healthier dietary choices, feelings of optimism, and greater self-acceptance (Newnham-Kanas et al., 2008). Another study that used CALC as an intervention for obesity found coaching, and particular coaching skills, were associated with a trend towards a decrease in waist circumference and clinically significant increases in participants' self-esteem and their mental, physical, and overall health statuses (van Zandvoort et al., 2008). As summarized in an annotated bibliography of 72 critically appraised health-related coaching studies, life coaching has been utilized effectively in ameliorating *many* health issues, including, but not limited to diabetes, asthma, poor cardiovascular health, fitness, and depression (Newnham-Kanas et al., 2009). CALC uses MI principles to create a proactive alliance in which coach and client work together as equals to meet the needs of the client. The approach has been evaluated as a theoretically-grounded behaviour change method (Irwin & Morrow, 2005) that includes constructs from Social Cognitive Theory (Bandura, 1977), the Theory of Reasoned Action (Fishbein & Ajzen, 1975), and the Theory of Planned Behaviour (Ajzen, 1988). CALC also shares some of the elements from Egan's Skilled Helper Model (Egan, 1997), Self Regulation Theory (Kanfer, 1970) and Self Determination Theory (Ryan & Deci, 2000). From a behavioural perspective it stands to reason that the MI using CALC approach may work to produce desirable impacts on obesity because of its impact on self-regulation, and self-regulation in one domain (e.g., life stress) often increases self-regulation in other, unrelated domains (e.g., dietary intake and/or physical activity). Our experience with short-term, MI-obesity research studies suggests that obesity includes modifiable conditions (physical and psychological) that respond to an MI intervention, and a longer-term study is now required (Newnham-Kanas, Irwin, Morrow, 2008; van Zandvoort, Irwin, Morrow, 2008; 2009). For a full review of Co-Active life coaching, please refer to

Whitworth, Kimsey-House, and Sandahl (1998; 2007). The purpose of this study was to assess the impact of six-months of MI, administered via CALC skills (hereafter referred to as the coaching intervention), on the weight, waist circumference, self-esteem, self-efficacy, quality of life, physical activity, dietary intake, and functional health status of eight adults struggling with obesity (aged 35-55; body mass index values greater than 30). A secondary purpose was to determine the impact of MI using CALC six-months after the end of the intervention.

Study Design and Methods

This study utilized a multiple-baseline, single-subject research design as explained by Kazdin (1982). This quasi-experimental design allows investigators to examine the pattern and stability of two or more behaviours within one participant or of a similar behaviour across two or more participants before and during the intervention phase (Kazdin). This design is particularly useful when assessing change in behaviour in a small number of participants because this methodology allows for new interventions to be observed on a small number of participants before it is tested on a larger sample size (Hayes, 1981). Eight women participated in this study, which allowed for an attrition rate of two participants, which was a feasible number for the study's single volunteer Certified Professional Co-Active Coach (CPCC). The larger the number of baselines, the clearer the demonstration that the intervention was responsible for the reported change and smaller the probability that changes between the baseline and intervention phase could be due to chance (Backman & Harris, 1999; Hayes, 1992; Kazdin). Typically, two baselines are a minimum requirement and for the present study, a minimum of four baselines was conducted to reduce the chance of coincidental extraneous events.

Recruitment

A sample of eight women was recruited via a local London Ontario newspaper. Participants were eligible to participate in the study if they were between the ages of 35-55, had a BMI equal to or greater than 30, spoke and read English fluently and continued under a physician's care for any co-morbidities (e.g., diabetes). Thirty-five people contacted the researcher and the first eight who met the study's eligibility requirements became the study participants. Ethical approval was received from The University of Western Ontario's Office of Research Ethics (see Appendix B).

Participants

All eight participants were White women between the ages of 35-55. All participants had a starting BMI greater than or equal to 30. Participants one, two, three, five, seven, and eight had co-morbidities that presented after the study began and were under the supervision of a medical professional. The co-morbidities included depression, steroid medication, cancer, asthma, and injuries from a car accident. The specific co-morbidity is not attached to the corresponding participant to ensure confidentiality. A number of participants also experienced and received physician support for their symptoms related to menopause during the study.

Procedure

During the initial, face-to-face meeting between the lead researcher (CNK) and each participant, the nature of the study and the coaching intervention were explained and each participant received a letter of information for review (see Appendix C). Once they agreed to participate (all 8 agreed to participate), participants completed a consent form (see Appendix C), and their height, weight, and waist circumference (the measuring tape was placed along their belly button to ensure a reliable reading and the same digital scale was used throughout

the entire study) were measured and they provided a $10 fee for each coaching session ($180 total). This fee helps to create a sense of personal buy-in from the client, which translates into participants showing up for their appointments on time and doing the work they commit to during their session. Unbeknown to participants, the money would be returned at the end of the intervention. Participants were then asked to complete a series of previously validated tools/questionnaires. Specifically: the SF-36 short form Functional Health Status Questionnaire which has a previously measured alpha reliability coefficient of 0.8 (see Appendix D; Jenkinson, Coulter, & Wright, 1993; Ware, 1997); the Rosenberg Self-Esteem Scale which has previously measured alpha reliability coefficients ranging from 0.77 to 0.88 (see Appendix E; Blascovich & Tomaka, 1993; Rosenberg, 1989); a self-efficacy questionnaire which has previously measured alpha reliability coefficients ranging from 0.73 to 0.95 (see Appendix F; adapted from McAuley & Mihalko's research, 1998); the International Physical Activity questionnaire which Craig et al. found, "…80% of estimates showing agreement coefficients of at least 70%…" (see Appendix G; IPAQ; Craig et al., 2003, p. 1387); a three-day food record (see Appendix H; Chronic Disease and Injury Prevention Team, 2009), and The World Health Organization Quality of Life Scale which has a previously measured alpha reliability coefficient of 0.70 (see Appendix I; Huang, Wu, & Frangakis, 2006; WHOQOL-BREF; World Health Organization, 1997). Once the questionnaires were complete, a short ten-minute semi-structured interview was conducted assessing qualitatively participants' experiences associated with being obese and the effect of these experiences on their lives. The qualitative components of the study are presented in detail elsewhere (Newnham-Kanas, Morrow, & Irwin, under review). To account for the *repeated testing* threat to internal validity (i.e., participants remembering correct answers or being conditioned to know the assessments; Cook & Campbell, 1979), baseline assessments

(after the initial meeting) and assessments during the intervention consisted of having participants' weight and waist circumference measured only.

Participants one, two, and three had their first coaching session after four baseline assessments, while participants four, five, and six had their first coaching session after five baseline assessments, and participants seven and eight had their first coaching session after six baseline assessments. Baseline assessments were scheduled one week apart while assessments during the intervention were spaced at one-month intervals. To determine whether the intervention might be associated with any changes, participants were asked not to alter their behaviour during the pre-intervention phase in order to capture an accurate portrayal of the stability of their weight and waist circumference.

One Certified Professional Co-Active Coach (CPCC) known to the researchers donated her time for the study. The coach received her training and certification through The Coaches Training Institute. The CPCC was not involved in the initial meeting with participants and was not privy to any of the information collected during assessments. The only contact that the CPCC and the researchers had about the study was to confirm that participants attended their sessions. After the baseline phases, each participant met with the CPCC at the host University, for her first and only hour-long face-to-face meeting. The CPCC then scheduled the remaining 35-minute telephone sessions. Each participant received one coaching session per week, after the first session, for 17 weeks. Missed appointments were rescheduled. All participants received all 18 sessions (no attrition occurred throughout the study) over 6 months. For each of these telephone sessions, it was each participant's responsibility to phone the CPCC at the designated appointment time (the CPCC phoned one participant as a result of a phone plan arrangement). At the beginning of each telephone coaching session, each participant was free to focus on any issue she wished, whether or not

the issue seemed directly related to weight management; previous studies using CALC have demonstrated that obesity issues are connected to a wide variety of apparently unrelated issues extant in each client's life (Newnham-Kanas, Irwin, Morrow, 2008; van Zandvoort, Irwin, Morrow, 2008; 2009). The majority of questions and coaching content with a CPCC are unscripted open-ended questions, a primary characteristic of the CALC model (see Whitworth et al., 1998, 2007 and van Zandvoort et al., 2008 for additional information about the content of coaching sessions).

At the conclusion of the intervention (i.e., at 6 months post initial coaching session), participants returned to the host University where they completed the same weight, waist circumference, nutrition, quality-of-life, self-esteem, self-efficacy, physical activity measures, and their cheques were returned. Participants returned one year post initial coaching session (participants were not coached during the six-month follow-up period) for a final weigh-in and waist circumference measurement.

Date Analysis and Interpretation

BMI and WC for each participant during the baseline and intervention phase were graphed and analyzed using visual inspection (as described by Kazdin, 1982) to determine the reliability or consistency of the intervention effects. Results from the measures assessing physical activity, self-esteem, self-efficacy, functional health status, quality of life, and nutrition were examined to determine whether a clinically significant difference was attained using effect size. Effect size is a measure of the strength of the relationship between two variables. Cohen's *d* is defined as the difference between two means divided by a standard deviation for the data (Cohen, 1988).

Values used to determine the effect size for the nutrition data were calculated by inputting the food intake records into a food processor computer program (Food Processor

SQL 10.5, ESHA Research Inc., Salem, OR) and an average of the three days were calculated. In addition, the number of vegetable and fruit (V&F) servings according to Eating Well with Canada's Food Guide (EWCFG, 2007) was calculated manually (Health Canada).

Results

Visual Inspection

Weight. BMI is an appropriate measure when assessing a change across participants because it provides a standard against which to compare (Centres for Disease Control and Prevention, 2011). However, when comparing within a participant, height is already a constant leaving weight as the only independent variable. As a result, weight was reported in order to highlight the considerable changes these participants experienced.

Participant one's weight decreased from a baseline score of 214.2 lbs to 195.8 lbs at the end of the intervention phase. The level decreased 18.4 lbs from the end of baseline to the end of the intervention phase. The baseline slope equation is 216.8-0.86x and the intervention slope equation is 216.8-0.93x. Weight decreased consistently throughout the study period. However, participant one increased her weight by 14.4 lbs from the end of the intervention to the six-month follow-up. After using visual inspection, there appeared to be a decrease in participant one's weight across the intervention phase with an increase at the six-month follow-up, although still 4.0 lbs below her baseline weight. Weight data for participant one is presented in Figure 1.

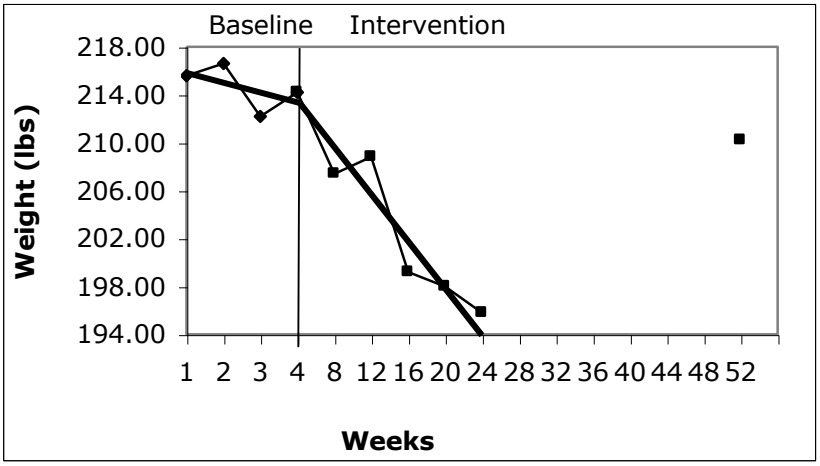


Figure 1. Weight measurement for participant one.

Participant two's weight decreased from a baseline score of 199.2 lbs to 196.0 lbs at the end of the intervention phase. The level decreased 3.2 lbs from the end of baseline to the end of the intervention phase. The baseline slope equation is 201.8-0.62x and the intervention slope equation is 196.35-0.05x. Weight decreased consistently throughout the study period. However, participant two increased her weight by 11 lbs from the end of the intervention to the six-month follow-up. Weight decreased slightly at the beginning of the intervention phase and then proceeded to increase half-way through the intervention. After using visual inspection, there appeared to be a very slight decrease in participant two's weight by the end of the intervention with a 7.8 lbs increase from baseline to the six-month follow-up. Weight data for participant two is presented in Figure 2.

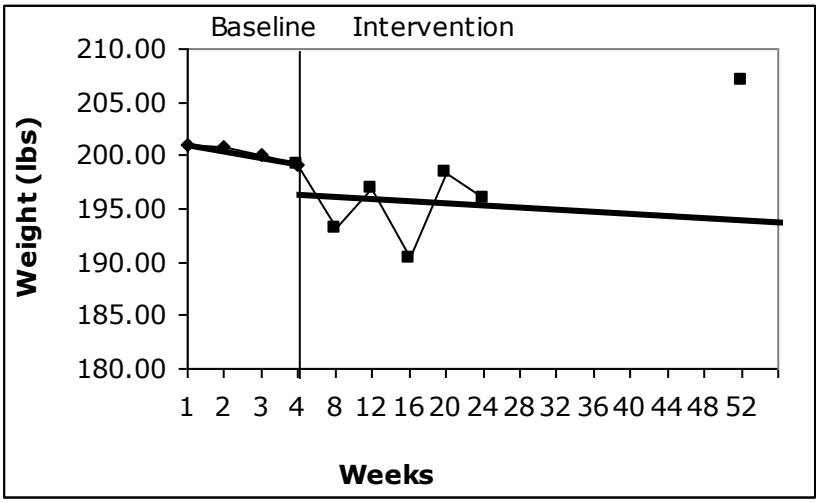
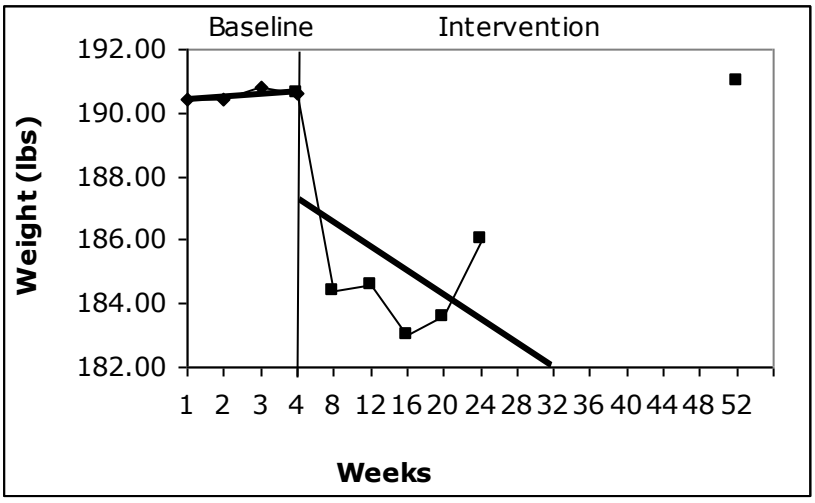


Figure 2. Weight measurement for participant two.

Participant three's weight decreased from a baseline score of 190.6 lbs to 186.0 lbs at the end of the intervention phase. The level decreased 4.6 lbs from the end of baseline to the end of the intervention phase. The baseline slope equation is 190.3+0.1x and the intervention slope equation is 188.07-0.19x. Participant three gained 5 lbs from the end of the intervention phase to the six-month follow-up, although only 0.4 lbs above her baseline weight. Weight decreased slightly throughout the study period. After using visual inspection, there appeared to be a small decrease in participant three's weight across the intervention phase. Weight data for participant three is presented in Figure 3.



.

Figure 3. Weight measurement for participant three.

Participant four's weight decreased from a baseline score of 172.2 lbs to 143.0 lbs at the end of the intervention phase. The level decreased 29.2 lbs from the end of baseline to the end of the intervention phase. The baseline slope equation is 171.18+0.18x and the intervention slope equation is 179.18-1.41x. Participant four lost an additional 2 lbs from the end of the intervention phase to the six-month follow-up. Participant four lost a total of 31.2 lbs from her baseline weight to the six-month follow-up. After using visual inspection, there appeared to be a steady and steep decrease in participant four's weight throughout the intervention phase while continuing to maintain her weight from the end of the intervention to the six-month follow-up. Weight data for participant four is presented in Figure 4.

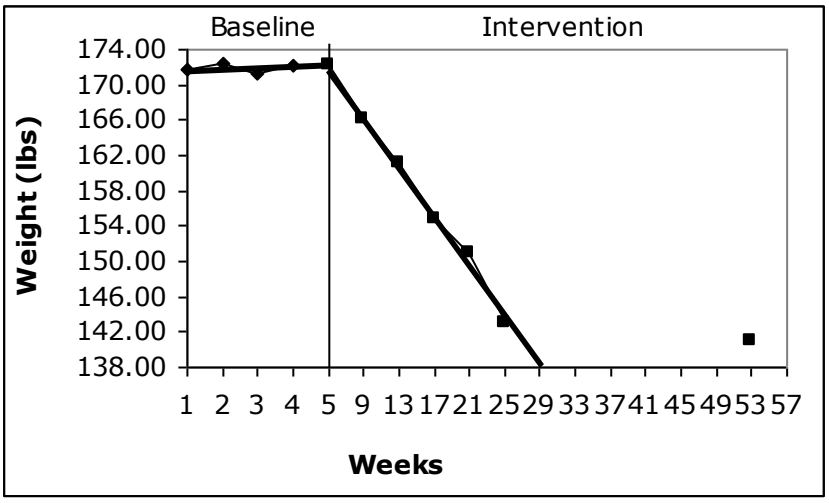


Figure 4. Weight measurement for participant four.

Participant five's weight decreased from a baseline score of 211.0 lbs to 194.8 lbs at the end of the intervention phase. The level decreased 16.2 lbs from the end of baseline to the end of the intervention phase. The baseline slope equation is 215.18-0.74x and the intervention slope equation is 214.95-0.76x. Participant five lost an additional 0.6 lbs from

the end of the intervention phase to the six-month follow-up. Participant five lost a total of 16.8 lbs from her baseline weight to the six-month follow-up. After using visual inspection, there appeared to be a decrease in participant five's weight across the baseline and intervention phases with continued maintenance of her weight from the end of the intervention to the six-month follow-up. Weight data for participant five is presented in Figure 5.

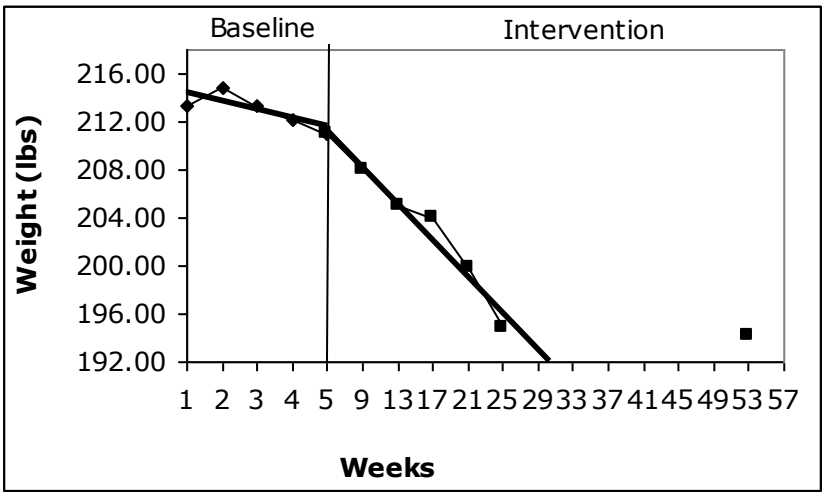


Figure 5. Weight measurement for participant five.

Participant six's weight decreased from a baseline score of 291.4 lbs to 254.0 lbs at the end of the intervention phase. The level decreased 37.4 lbs from the end of baseline to the end of the intervention phase. The baseline slope equation is 292.0-0.28x and the intervention slope equation is 295.96-1.78x. Participant six lost an additional 1 lbs from the end of the intervention phase to the six-month follow-up. Weight decreased consistently throughout the intervention phase. Participant six lost a total of 38.4 lbs from her baseline weight to the six-month follow-up. After using visual inspection, there appeared to be a steady decrease in participant six's weight throughout the intervention phase with a continued maintenance of

the weight lost from the end of the intervention phase to the six-month follow-up. Weight data for participant six is presented in Figure 6.

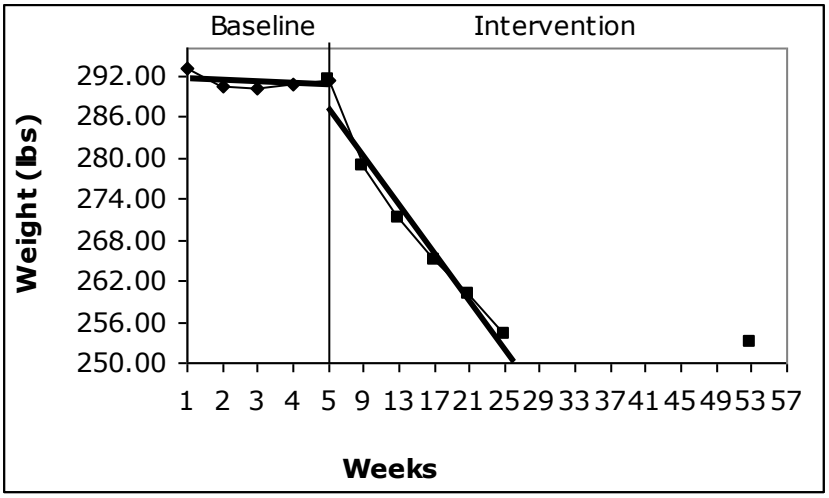


Figure 6. Weight measurement for participant six.

Participant seven's weight decreased from a baseline score of 254.0 lbs to 235.2 lbs at the end of the intervention phase. The level decreased 18.8 lbs from the end of baseline to the end of the intervention phase. The baseline slope equation is 255.65-0.23x and the intervention slope equation is 259.51-0.98x. Participant seven gained an additional 6.4 lbs from the end of the intervention phase to the six-month follow-up. After using visual inspection, there appeared to be a steady decrease in participant seven's weight throughout the intervention phase with an increase in weight from the end of the intervention to the six-month follow-up, although still 12.4 lbs below her baseline weight. Weight data for participant seven is presented in Figure 7.

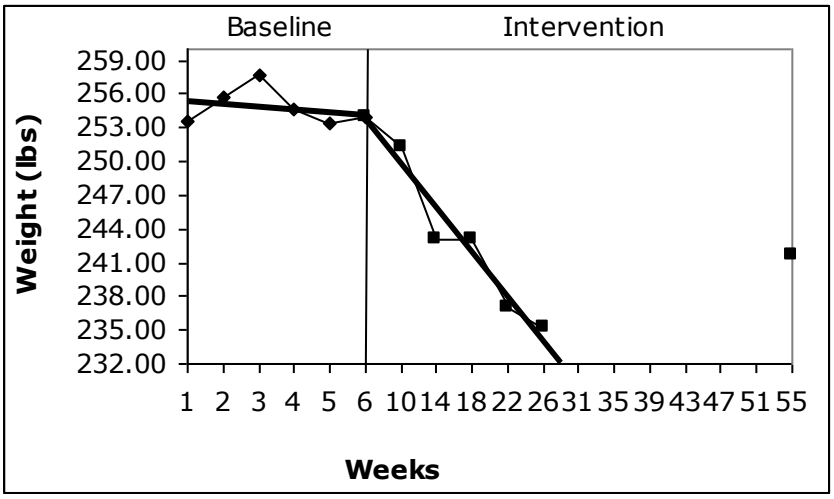


Figure 7. Weight measurement for participant seven.

Participant eight's weight decreased from a baseline score of 172.8 lbs to a score of 163.0 lbs at the end of the intervention phase. The level decreased 9.8 lbs from the end of baseline to the end of the intervention phase. The baseline slope equation is 176.52-0.58x and the intervention slope equation is 178.61-0.57x. Participant eight lost an additional 8.2 lbs from the end of the intervention phase to the six-month follow-up. Participant eight lost a total of 18.0 lbs from her baseline weight to the six-month follow-up. After using visual inspection, there appeared to be a steady decrease in participant eight's weight throughout the intervention phase with a continued decrease in weight from the end of the intervention to the six-month follow-up. Weight data for participant eight is presented in Figure 8.

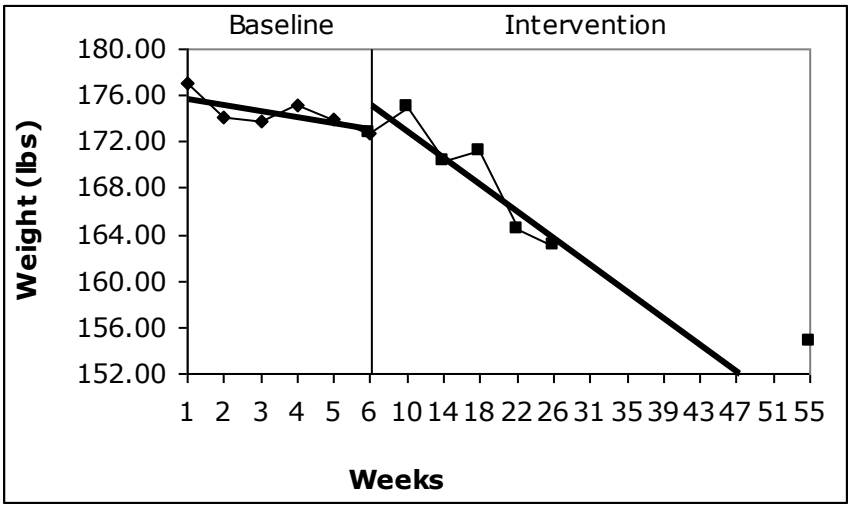


Figure 8. Weight measurement for participant eight.

To summarize, weight decreased for all participants from baseline to the end of the intervention with a more pronounced decrease in participant's one, four, five, six, seven, and eight. Four participants gained part of their weight back that was lost during the six-month follow-up and four participants maintained and continued to lose additional weight at the six-month follow-up.

Waist Circumference (WC). Participant one's WC decreased from a baseline score of 43.7in to a score of 42.0in at the end of the intervention phase. The level decreased 1.7in from the end of baseline to the end of the intervention phase. The baseline slope equation is 43.75-0.02x and the intervention slope equation is 44.26-0.10x. Participant one maintained her WC from the end of the intervention phase to the six-month follow-up. After using visual inspection, there appeared to be a decrease in participant one's WC throughout the intervention phase while maintaining her WC from the end of the intervention to the six-month follow-up. Waist circumference data for participant one is presented in Figure 9.

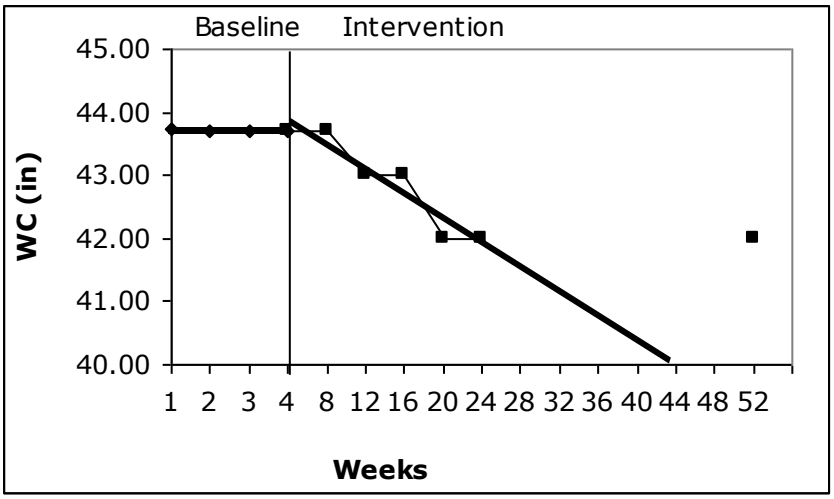


Figure 9. Waist circumference measurements for participant one.

Participant two's WC did not change from a baseline score of 39.0in to 39.0in at the end of the intervention phase. The baseline slope equation is 39.1-0.03x and the intervention slope equation is 38.3-0.04x. Participant two maintained her WC from the end of the intervention phase to the six-month follow-up. After applying visual inspection, there appeared to be a slight decrease in participant two's WC throughout the early intervention phase with an increase near the end of the intervention and no change from the end of the intervention to the six-month follow-up. Waist circumference data for participant two is presented in Figure 10.

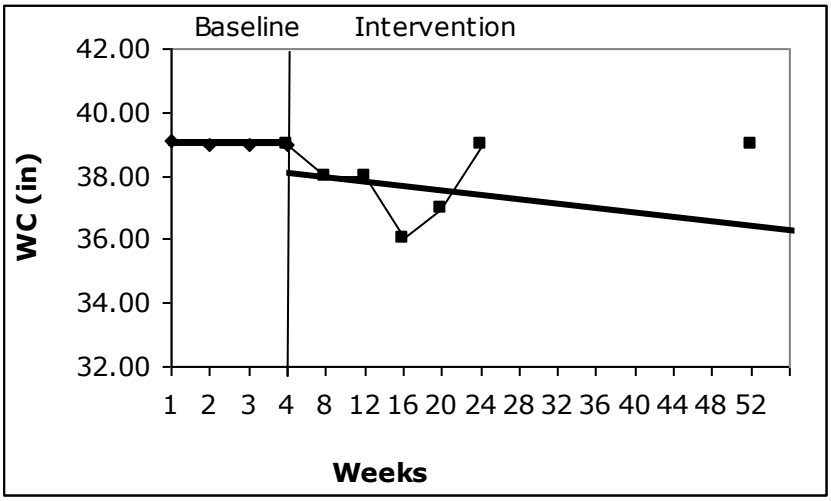


Figure 10. Waist circumference measurements for participant two.

Participant three's WC decreased from a baseline score of 42.7in to 42.0in at the end of the intervention phase. The level decreased 0.7in from the end of baseline to the end of the intervention phase. The baseline slope equation is 42.78-0.02x and the intervention slope equation is 42.47-0.03x. Participant three maintained her WC from the end of the intervention phase to the six-month follow-up. After applying visual inspection, there appeared to be a decrease in WC from baseline to the beginning of the intervention phase with WC remaining constant throughout the majority of the intervention phase and no change was detected from the end of the intervention to the six-month follow-up. Waist circumference data for participant three is presented in Figure 11.

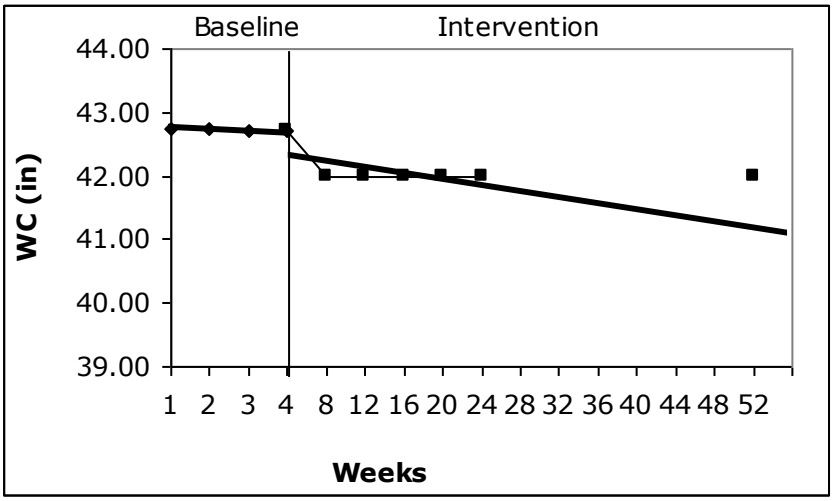


Figure 11. Waist circumference measurements for participant three.

Participant four's WC decreased from a baseline score of 41.5in to 37in at the end of the intervention phase. The level decreased 4.5in from the end of baseline to the end of the intervention phase. The baseline slope equation is 39.8+0.35x and the intervention slope equation is 41.61-0.18x. Participant four decreased her WC by 0.5in from the end of the intervention phase to the six-month follow-up. After applying visual inspection, there appeared to be a decrease in participant four's WC throughout the intervention phase with a slight decrease from the end of the intervention to the six-month follow-up. Waist circumference data for participant four is presented in Figure 12.

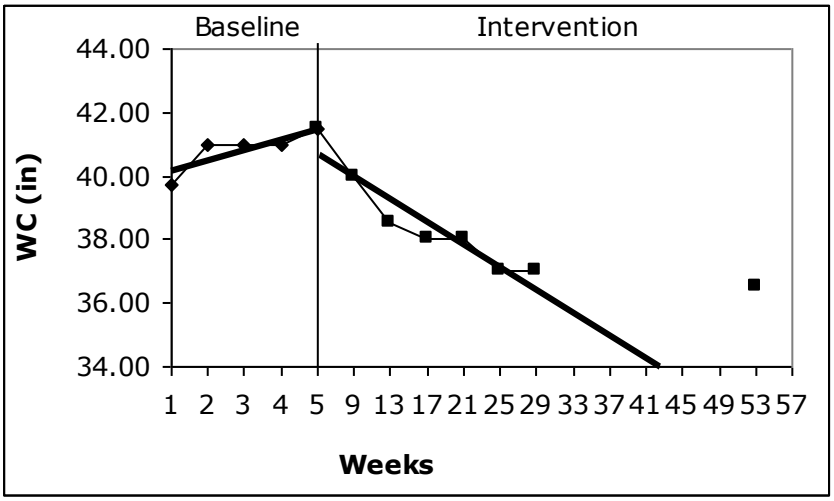


Figure 12. Waist circumference measurements for participant four.

Participant five's WC decreased from a baseline score of 49.5in to 45in at the end of the intervention phase. The level decreased 4.5in from the end of baseline to the end of the intervention phase. The baseline slope equation is 50.7-0.2x and the intervention slope equation is 50.63-0.23x. Participant five maintained her WC from the end of the intervention phase to the six-month follow-up. After applying visual inspection, there appeared to be a sharp decrease in participant five's WC throughout the intervention phase and no change was detected from the end of the intervention phase to the six-month follow-up. Waist circumference data for participant five is presented in Figure 13.

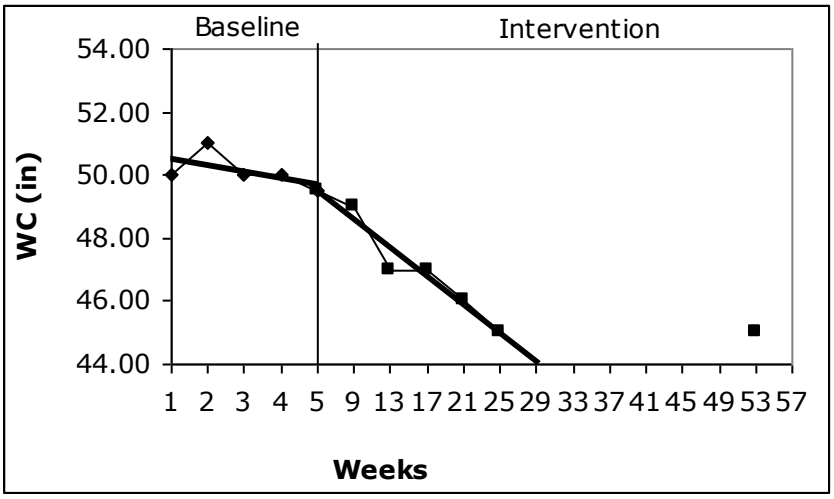


Figure 13. Waist circumference measurements for participant five.

Participant six's WC decreased from a baseline score of 55in to 50in at the end of the intervention phase. The level decreased 5.0in from the end of baseline to the end of the intervention phase. The baseline slope equation is 55.4-0.1x and the intervention slope equation is 56.33-0.26x. Participant six maintained her WC from the end of the intervention phase to the six-month follow-up. After applying visual inspection, there appeared to be a sharp decrease in participant six's WC throughout the intervention phase with no change from the end of the intervention to the six-month follow-up. It should be noted that participant six could not make time to come in for her final assessment. Her weight and waist circumference were self-reported. Waist circumference data for participant six is presented in Figure 14.

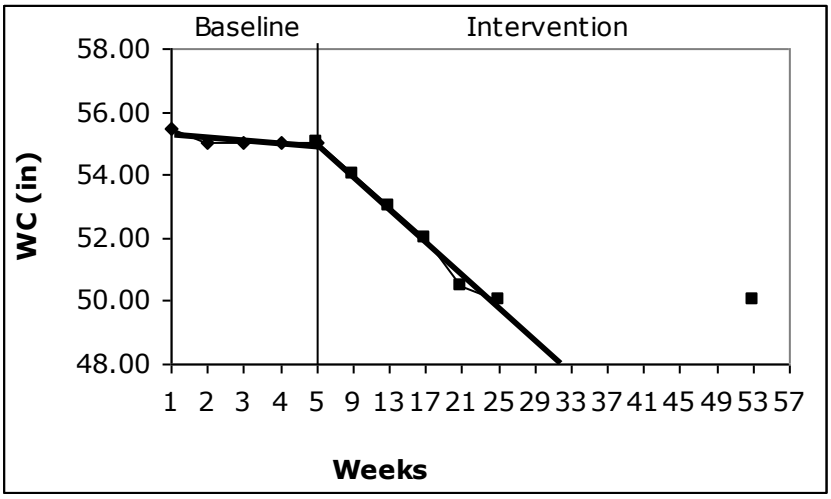


Figure 14. Waist circumference measurements for participant six.

Participant seven's WC decreased from a baseline score of 54in to a score of 51in at the end of the intervention phase. The level decreased 3.0in from the end of baseline to the end of the intervention phase. The baseline slope equation is 55.0-0.16x and the intervention slope equation is 54.23-0.15x. Participant seven increased her WC from the end of the intervention to the six-month follow-up by 1in. After applying visual inspection, there appeared to be steady decrease in participant seven's WC throughout the intervention phase and a small increase from the end of the intervention to the six-month follow-up. Waist circumference data for participant seven is presented in Figure 15.

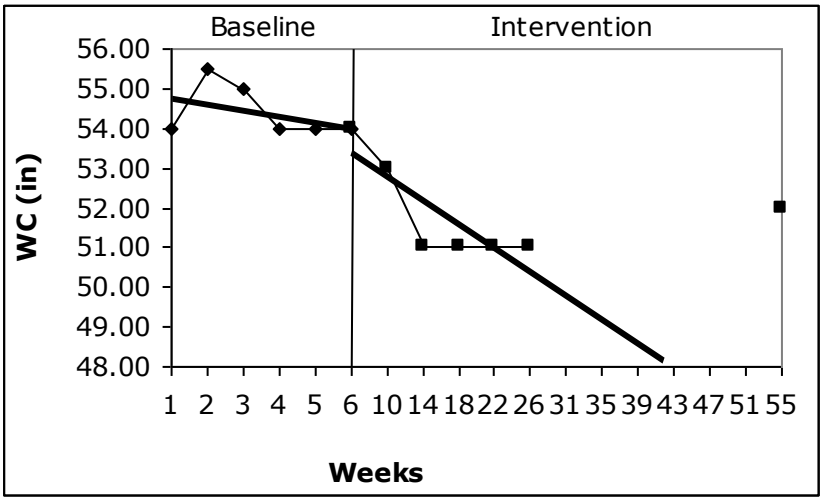


Figure 15. Waist circumference measurements for participant seven.

Participant eight's WC decreased from a baseline score of 38.0in to 37.0in at the end of the intervention phase. The level decreased 1.0in from the end of baseline to the end of the intervention phase. The baseline slope equation is 39.57-0.19x and the intervention slope equation is 37.74-0.04x. Participant eight continued to decrease her WC by 2.0in from the end of the intervention phase to the six-month follow-up. After applying visual inspection, there appeared to be a decrease in participant eight's WC when the intervention was applied and remained constant throughout the intervention phase with a continued decrease from the end of the intervention to the six-month follow-up. Waist circumference data for participant eight is presented in Figure 16.

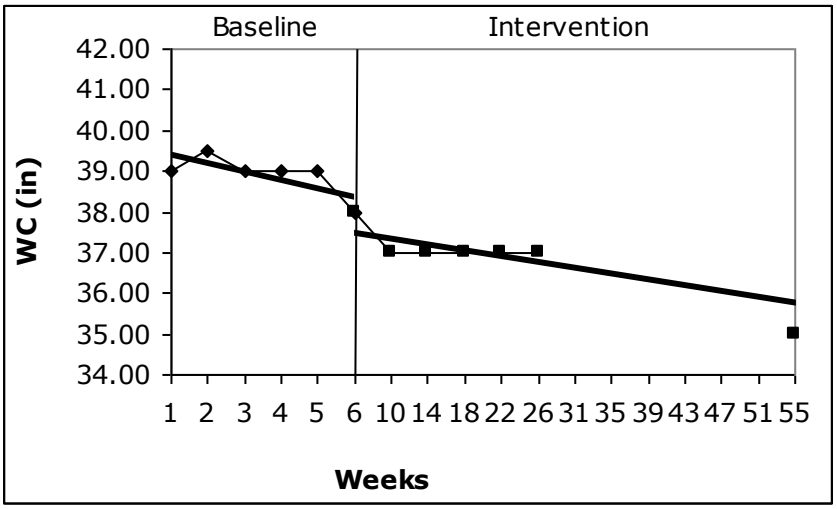


Figure 16. Waist circumference measurements for participant eight.

To summarize, WC decreased for participants one, four, five, six, seven, and eight and remained stable for participants two and three. This demonstrates a trend towards a decrease in WC.

Clinical Significance

Pre-post changes in self-esteem, functional health status, quality of life, self-efficacy, physical activity, and nutrition were evaluated for clinical significance by assessing statistical change through an examination of effect size using Cohen's *d* (Cohen, 1988). Table 1 contains the pre- and post-intervention scores for each measure.

Self-Esteem. Participants' scores on the Rosenberg Self-Esteem Scale revealed a large effect (i.e., increase) in self-esteem (Cohen's $d = 1.85$). Collectively, the effect size indicates a clinically significant improvement in participants' self-esteem after completing the coaching intervention.

Functional Health Status. Participants' scores on the overall health dimension of the SF-36 revealed a considerable increase (i.e., large effect) in overall health status (Cohen's $d = 1.34$). Participants' scores on the physical health dimension of the SF-36 revealed an

increase (i.e., large effect) in overall physical health status (Cohen's *d* = 0.95). Participants' scores on the mental health dimension of the SF-36 revealed a considerable increase (i.e., large effect) in overall mental health status (Cohen's *d* = 1.89). Collectively, the effect sizes for physical, mental, and overall health indicate a clinically significant improvement in participants' health status after completion of the coaching intervention.

Quality of Life (QOL). Participants' scores on the overall QOL on the WHOQOL-Bref revealed a moderate to large effect in overall QOL status (Cohen's *d* = 0.72). Participants' scores on the overall health dimension revealed a considerable increase (i.e., large effect) in overall health status (Cohen's *d* = 1.21). Participants' scores on the physical dimension revealed a considerable increase (i.e., large effect) in overall physical health status (Cohen's *d* = 1.44). Participants' scores on the psychological dimension revealed a considerable increase in overall psychological health status (Cohen's *d* = 2.36). Participants' scores on the overall social dimension revealed a moderate increase in overall social status (Cohen's *d* = 0.49). Participants' scores on the environmental dimension revealed a small to moderate effect in overall environmental status (Cohen's *d* = 0.38). Collectively, the effect sizes for QOL dimensions indicate a clinically significant improvement in participants' overall QOL after finishing the coaching intervention.

Self-Efficacy. Participants' scores on the self-efficacy barriers to nutrition questionnaire revealed an increase (i.e., large effect) in participants' ability to manage barriers to healthy nutrition (Cohen's *d* = 0.77). Participants' scores on the barriers to physical activity questionnaire revealed a considerable increase in participants' ability to handle barriers to physical activity (Cohen's *d* = 1.22). Participants' scores on the achieving tasks in physical activity questionnaire revealed a moderate increase (i.e. medium effect) in participants' ability to achieve tasks in physical activity (Cohen's *d* = 0.51). Collectively, the

effect sizes for self-efficacy indicate a clinically significant improvement in participants' overall self-efficacy after completing the coaching intervention.

Physical Activity. Participants' scores on the IPAQ revealed a moderate increase (i.e., medium effect) in participants' level of physical activity (Cohen's *d* = 0.6). The effect size for physical activity does not indicate a clinically significant improvement in participants' overall physical activity level after completing the coaching intervention.

Nutrition. Participants' food records revealed a large increase (i.e., large effect) in vegetables and fruits (Cohen's *d* = 1.06) and protein (Cohen's *d* = 1.30) and a large decrease in sodium (Cohen's d = -1.53), total calories (Cohen's *d* = -1.50), and saturated fat (Cohen's *d* = -1.08). There was a moderate decrease (i.e., medium effect) in fibre (Cohen's *d* = -0.51) and total fat (Cohen's *d* = -0.52) and a small to moderate decrease (i.e., small to medium effect) in cholesterol (Cohen's *d* = -0.39). The decrease in carbohydrates was too small to even classify as a small effect (Cohen's *d* = -0.04).

Table 1

Pre- and Post-scores, Standard Deviations (SD), and Effect Sizes to measure clinically significant changes in self-esteem, functional health status, self-efficacy, quality of life, physical activity, and nutrition

SELF-ESTEEM				
Participant	Pre-Score	Post-Score	Difference	
1	12	19	7	
2	18	23	5	
3	21	30	9	
4	25	29	4	
5	19	20	1	
6	27	30	3	
7	17	20	3	
8	23	28	5	
			Average Difference	4.62
			SD Difference	2.50
			Effect Size	1.85
FHS - OVERALL				
Participant	Pre-Score	Post-Score	Difference	
1	73	70	-3	
2	51	59	8	
3	78	82	4	
4	62	89	27	
5	60	82	22	
6	79	96	17	
7	28	56	28	
8	56	87	31	
			Average Difference	16.75
			SD Difference	12.49
			Effect Size	1.34
FHS - MENTAL				
Participant	Pre-Score	Post-Score	Difference	
1	82	82	0	
2	60	81	21	
3	74	93	19	
4	67	90	23	
5	46	81	35	
6	77	94	17	
7	30	69	39	
8	53	79	26	
			Average Difference	22.50
			SD Difference	11.90

			Effect Size	1.89
FHS - PHYSICAL				
Participant	Pre-Score	Post-Score	Difference	
1	58	56	-2	
2	40	38	-2	
3	68	73	5	
4	48	86	38	
5	70	79	9	
6	74	95	21	
7	24	37	13	
8	58	92	34	
			Average Difference	14.50
			SD Difference	15.32
			Effect Size	0.95
SELF-EFFICACY - NUTRITION				
Participant	Pre-Score	Post-Score	Difference	
1	83.64	90.91	7.27	
2	36.36	73.63	37.27	
3	54.54	66.36	11.82	
4	61.82	79.1	17.28	
5	92.73	76.36	-16.37	
6	38.18	77.27	39.09	
7	55.45	60.91	5.46	
8	70	78.2	8.2	
			Average Difference	13.75
			SD Difference	17.97
			Effect Size	0.77
SELF-EFFICACY – PA BARRIERS				
Participant	Pre-Score	Post-Score	Difference	
1	81.67	87.5	5.83	
2	30	70.83	40.83	
3	31.67	47.5	15.83	
4	43.33	75	31.67	
5	83.33	74.17	-9.16	
6	54.17	75.83	21.66	
7	37.5	55	17.5	
8	14.17	40.83	26.66	
			Average Difference	18.85
			SD Difference	15.50
			Effect Size	1.22
SELF-EFFICACY – PA TASKS				

Participant	Pre-Score	Post-Score	Difference	
1	100	100	0	
2	100	100	0	
3	90	100	10	
4	62.5	95	32.5	
5	95	77.5	-17.5	
6	100	100	0	
7	15	77.5	62.5	
8	75	87.5	12.5	
			Average Difference	12.50
			SD Difference	24.71
			Effect Size	0.51

WHQOL – OVERALL QOL

Participant	Pre-Score	Post-Score	Difference	
1	4	4	0	
2	4	4	0	
3	4	5	1	
4	5	5	0	
5	4	4	0	
6	4	4	0	
7	3	4	1	
8	3	4	1	
			Average Difference	0.38
			SD Difference	0.52
			Effect Size	0.72

WHQOL – OVERALL HEALTH

Participant	Pre-Score	Post-Score	Difference	
1	1	2	1	
2	3	4	1	
3	2	2	0	
4	2	4	2	
5	2	3	1	
6	1	4	3	
7	2	2	0	
8	2	4	2	
			Average Difference	1.25
			SD Difference	1.04
			Effect Size	1.21

WHQOL - PHYSICAL

Participant	Pre-Score	Post-Score	Difference
1	22	28	6

2	23	28	5	
3	23	22	-1	
4	21	32	11	
5	24	30	6	
6	24	30	6	
7	17	19	2	
8	26	31	5	
			Average Difference	5
			SD Difference	3.46
			Effect Size	1.44

WHQOL - PSYCHOLOGICAL				
Participant	Pre-Score	Post-Score	Difference	
1	20	24	4	
2	19	23	4	
3	22	25	3	
4	23	26	3	
5	18	21	3	
6	21	24	3	
7	18	19	1	
8	24	25	1	
			Average Difference	2.75
			SD Difference	1.17
			Effect Size	2.36

WHQOL - SOCIAL				
Participant	Pre-Score	Post-Score	Difference	
1	7	12	5	
2	10	10	0	
3	10	12	2	
4	13	12	-1	
5	12	11	-1	
6	13	12	-1	
7	9	10	1	
8	6	11	5	
			Average Difference	1.25
			SD Difference	2.55
			Effect Size	0.49

WHQOL - ENVIRONMENTAL			
Participant	Pre-Score	Post-Score	Difference
1	31	29	-2
2	30	31	1
3	34	39	5
4	28	34	6

5	35	36	1	
6	40	35	-5	
7	28	30	2	
8	31	34	3	
			Average Difference	1.38
			SD Difference	3.58
			Effect Size	0.38
PHYSICAL ACTIVITY				
Participant	Pre-Score	Post-Score	Difference	
1	1120	3680	2560	
2	480	3537	3057	
3	4626	990	-3636	
4	438	3082.5	2644.5	
5	918	3618	2700	
6	0	20370	20370	
7	492	7836	7344	
8	3393	2916	-477	
			Average Difference	4320.31
			SD Difference	7202.98
			Effect Size	0.60
NUTRITION – F & V				
Participant	Pre-Score	Post-Score	Difference	
1	2.70	2.30	-0.4	
2	5.30	5.30	0	
3	3.70	4.00	0.3	
4	1.70	4.00	2.3	
5	0.30	5.30	5	
6	2.00	4.30	2.3	
7	2.00	5.00	3	
8	2.30	5.80	3.5	
			Average Difference	2
			SD Difference	1.89
			Effect Size	1.06
NUTRITION - SODIUM				
Participant	Pre-Score	Post-Score	Difference	
1	4044.80	2100.76	-1944.04	
2	2882.60	1876.17	-1006.43	
3	1539.47	941.80	-597.67	
4	3024.79	2164.98	-859.81	
5	4544.87	2802.21	-1742.66	
6	2557.41	1345.59	-1211.82	
7	2813.40	2783.35	-30.05	

8	2171.23	1698.93	-472.3	
			Average Difference	-983.10
			SD Difference	642.11
			Effect Size	-1.53
NUTRITION – SATURATED FAT				
Participant	Pre-Score	Post-Score	Difference	
1	45.15	23.50	-21.65	
2	39.16	17.33	-21.83	
3	13.98	12.77	-1.21	
4	28.82	6.24	-22.58	
5	61.58	16.83	-44.75	
6	15.44	7.32	-8.12	
7	16.53	10.90	-5.63	
8	11.79	10.26	-1.53	
			Average Difference	-15.91
			SD Difference	14.80
			Effect Size	-1.08
NUTRITION - FIBRE				
Participant	Pre-Score	Post-Score	Difference	
1	32.58	33.49	0.91	
2	29.94	17.53	-12.41	
3	8.51	12.30	3.79	
4	16.92	14.85	-2.07	
5	27.22	18.01	-9.21	
6	19.51	15.34	-4.17	
7	13.87	13.45	-0.42	
8	13.97	15.14	1.17	
			Average Difference	-2.80
			SD Difference	5.54
			Effect Size	-0.51
NUTRITION – TOTAL FAT				
Participant	Pre-Score	Post-Score	Difference	
1	32.85	27.26	-5.59	
2	44.11	30.78	-13.33	
3	28.95	33.68	4.73	
4	37.47	20.78	-16.69	
5	40.58	27.18	-13.4	
6	27.81	27.36	-0.45	
7	21.56	31.58	10.02	
8	27.32	22.76	-4.56	
			Average	-4.91

			Difference	
			SD Difference	9.40
			Effect Size	-0.52
NUTRITION - CHOLESTEROL				
Participant	Pre-Score	Post-Score	Difference	
1	223.16	347.41	124.25	
2	284.80	149.61	-135.19	
3	85.38	312.69	227.31	
4	828.69	95.23	-733.46	
5	484.54	98.69	-385.85	
6	345.47	281.41	-64.06	
7	290.07	144.40	-145.67	
8	90.76	217.80	127.04	
			Average Difference	-123.20
			SD Difference	314.47
			Effect Size	-0.39
NUTRITION - CARBOHYDRATES				
Participant	Pre-Score	Post-Score	Difference	
1	56.03	58.37	2.34	
2	39.20	44.91	5.71	
3	57.37	38.38	-18.99	
4	44.07	54.89	10.82	
5	42.72	59.21	16.49	
6	48.50	42.51	-5.99	
7	56.11	44.62	-11.49	
8	53.55	50.81	-2.74	
			Average Difference	-0.48
			SD Difference	11.72
			Effect Size	-0.04

Discussion

The main purpose of this study was to determine the effectiveness of MI using CALC skills as an intervention for decreasing obesity. The secondary purpose was to examine the effect of MI on participants' self-esteem, functional health status, quality of life, self-efficacy, physical activity, and nutrition behaviours.

Weight decreased for all participants during the six-months of coaching. At the six-month follow-up, participants four, five, six, and eight continued to decrease or maintain their weight. Participants one, two, three, and seven gained weight at the six-month follow-up but participants one and seven were still below their baseline weight. It should be noted that of the three participants who regained weight, one participant reported an increase in asthma symptoms that reduced her ability to exercise consistently and two participants reported an injury from a car accident as factors that influenced their weight. Based on Shaw, O'Rourke, Del Mar, and Kenardy's (2007) literature review examining psychological interventions for treating obesity and Douketis, Macie, Thabane, and Willamson's (2005) systematic review that examined methods used for weight loss, these results are not surprising. Both sets of researchers report that longer behavioural interventions result in significantly greater weight loss than shorter behavioural treatments. However, these results are surprising to the researchers of the current study due to the participants' reported co-morbidities. One participant was using Prednisone, a steroidal drug used to treat her asthma. Prednisone's side effects include weight gain, fatigue or weakness, joint pain, and severe swelling (Senecal, 1998). In a study conducted by Everdingen, Jacobs, Siewertsz van Reesema, and Bijlsma (2002) that assessed the impact of Prednisone on patients with early active rheumatoid arthritis, the treatment group who received Prednisone had a significant

increase (p=0.001) in weight gain with no change in weight in the placebo group. One participant was dealing with depression. According to the Canadian Mental Health Association (2010), depressed individuals have a tendency to eat more, experience a loss of energy, and often feel tired. Three participants were going through menopause and presented symptoms that might have influenced weight inclusive of, aching joints, chronic fatigue, sweet, caffeine, junk food, and carbohydrate cravings, depression and anxiety, dizziness, weight gain, and sleep problems (Greendale & Judd, 1993). One participant received radiation therapy for detected cancerous cells. Radiation side effects include anxiety and depression, changes in appetite, fatigue, and sleep disturbances (Canadian Cancer Society, 2010). Moreover, this same participant quit smoking during the intervention, which can result in an increased appetite, problems sleeping, and slight social withdrawal (American Cancer Society, 2010). Given these co-morbidities it was not expected that participants would decrease their weight. However, participants one, four, five, six, seven and eight lost as little as 9.8 pounds and as much as 37.4 pounds. In a similar study conducted by Newnham-Kanas et al. (2008), it was suggested that coaching continue for a longer period of time, which may garner greater weight loss. Directly following the final coaching session, three participants were no longer obese and two participants moved from Class II obesity to Class I and Class III obesity to Class II. At the end of the six-month follow-up, two participants were no longer obese and one participant moved from Class III to Class II. The current study's results highlight the effectiveness of MI using CALC skills' for six-months as a viable intervention for losing weight, even when co-morbidities are present that may impact the amount of weight lost.

Waist circumference decreased for participants one, three, five, six, seven, and eight directly following the intervention. There was no change in waist circumference for

participant two. Waist circumference continued to decrease for participants one and eight at the six-month follow-up. Participants three, five, and six maintained their WC from the end of the intervention, and participant seven increased her WC but it was lower than her baseline measurement. Waist circumference might have resulted from an increase in physical activity and healthier eating habits as reported in the exit interview. These results are particularly important given that WC is perceived as a more accurate representation of excess body fat which, in turn, is a good predictor of all-cause mortality in middle aged men and women (Bigaard et al., 2005; Janssen, Katzmarzyk, & Ross, 2004).

Self-esteem increased for participants with a large effect detected. This result is analogous to results reported by a similar study conducted by Newnham-Kanas et al. (2008) and Van Zandvoort et al. (2008). Gover (1991) explains that one way to build self-esteem is to become aware and challenge the individual's inner critic. In coaching this inner critic is referred to as the saboteur and identifying and confronting the thoughts associated with the saboteur were skills reportedly used by the coach during participants' coaching sessions. Self-concept is integral to increased self-esteem and is determined by the self-talk or internal thoughts the individual has about him/herself. By challenging the negative self-talk and thoughts, it is presumed that an individual will be able to set more challenging goals and suggest solutions to his/her problems (Hall, 2007). In balance coaching, a specific form of CALC, the coach works with clients to envision new perspectives to help them become aware of their current perspective and how to create action plans to generate new perspectives and new ways of looking at life events and challenges (Whitworth, Kimsey-House, & Sandahl 1998; 2007). As reported by the coach of the current study (Newnham-Kanas, Irwin, Morrow, under review), balance coaching was one of the styles of coaching used predominately with participants. Increased self-esteem allows individuals to feel

worthwhile, capable of helping themselves, and optimistic about the future (Gover). All of these traits are necessary for weight loss to be possible and may be one reason participants in the current study lost a considerable amount of weight and for some, were able to maintain and even further reduce that weight six-months later.

Functional health status (FHS) increased for participants with a large effect detected for the overall, physical, and mental dimensions of health. These findings were also reported in studies conducted by Newnham-Kanas et al. (2008) and Van Zandvoort et al. (2008). Stress has been reported as an important risk factor for weight loss and maintenance (Elfhag & Rossner, 2005). Additionally, individuals who tend to regain weight have a tendency to increase their eating habits to cope with the stress (Elfhag & Rossner). All of the participants in the current study struggled with their weight for many years and might fit within that paradigm. These increased FHS results after the coaching sessions suggest that MI applied via CALC aided participants in finding solutions to manage their stress and in turn adopt healthy behaviours that improved their sense of well being. These results are particularly surprising given the number of co-morbidities and resulting stress these participants were dealing with prior to and during the intervention.

Participants' overall quality of life (QOL) increased with a large effect detected for overall, physical, and psychological QOL dimensions. A moderate and small to moderate effect was detected for social and environmental dimensions. Research confirms that increased weight decreases health-related QOL, which would contribute to explaining the mechanism by which participants QOL increased (Jia & Lubetkin, 2005; Pinhas-Hamiel et al., 2005). These results are particularly surprising because it has been reported that as individuals increase in age, their physical QOL scores decrease (Zabelina, Erickson, Kolotkin, & Crosby, 2009). It is not surprising that psychological dimensions increased as

self-esteem and learning to cope with life stressors are key components of the psychological dimension, which increased at the end of the coaching intervention (WHOQOL-BREF; World Health Organization, 1997). Although social and environment QOL increased moderately, participants reported in their exit interview and focus group (Newnham-Kanas et al., under review) that they stepped outside of their comfort zone by joining social clubs (e.g. book clubs) and reuniting with old friends.

Participants were viewed by the coach as naturally, creative, resourceful, and whole – a cornerstone of the Co-Active model (Whitworth et al., 2007). In other words, the coach viewed participants as having the capability to find their own solutions to problems and strong enough to work through difficult moments in order to deepen their learning and/or commit to some specific behavioural action to ameliorate their health concern (reflective of another Co-Active cornerstone). Given the increase in nutrition barriers, physical activity barriers, and physical activity-related task self-efficacy (large and medium effect sizes detected) perceived by participants over the duration of the intervention, it is evident that participants increased their belief and ability to conquer obstacles such as working through issues that were impeding their ability to lose weight, increasing their physical activity (as reported in their post-interviews; Newnham-Kanas et al., under review), and making healthier nutritional changes. CALC tools that support clients in engaging in healthful actions and increasing self-acceptance are some of the reasons MI using CALC skills is believed to be an intervention that can have a more permanent effect on weight loss. These self-efficacy results are different from the study conducted by Newnham-Kanas et al. (2008); our interpretation is that the difference in the present study is due to increasing the number of coaching sessions and the concomitant link to increased self-efficacy scores.

Although a moderate effect size was reported for physical activity, it should be emphasized that even with the co-morbidities listed above, participants still found ways to increase their physical activity. As well, six of the eight participants shared in the exit interview that they had to work through "emotional baggage" before they could even contemplate integrating physical activity into their daily lives. Physical activity did increase in this study compared to the results report by Newnham-Kanas et al. (2008); this indicates that increasing the number of coaching sessions might aid in increasing participants frequency of engaging in healthful behaviours.

Participants reported a large reduction in energy intake of approximately 900 kcal per day, which likely contributed significantly to the observed weight loss. This large reduction in overall energy intake may be attributed to the increase (large effects) in protein and vegetable and fruit (V&F) intake with a simultaneous reduction in total fat intake - all of which may have enhanced the satiety value of participants' diets. In particular, a diet containing 25% of total energy intake (TEI) from protein, which is similar to that observed in the present study, has demonstrated a spontaneous reduction in energy intake of about 400 kcal per day (Skov, Toubro, Ronn, Holm, & Astrup, 1999). Furthermore, the large increase in V&F intake in combination with reductions in total fat, saturated fat, cholesterol, and sodium may reduce participants' risk of developing future chronic diseases, such as Type 2 diabetes and cardiovascular diseases (Institute of Medicine, 2005). With respect to sodium alone, it is estimated that an 1800 mg/d reduction in sodium intake, which is approximately 50% of what our participants achieved, could reduce systolic and diastolic blood pressure by 5.06 and 2.7 mmHg respectively and may reduce the overall prevalence of hypertension by 30% (Joffres, Campbell, Manns, & Tu, 2007). It is noteworthy that fibre intake was moderately reduced throughout the study. This is an undesirable finding, as fibre intake is

negatively associated with chronic disease development (Institute of Medicine). In future studies, some nutritional education may be warranted to ensure that participants meet their recommended intake of nutrients known to contribute to health and chronic disease prevention.

There are several limitations to the current study. Although recruitment methods were used to attract a variety of individuals, the final group of participants was homogenous in sex and ethnicity. Because the study had only one coach and due to the multiple-baseline, single-subject design, a small sample size was necessary. As a result of these two factors, these results are not representative of individuals struggling with obesity aged 35-55. However, it should be noted that the current study incorporated suggestions reported by Newnham-Kanas et al. (2008) by standardizing the number of coaching sessions for each participant (all participants completed 18 coaching sessions) and the number of coaching sessions increased from six-weeks to six-months, and follow-up continued to one-year post-baseline.

Even though monthly weigh-in sessions may be viewed as an intervention in and of itself, this is unlikely for the current study. Participants were not shown their weight until the final weigh-in after all coaching sessions were complete. As well, none of the participants in the exit interview reported that the weigh-ins had any effect (positive or negative) on their final weight outcome.

Given the results of the current study, it is apparent that increasing the number of coaching sessions from our previous work had a beneficial effect on weight loss. Based on suggestions from participants, it is recommended that coaching continue for at least one year due to the multiplicity of areas in participants' lives that obesity affects, and that affect obesity. Although a significant amount of weight was lost in only six months, it has been reported that dietary/lifestyle therapy can require 2-4 years to maintain weight loss

(Douketis, Macie, Thabane, & Williamson, 2005). It is also recommended that a larger, more representative sample of participants be used in conjunction with a control group to augment internal validity. Currently there are two other studies (Newnham-Kanas et al., 2008; Van Zandvoort et al., 2008) that have reported MI using CALC skills as an effective intervention for obesity. Thus, MI's effectiveness has been documented and thereby points the way toward integrating formal physical activity and nutritional programs in conjunction with MI to determine what impact these added programs would have on obesity.

Despite these limitations and suggestions, the following conclusions can be drawn from the reported results:

1. MI applied via CALC was associated with a trend towards a decrease in weight and WC.
2. MI applied via CALC was associated with a trend towards maintaining or continuing to decrease weight and WC six-months after the last coaching session.
3. MI applied via CALC was associated with clinically significant increases in self-esteem.
4. MI applied via CALC was associated with clinically significant increases in functional health status.
5. MI applied via CALC was associated with clinically significant increases in quality of life.
6. MI applied via CALC was associated with clinically significant increases in self-efficacy.
7. MI applied via CALC was associated with a moderately detected increase in physical activity.

As obesity levels continue to rise in Canada and around the world, it is crucial that research continue to test new strategies aimed at helping individuals decrease their weight. As research persists, a common theme of incorporating behavioural treatments with traditional physical activity and nutrition programs are emphasized as vital in aiding obese individuals in decreasing their weight (Foster, Makris, & Bailer, 2005; Kausman & Bruere, 2006). Specifically, programs that empower individuals to find solutions to their own problems, make healthier choices, and learn to cope with life stressors are deemed effective strategies in losing and maintaining weight (Elfhag & Rossner, 2005; Kausman & Bruere). MI using CALC skills is one such intervention and it is an effective tool in aiding individuals conquer their battle with weight.

Treatments for obesity often determine progress and success on changes in weight, waist circumference, and BMI. However, Kausman and Bruere (2006) suggest that focusing strictly on those indices takes away from the behaviours that are encouraged and needed to help clients change and maintain that change. Therefore, the next chapter outlines a study that explored behaviours and processes that could not be measured quantitatively in the current study. Using individual interviews and a focus group, the proceeding study assessed how the intervention impacted participants, from their own perspectives. As well, the CPCC who volunteered in the study was interviewed to understand the important skills used and to provide suggestions for future coaches working with this population

References

Ajzen, I. (1988). *Attitudes, personality, and behaviour*. Chicago: Dorsey Press.

American Cancer Society. (2010). Guide to quitting smoking. Retrieved from http://www.cancer.org/Healthy/StayAwayfromTobacco/GuidetoQuittingSmoking/guide-to-quitting-smoking

Backman, C. L., Harris, S. R. (1999). Case Studies, Single-Subject Research, and N of 1 Randomized Trials: Comparisons and Contrast. *American Journal of Physical Medicine & Rehabilitation, 78(2)*, p.170-176.

Bandura, A. (1977) Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review,* 84(2), 191-215.

Bigaard, J., Frederiksen, K., Tjonneland, A., Thomsen, B.L., Overvad, K., Heitmann, B.L., et al. (2005). Waist circumference and body composition in relation to all-cause mortality in middle-aged men and women. *International Journal of Obesity, 29*, 778-784.

Blascovich, J, & Tomaka, J. (1993). Measures of self-esteem. Pp. 115-160 in J.P. Robinson, P.R. Shaver, and L.S. Wrightsman (eds). *Measures of personality and social psychological attitudes*. Third Edition. Ann Arbor: Institute for Social Research.

Canadian Cancer Society. (February, 2010). *Side effects of radiation therapy.* Retrieved from http://www.cancer.ca/Canada-wide/About%20cancer/Treatment/Radiation/Side%20effects%20of%20radiation%20therapy.aspx?sc_lang=en

Canadian Mental Health Association. (2010). *Depression.* Retrieved from http://www.cmha.ca/bins/content_page.asp?cid=3-86-87&lang=1

Centre for Disease Control and Prevention. (2011). *Healthy weight – it's not a diet, it's a lifestyle!* Retrieved from http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, New Jersey: Lawrence Erlbaum.

Cook, T.D. & Campbell, D.T. (1979). *Quasi-Experimentation: Design and Analysis for Field Settings.* Rand McNally, Chicago, Illinois.

Craig, C.L., Marshall, A.L., Sjostrom, M., Bauman, A.E., Booth, M.L., Ainsworth, B.E., et al. (2003). International physical activity questionnaire (IPAQ): 12-counry reliability and validity. *Medicine and Science in Sports and Exercise, 35,* 1381-1395.

Douketis, J. D., Macie, C., Thabane, L., & Williamson, D. F. (2005). Systematic review of long-term weight loss studies in obese adults: Clinical significance and applicability to clinical practice. *International Journal of Obesity, 29,* 1153 – 1167.

Egan, G. (1997). *The skilled helper: a problem-management approach to helping* (6th ed.). Pacific Grove: Brooks/Cole Publishing Company.

Elfhag, K., & Rossner, S. (2005). Who succeeds in maintaining weight loss? A conceptual review of factors associated with weight loss maintenance and weight regain. *Obesity Reviews, 6,* 68-85.

Everdingen, A.A., Jacobs, J.W.G., Siewertsz van Reesema, D.R., & Bijlsma, J.W.J. (2002). Low-dose prednisone therapy for patients with early active rheumatoid arthritis: Clinical efficacy, disease-modifying properties, and side effects: A randomized, double-blind, placebo-controlled clinical trial. *Annals of Internal Medicine, 136*(1), 1-12.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: an introduction to theory and research.* Reading, Massachusetts: Addison-Wesley,

Fodor, J.G., Frohlich, J.J., Genest, Jr., J.J.G., & McPherson, P.R. (2000). Recommendations for the management and treatment of dyslipidemia: Report of the Working Group on Hypercholesterolemia and Other Dyslipidemias. *Canadian Medical Association Journal, 162*(10), 1441-7.

Foster, G.D., Makris, A.P., & Bailer, B.A. (2005). Behavioral Treatment of Obesity. *The American Journal of Clinical Nutrition, 82*(1), 2305-2355.

Greendale G.A., & Judd, H.L. (1993). The menopause: health implications and clinical management. *Journal of the American Geriatrics Society, 41*, 426-436.

Gorczynski, P., Morrow, D., & Irwin, J.D. (2008) The impact of Co-active Coaching on the physical activity levels of children. *International Journal of Evidence-Based Coaching and Mentoring*, 6(2), 13-26.

Gover, J. (1991). Building Self-Efficacy. Retrieved January 29, 2011, from http://eric.ed.gov/PDFS/ED373298.pdf

Hardeman W, Griffin S, Johnston M, Kinmonth AL, Wareham NJ (2000). Interventions to prevent weight gain: a systematic review of psychological models and behaviour change methods. International Journal of Obesity and Related Metabolic Disorders, 24, 2, 131-143.

Hayes, S.C. (1981). Single Case Experimental Design and Empirical Clinical Practice. In A.E. Kazdin (Ed.), *Methodological Issues & Strategies in Clinical Research* (2nd ed.). Washington, DC: American Psychological Association.

Health Canada. (2007). *Eating Well with Canada's Food Guide – A resource for educators and communicators.* Ottawa: HC Pub 4667.

Huang, I.C., Wu, A.W., & Frangakis, C. (2006). Do the SF-36 and WHOQOL-BREF measure the same constructs? Evidence from the Taiwan population. *Quality of Life Research, 15*(1), 15-24.

Institute of Medicine. (2005). *Dietary Reference Intakes for Energy, Carbohydrates, Fibre, Fat, Fatty Acids, Cholesterol, Protein and Amino Acids.* Washington DC: National Academy Press.

Irwin, J.D., & Morrow, D. (2005). Health promotion theory in practice: an Analysis of Co-active Coaching. *International Journal of Evidence-Based Coaching and Mentoring*, 3(1), 29-38.

Janssen, I., Heymsfield, S.B., Ross, R. (2002). Application of simple anthropometry in the assessment of health risk: implications for the Canadian Physical Activity, Fitness and Lifestyle Appraisal. *Canadian Journal of Applied Physiology, 27*(4), 396-414.

Janssen, I., Katzmarzyk, P.T., & Ross, R. (2002). Body mass index, waist circumference, and health risk: evidence in support of current National Institutes of Health guidelines. *Archives of Internal Medicine, 162*(18), 2074-2079.

Janssen, I., Katzmarzyk, P.T., Ross, R. (2004). Waist circumference and not body mass index explains obesity-related health risk. *American Journal of Clinical Nutrition, 79*(3), 379-384.

Jenkinson, C., Coulter, A., & Wright, L. (1993). Short Form 36 (SF36) health survey questionnaire: normative data for adults of working age. *British Medical Journal, 306*(6890), 1437-1440.

Jia, H., & Lubetkin, E. (2005). The impact of obesity on health-related quality-of-life in the general adult US population. *Journal of Public Health, 27*(2), 156-164.

Joffres, M.R., Campbell, N.R.C., Manns, B., Tu, K. (2007). Estimate of the benefits of a population-based reduction in dietary sodium additives on hypertension and its related health care costs in Canada. *Canadian Journal of Cardiology, 23*, 437–43.

Kanfer, F.H. (1970). *Self-regulation: research, issues, and speculation.* In C. Neuringer and J. L. Michael (Ed.), Behavior modification in clinical psychology. New York: Appleton Century-Crofts.

Kazdin, A.E. (1982). *Single-Case Research Designs: Methods for Clinical and Applied Settings*. New York: Oxford University Press.

Kausman, R., & Bruere, T. (2006). If not dieting, now what? *Australian Family Physician, 35*(8), 572-575.

McAuley, E. & Mihalko, S.L. (1998). Measuring exercise-related self-efficacy. In J.L. Duda (Ed.), *Advances in Sport and Exercise Psychology Measurement* (pp. 371-380). Morgantown, WV: Fitness Information Technology Inc.

Miller, W.R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people to change addictive behavior*. New York: The Guilford Press.

Newnham-Kanas, C.E., Gorczynski, P., Irwin, J.D., & Morrow, D. (2009). Annotated bibliography of life coaching and health research. *International Journal of Evidence Based Coaching and Mentoring,* 6 (2), 1-12.

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (2008). Life coaching as an intervention for individuals with obesity. *International Journal of Evidence-Based Coaching and Mentoring,* 6(2), 1-12.

Newnham-Kanas, C., Morrow, D., & Irwin, J.D. (under review). 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.*

Newnham-Kanas, C., Morrow, D., & Irwin, J.D. (2010). A functional juxtaposition of three methods for health behaviour change: Motivational Interviewing, Coaching, and Skilled Helping. *International Journal of Evidence-Based Coaching and Mentoring, 8*(2), 27-48.

Penz, E.D., Joffres, M.R., Campbell, N.R.C. (2008). Reducing dietary sodium and decreases in cardiovascular disease in Canada. *Canadian Journal Cardiology, 24*, 497–501.

Pinhas-Hamiel, O., Singer, S., Pilpel, N., Fradkin, A., Modan, D., & Reichman, B. (2005). Health-related quality of life among children and adolescents: associations with obesity. *International Journal of Obesity*, 1-6.

Rosenberg, M. (1989). *Society and the Adolescent Self-Image*. (Rev. ed.). Middletown, CT: Wesleyan University Press.

Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78.

Senecal, J-L. (1998). Lupus: The disease with a thousand face (*4th ed.*). Retrieved January 29, 2011, from.http://www.lupuscanada.org/english/living/1000faces_appen2.html

Shaw, K., O'Rourke, P., Del Mar C., & Kenardy, J. (2007). Psychological interventions for overweight or obesity (review). *Cochrane Database of Systematic Reviews*. Issue 2. Art No.:CD003818. DOI 10.1002/14651858.CD003818.pub2.

Shields, M., Tremblay, M.S., Laviolette, M., Craig, C.L., & Janssen, I. (January 2010). Fitness of Canadian adults: results from the 2007-2009 Canadian health measures survey. *Health Reports (Statistics Canada, Catalogue no. 82-003-XPE), 21*(1), 1-15.

Skov AR, Toubro, S, Ronn, B, Holm, L and Astrup, A. (1999). Randomized trial on protein vs carbohydrate in ad libitum fat reduced diet for the treatment of obesity. *International Journal of Obesity, 23*,528-536.

Slevin, E. (2004). High intentsity counselling or behavioural interventions can result in moderate weight loss. *Evidence-Based Health Care and Public Health, 8*(3), 136-138.

Strazzullo, P., D'Elia, L., Kandala, N-B., Cappuccio, F.P. (2009). Salt intake, stroke, and cardiovascular disease: meta-analysis of prospective studies. *British Medical Journal, 339*, b4567.

Stice, E., Presnell, K., Shaw, H., & Rhode, P. (2005). Psychological and behavioural risk factors of obesity onset in adolescent girls: A prospective study. *Journal of Consulting and Clinical Psychology, 73*(2), 195-202.

Three-day Food Record. Chronic Disease and Injury Prevention Team, Middlesex-London Health Unit, 2009.

Tjepkema, M. (2006). Adult obesity. *Health Reports (Statistics Canada, Catalogue 82-003), 17*(3), 9-25.

van Zandvoort M.M., Irwin, J.D., & Morrow, D. (2009). The impact of Co-active life coaching on female university students with obesity. *International Journal of Evidence-Based Coaching and Mentoring, 7(1),* 104-118

van Zandvoort, M.M., Irwin, J.D., & Morrow, D. (2008). Co-active Coaching as an intervention for obesity among female university students. *International Coaching Psychology Review*, 3(3), 191 - 206.

Wadden, T. A., Brownell, K. D., & Foster, G. D. (2002). Obesity: Responding to the global epidemic. *Journal of Consulting and ClinicalPsychology, 70*, 510–525.

Ware, J. D. (1997). *SF-36 Health Survey: Manual & Interpretation Guide*. The Medical

Outcomes Trust: Boston, MA.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (1998). *Co-active coaching: New skills for coaching people toward success in work and life.* California: Davis-Black Publishing.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (2007). *Co-active coaching: New skills for coaching people toward success in work and life (2nd ed.).* California: Davis-Black Publishing.

World Health Organization. WHOQOL Measuring quality of life. (1997). Retrieved September 2009, from http://www.who.int/mental_health/media/68.pdf

World Health Organization. *Obesity and overweight*. (September 2006). Retrieved from http://www.who.int/mediacentre/factsheets/fs311/en/index.html

Zabelina, D.L., Erickson, A.L., & Kolotkin, R.L. (2009). The effect of age on weight-related quality of life in overweight and obese individuals. *Obesity, 17*(7), 1410-1413.

Study 2

Participants' Perceived Utility of Motivational Interviewing Using Co-Active Life Coaching Skills on their Struggle with Obesity[2]

Perhaps the most underestimated consequences of obesity are the psycho-social problems that contribute to and result from excess bodyweight, including but not limited to: negative self-esteem, increased anxiety, and elevated depression levels (Warschburger, 2005). Adults struggling with obesity are less likely to marry and have lower household incomes than non-overweight adults (Gortmaker, Must, Perrin, Sobol, & Dietz, 1993). Negative attitudes towards those who are struggling with obesity are accepted in mainstream society and, in some cases, even encouraged (Wang, Brownell, & Wadden, 2004). Society often views obesity as a condition that is the fault of the obese individual (Wang et al.). Wang and colleagues examined the stigma of obesity and overweight individuals and found that those who were obese had negative attitudes towards others who were obese and believed that overweight people were lazier than thin people. These researchers demonstrated that even adults struggling with obesity believed the negative stigma associated with obesity.

Women, more often than men, are affected by depression due to obesity (Hasler et al., 2005; Linde et al., 2004). Increased incidence of depression has been linked to low weight-control self-efficacy and reduced self-esteem resulting in increased binge-eating and an inability to make positive health behaviour changes. Lau and colleagues (2006) outlined the need for a comprehensive treatment plan that included nutritional therapy, physical activity, and cognitive-behaviour therapy. Shaw and colleagues (2007) reported the need for and utility of behaviour therapy and cognitive behaviour therapy as a way to help individuals facilitate weight management. One increasingly promising form of such behaviour therapy

[2] A version of this chapter has been published in the Coaching: An International Journal of Theory, Research and Practice (2011), 4(2), 104-122. A copyright release can be found in Appendix A.

for weight management is Motivational Interviewing (MI) administered using Co-Active life coaching (CALC) skills (Newnham-Kanas, Morrow, & Irwin, 2010).

Research using MI via CALC as an intervention for obesity has demonstrated decreases in waist circumference, increases in self-esteem, and increases in functional health status (Newnham-Kanas, Irwin, & Morrow, 2008; Zandvoort, Irwin, & Morrow, 2008; 2009). Used on their own, both MI and life coaching have been established as health-related behaviour change methods. For instance, MI has been studied for its use within smoking cessation (Butler, Rollnick, Cohen, Bachman, Russell, & Stott, 1999), HIV treatment adherence (DiIorio, Resnicow, McDonnell, Soet, McCarty, & Yeager, 2003), and youth dietary issues (Berg-Smith, Stevens, Brown, Van Horn, Gernhofer, Peters et al., 1999). Similarly, an annotated bibliography of 72 articles outlined that life coaching (in many different coaching formats not exclusively CALC in style) has been used for an array of health problems including but not limited to diabetes, mental health, depression, and cardiovascular health (Newnham-Kanas, Gorczynski, Morrow, & Irwin, 2009). It is imperative to note that not all 'life coaching' approaches are similar, and the lack of specificity regarding the type of coaching approach used was a major criticism of the studies outlined in the above-noted annotated bibliography. Similarly, the non-standardized approach to administering the tenets of MI has been criticized for its use within health arenas (Mesters, 2009). Due to their complementary philosophies, the use of CALC tools to apply MI principles has been deemed theoretically sound and clinically appropriate (Newnham-Kanas et al., 2010). This chapter is the qualitative component of a single-subject, multiple-baseline research study to assess the impact of a six-month one-on-one MI via CALC intervention for adults (aged 35-55) struggling with obesity; it provides the qualitative component as a companion study outlined in the preceding chapter. In addition to the quantitative findings

that support this intervention for adults struggling with obesity (Newnham-Kanas, Irwin, Morrow, & Battram, chapter 2 above and under review), it was also important to understand the personal experiences of the participants who engaged in the intervention and follow-up lasting a total of one year. Specifically, using one-on-one interviews and a focus group, the research team sought to gain an understanding of the following issues: what it was like living as an individual struggling with obesity; what it was like completing the intervention; and what it was like six-months after the final coaching session. In addition, this study also explored with the CPCC what it was like to work with this population.

Methods

Participants and recruitment

Eight English speaking women (aged 35-55) living in London, Ontario who presented with a BMI ≥ 30 were recruited using a local newspaper. Participant eligibility, process for inclusion, and profile descriptions are provided elsewhere (Newnham-Kanas et al., under review). Ethical approval was received from The University of Western Ontario's Office of Research Ethics (see Appendix B). A Certified Professional Co-Active Coach (CPCC) known to the research team volunteered to administer the coaching intervention.

Procedure

Once participant eligibility was confirmed, participants met for individual interviews with the lead researcher (CNK) at the host University for an introductory meeting. During this meeting, the researcher explained the nature of the study, received signed consent (see Appendix C), and confirmed BMI and waist circumference (WC) by direct measurement. At the end of this meeting, a semi-structured interview was conducted to gain insight into the lived experience of the women struggling with obesity. Prior to the interview, participants were told that information provided during the initial meeting with the lead researcher would

not be shared with the CPCC. Participants were asked to respond as honestly as possible to ensure accurate reporting (Bates, 1992) and were assured that publication of their responses would not contain any identifying markers. The five primary questions used during the interview included: *What is it like being you? In your wildest dreams, what would your life look like? In what way would it be different from now? What does your weight represent? What would you have to say yes and no to, to make your ideal weight come true? What is the story you tell yourself about your weight?* Member checking as described by Guba and Lincoln (1989) was used after each question to ensure the researcher accurately understood the information presented. Each interview lasted 10-15 minutes and was audiotaped and transcribed verbatim.

As noted above, one CPCC who was certified through The Coaches Training Institute volunteered her time for the study. The coach was not involved in any other aspects of the study (i.e., the coach had no involvement in or knowledge of the meetings between the researchers and participants, data collection, or data analysis procedures). In addition, the researchers were not privy to information shared between the coach and each participant. The first meeting between the coach and each participant was done in person and lasted approximately one hour; the remaining 17 sessions were done once per week by phone and lasted approximately 35 minutes. During the initial in-person session at the University, the coach explained the nature of coaching, worked together to create a designed alliance (goals and desires for coaching outcome) with each participant, and established the primary agenda for each client. Following the initial session, clients phoned the coach once a week (the coach called one participant due to a phone-plan-related agreement with this particular participant). Missed sessions were rescheduled and all eight participants received a total of 18 coaching sessions over six months. In compliance to the Co-Active coaching model and format, clients

came to each session with their own agenda identified, and that agenda may or may not have been directly related to their weight and health. The majority of questions asked by the CPCC were unscripted open-ended questions, characteristic of the Co-Active coaching method. As per the model's key principle, it was assumed that the client "knew" all the answers; the coach helped guide the client to her own answers using a variety of techniques. Some of those techniques included: asking powerful questions, championing, holding accountabilities, deepening their learning and/or getting them into change-action, and experiencing what the client felt in the moment. For a full review of Co-Active coaching, please refer to Whitworth et al. (2007).

Within one week of completing the intervention, participants returned to campus for a final in-person meeting with the lead researcher where they participated in a final one-on-one interview. Participants were told there were no right or wrong answers and were reminded that their responses would remain confidential in that the publication of their responses would not include any identifying markers. The final interview served as an opportunity for the researchers to gain an understanding, from the perspective of participants, about their experience of the intervention. The eight questions used during this final interview included: *What is it like being you? How has this changed since you started the program? Tell me about your experience being in the study/program? What have you learned from your coaching experience? What actions have you taken and which do you attribute to coaching? What life challenges or other situations took place throughout the study that may have impacted your body-weight goals? How do you see what you have learned impacting you in the next six months? What else would you like to tell me that I have not already asked?* Each participant's interview lasted approximately 20 minutes. The interviews were audiotaped and transcribed verbatim.

Six months after their final coaching session, participants were invited back to campus to participate in a focus group led by an experienced moderator (JI) and trained assistant moderator. The purpose of the focus group was to gain an understanding of participants' perspectives of the longer-term impact of the intervention, their weight-related challenges/achievements since the intervention ended, and study-related advice that could be used in future work. Six participants agreed to participate in the focus group with one participant leaving half way through for a family obligation. Participants signed an informed consent form (see Appendix J), were told that there were no wrong answers, and encouraged to provide honest and frank replies to each question. The six questions used during the focus group included: *What did you get out of being in the study? What have you done since the end of the study? What supports have you put in place to help you on this journey? What do you need to help facilitate your needs/goals/desires? What are you willing to do to make these happen? What advice do you have for us for future studies?* The focus group lasted 1.5 hours. The focus group was audio-recorded and transcribed verbatim. Methods to ensure data trustworthiness were employed throughout the data collection and analysis processes, as advised by Guba and Lincoln (see Table 1).

After the study was complete, one of the study researchers (DM), who was not involved with participants or the CPCC during the study, interviewed the CPCC. The purpose of this interview was to gain insight into the CPCC's experience in working with individuals with obesity. The seven main questions used during this interview included: *What was it like for you to coach in this study? What surprised you about working with these individuals? What were the tools/techniques you used most often? How did you know, as the coach, that the client got what she was looking for? What insights did you gain coaching individuals struggling with obesity? What advice do you have when working with this*

clientele? What would you do differently if doing this study again? The interview was done over the phone and lasted 90 minutes. The interview was audio recorded and transcribed verbatim.

Data analysis and interpretation

Inductive content analysis, as described by Patton (2002), was performed on the transcripts from the one-on-one interviews implemented at the beginning and end of the intervention as well as for the focus group. This technique was used to identify main themes that emerged from participant answers regarding obesity, the study's effect on participants' lives, and participants' experiences with the coaching intervention. The researcher and another experienced qualitative researcher, who was not in any way associated with the current study, separately analyzed the pre- and post-interview transcripts and then came together to compare themes and determine which themes were most prominent in expressing the lived experience of struggling with obesity and of being coached. Two researchers (CNK and DM) analyzed the focus group transcripts and two researchers (CNK and JD) analyzed the CPCC's transcript using inductive content analysis.

Table 1

Measures Taken to Ensure Data Trustworthiness

Credibility	Member checking was done between questions and at the end of each interview to ensure the researchers correctly understood the responses from participants. During the focus group with participants, the moderator provided her perception of participants' responses prior to moving on to the next question, and the assistant moderator summarized participant responses at the end of the focus group to ensure accuracy.
Confirmability	Inductive content analysis was performed independently and simultaneously by two researchers, who later met to compare their analyses. Data were examined for similarities and differences across the interviews and emerging themes were identified. A summary of the analysis was prepared and discussed.
Dependability	The plan of study and its implementation are documented. Data gathering and analysis are described in detail. Reflective appraisals of the project are shared in the discussion of this paper.
Transferability	The research process has been documented in detail, thus enabling potentially interested parties to determine whether our results are transferable to other settings.

Note. Adapted from "Preschoolers' physical activity behaviours," by J.D. Irwin, M. He, L.M. Sangster Bouck, P.Tucker, & G.L. Pollett, 2005, *Canadian Journal of Public Health, 96*(4), 299-303.

Results

The results for this study are presented by division into four sections. The first three sections include themes from the pre- and post-interviews as well as the themes from the focus group with participants. The fourth section reveals findings from the CPCC's interview.

Pre-intervention interview themes

Pre-intervention interviews were designed to gain an understanding of what it was like struggling with obesity for these participants. Six main themes emerged from the pre-intervention interviews: 1) weight as a barrier/disconnect in relationships with others; 2) not recognizing self; 3) excuses for weight; 4) lack of control over weight; 5) awareness of steps to weight loss; and 6) desire to be healthy. Illustrative comments that embody the majority of responses by participants for each theme are presented in Table 2.

Post-intervention interview findings

Post-intervention interviews were employed to gain an understanding, from the participants' perspectives, of what had changed since the beginning of the study and to gain insights into their coaching experience. Six main themes emerged from the post-intervention interviews that reflect what participants attributed to the impact of the intervention: 1) increased self-confidence; 2) learning to cope more effectively with life; 3) giving self permission to put self first; 4) continued emotional healing; 5) the importance of social networks; and 6) learning to step outside of comfort zone. Illustrative comments that exemplify the majority of responses by participants for each theme are presented in Table 3.

Focus group findings

The focus group was utilized to understand what happened since the study ended and how participants were planning on moving forward. Six main themes emerged from the focus

group: 1) weight was a symptom; 2) increased self-care; 3) life coaching and weight loss as a journey; 4) support required as a motivator; 5) relationship with coach; and 6) increased awareness. Illustrative comments that represent the majority of responses are displayed in Table 4.

Participants also discussed suggestions for future studies during the focus group. Half of the participants would have preferred sessions in person to help increase accountability. The other half of participants preferred sessions over the phone because it was very convenient. All participants wanted the study to continue past six months and agreed that one-year or longer would have been preferred. In their view, increasing the number of coaching sessions over a longer period of time would have kept the momentum that was just beginning to start for some participants and would have aided in the continued change in behaviour leading to, potentially greater weight loss. Three participants wanted the opportunity to connect with other participants during the study. Finally, participants craved an outlet to report their successes throughout the intervention to people in addition to the study's CPCC.

Table 2

Quotations supporting each theme from pre-intervention interviews

Weight as a barrier/disconnect in relationships with other
"[My weight] represents a barrier or wall that I hide behind. It represents a wall that stops me from doing things I want to do."
"[My weight] represents withdrawal."
"And then I even take it a step further where sometimes, I think I'm hiding behind [my weight]."
Not recognizing self
"When I look in the mirror, I can see myself but I don't always recognize myself as being me. I'm not a fat person."
"I still think of myself as a thin person and when I look in the mirror I don't recognize myself."
"Who you are inside is not who you become outside. I've been in shock whenever I look at a window or a mirror, just a glance that that might be me and so I think it's more just, it's sometimes disbelief."
Excuses for weight
"Sometimes I justify [my weight] with genetics, metabolism being slowed down by medication I was on, whatever."
"I'll make excuses. Excuses why I've continued to put weight on instead of, and not making a really good effort to do something to get rid of the weight. Excuses like, 'oh, it's the medication I am on' or 'I can't exercise because it hurts too much'."
"I guess a few excuses. My Mother was overweight even though all the children weren't but as we got older we tended to gain weight and keep it on. You know I can make up excuses."

Lack of control over weight

"[My weight represents] loss of control. Not able to follow a plan…loss of control is where I'm eating indiscriminately and seeing it in the weight gain."

"I'm not quite in control of [my willpower and weight] as I used to be or what I would like to be."

"I think I'm addicted to food….Every day I think how am I going to fix this? That's the only thing that's in my head as I have to get this under control and how can I?"

Awareness of steps to weight loss

"[To make my ideal weight come true] I would have to say yes to a commitment to eating right and exercising right. Say no to eating wrong and not exercising."

"I would have to say yes to increased exercise and no to junk food. And yes to time for myself."

"I'd have to say yes to an exercise machine that I can do. I'd have to say no to a fair amount of eating habits and I definitely would have to say no to the times I eat, the late night snacking."

Desire to be healthy

"I would like to be, I guess I would like to be fit. I would like to be completely healthy. No, I don't want to be thin. I want to feel strong, be strong, and look strong. I want to be strong and healthy."

"I'd like to have more energy….I'd love to travel and have the energy to travel and be more active."

"I wouldn't have this body and I would be able to be physically active and out there and doing things."

Table 3

Quotations illustrating each theme from post-intervention interviews

Increased self-confidence
"I feel a lot better about who I am and I learned to stand tall in my own shoes."
"If I don't [take control of my life], who's going to? So [my life] has changed in the sense [that] I have that confidence and that go-to again. You know, I've started volunteering again and I'm already making a return to work… for next January."
"So [working with the CPCC] game me the confidence to know that what I was doing is right and the eating, and especially the exercise, gave me the mental ability to cope with my issues."
Learning to cope with life
"I'm more active, I'm also having more pain but I'm able to deal with it a little bit better because I'm feeling better about myself."
"I'm more able to tackle things where as before it was, I was so overwhelmed with existing that the thought of thinking about what I was going to eat…no that was just too much that day or most days."
"I have a much better handle on my stress. I guess [that] would be part of what I learned so that I can get perspective on what's going on around me. Perspective on what I'm doing or what I'm not supposed to be doing or how to turn things around to a more positive aspect for me."
Giving permission to put self first
"My priority now is really about me and that's huge, where it was [before the study] always about my kids. And I'm able to make it more about me because they're older and they

respect that I've changed, that it's all about me, and they benefit from it like with the [healthier] food and that sort of thing and they're really supportive and happy."

"I've got to put myself first, you know, my children are old enough. They don't need me as much and my husband too. I'm willing to say no, not right now, and you know, period."

"I've learned to set boundaries and say, 'you know what? My time is important for me too, not just for you.'"

Emotional healing

"I had been sort of dealing with my issues with [family members] for the first couple of sessions with [the CPCC]. I just sort of finished that off…so that was nice, it's really nice to not have that…that painful feeling inside me sometimes when I think about [my family] I'm used to having a painful feeling and it's the first time in my life…that I've been without that painful feeling, so that's new to me."

"[It was] so life changing working with someone [the CPCC] who stepped beyond just the physical part because what was holding me back was real emotional stuff."

"The things that were the more emotional healing were, I definitely attribute that to the coaching."

The importance of social networks

"I'm definitely not a gym person, there's got to be a social benefit, so it has to be fun social for me, which boot camp was perfect for because we bonded with girls."

"Having somebody else to turn [the CPCC] to was really, really important, so seeking support is really good."

Learning to step outside of their comfort zone

"I'm stepping out of my comfort zone and becoming more social than I would normally feel comfortable with. I have a tendency to isolate myself a little bit and I'm kind of pushing myself to call old friends, make new friends."

"I think sorta the fact that to do that sort of [self] work, is to just get back, step back in life and I was not really out but I think I was observing more than I was being. Stepping in and being part of your life in an active way."

"Instead of sitting back as I kind of decided to play the victim role or the poor, poor me role or whatever, I've decided that if something is going to change then I'm going to do something about it."

Table 4

Quotations supporting each theme from the focus group

Weight as a symptom

"I was attracted to getting into the program when I read [the ad] in the [local newspaper]. But I was so so so so stuck but weight wasn't the issue. The weight was the symptom, not the issue of all the other things that were stopping me…so for me, [the study] was about returning and finding me."

"I think for me, [the coaching] was more of an impact on other parts of my life than weight….For me, [the coaching] showed me how much how other things were impacting – that my weight wasn't just about food – that it was a lot more than food, a whole lot of other things and really, [the coaching] kick-started that part of me."

Increased self care

"So making choices. I'm on the treadmill every morning; I'm like 'ok, I have to make a choice…I don't get to get that piece of dessert that I want.' I do make those choices now. But as far as the other parts of it [weight management] are concerned, one of the big things for me was to learn to say no, and, uh, we [the coach and I] went into that really early on, real early on. To say no to others."

"I have to be a priority, and taking time during my day to make me a priority. Whether that means mindfulness techniques, spending time doing mindfulness stuff. You know, incorporating stuff like taking 15 minutes when I'm feeling really overwhelmed and I'm thinking 'well, I gotta get this done and that done and whatever' and saying 'but you know what? Right now what I need is 15 minutes in a tub or 10 minutes to close my eyes and just deep breathe.'"

Weight loss and life coaching as a journey

"I'm working out. In terms of goals and such, I've got things, we did the [wheel of life – a task for clients to determine how satisfied they are with their life]. It's your blueprint of where you want to be. It's all a process, so you're getting some of those things done and I'm on track [to a healthier life]."

"Yeah, I've had to start and re-manage [my exercise routine], and starting and stopping is really difficult. So, but this time I took [exercise] really slow and I incorporated pilates so I think I've got the pain stuff managed. I'm well into the weight [training] and now I'm building towards the upper [body], so I really got a good base for [an exercise routine]. Now I've got to start on my nutrition."

"It took me a lifetime to get to this [weight]. I don't expect to overcome it completely."

Support required as a motivator

"I need to go [to the gym] because I really feel I need – sort of like the buddy system thing – I need to be around people who like to do that sort of thing. I have my husband and my son, both don't want to exercise…I want for me to have people around me that are interested in improving [their physical fitness]."

"Well, I get great support from my husband. In the winter, he'll say 'I'll scrape the snow or I'll get the car started for you' and that's great because if he's at it that means I get to go [to the gym]. That's special to me."

"I got the feeling that [people at the gym] are going through this [weight struggle] together, I mean, I value people that who are going through this [weight struggle] together with me. I mean, I value the information that I'm being [taught], I try to suck in all of the knowledge that I'm learning, but I enjoy and I feel motivated by the people who are [exercising] with me."

Relationship with coach

"[The coaching] is serendipitous for me. It's me and [the coach] having to face a health issue and having to get real with the [weight problem]….And being able to say anything to [the coach] was like talking to a best friend. Or hoping that she was your best friend, though not always!"

"And part of [the ease of the study] was that you knew you could talk to [the coach] about [anything]. So you had another sounding board as well, so I went into it as planned: 'I'm going to take every speck of [the coaching session]'. So I wasn't quitting for a second."

Increased awareness

"On the, [wheel of life – a coaching tool] that [the coach] had us do first, one of the things that I had was that I needed more fun in my life. I basically hung out with one friend, and I didn't manage and nurture my friendships that well, so people kind of fell away over the years, and I had regrets about that. What I've been doing since the study is trying to stay in contact with people, you know, saying 'hey, let's go for a coffee', and being more involved, and that's a big change for me, and I finally realized [the importance of nurturing friendships]"

"In addition to the vegetables, I'm also allowing myself to have desserts. [The coach] and I talked about the smoking/drinking thing, and for me, a couple of glasses, 3 or 4 glasses were [too much]. But, chocolate, that tastes equally good, something small, being able to [still enjoy treats], enjoy [the chocolate], [and still] keeping track of the weight [works for me]. I'm allowing myself to enjoy things in small doses."

CPCC interview results

The purpose of the CPCC's interview was to gain insights into her coaching experience in service of understanding the coaching competencies that were particularly useful when working with these participants. Suggestions for future coaches working with individuals struggling with obesity are also provided.

All three styles of CALC (fulfillment, balance, and process) (Whitworth et al., 1998; 2007) were used during the coach's sessions with participants. Balance (used to help shift clients' perspectives in order to facilitate making behavioural choices) and process (addressing the internal emotional experience of the client in the present moment) were used more frequently than fulfillment (exploring what it means for clients to live true to their values). However, fulfillment coaching was used at the beginning of the coaching relationship to help participants clarify their values, envision their future self, and complete the wheel of life to identify areas that were not being lived to their full potential. In the CPCC's view, two of the most powerful tools that were used included powerful questions and "outrageous" homework (used at the end of sessions as a way to elicit continued reflection and exploration between coaching sessions). Both of these tools, especially the "outrageous" homework, provided a safe environment for participants to practice saying "no" and negotiating with the coach in service of fulfilling their over-arching agenda. Becoming aware and working with the participants' inner saboteur (i.e., negative self-talk) was also prominent throughout the coaching relationship and seemed to strengthen participants' ability to say 'no' which, in turn, helped clients become centre stage in their own life. True to the Co-Active model, the agenda had to come from the client – even if it didn't necessarily align with the participant's ultimate agenda or the agenda of the study to explore MI via CALC for its efficacy in weight loss. The CPCC also used acknowledgement (a skill used to identify

who the client is rather than complimenting or praising his/her action or story) as a competency throughout the coaching experience. However, it was noted that the CPCC used this tool sparingly and it was only employed when definite action had been taken. The purpose of Co-Active coaching is to deepen learning and/or forward action; if one of these main purposes is not used, then coaching is deemed not to be taking place, merely an interesting conversation. The CPCC perceived that if she acknowledged on a regular basis or as a form of comforting, it would keep participants stagnant and defeat the purpose of coaching. Finally, the CPCC viewed clients as naturally creative, resourceful, and whole as exemplified when she said, "… it was amazing to me, their inner strength, their fortitude, how they were able to juggle so many different priorities, so many different challenges, so many different agendas." Even during times when participants may have been struggling, the CPCC maintained that they were not broken and had the power to find their own answers and make the changes they desired.

The CPCC in this study shared some insights that may be useful to coaches who would like to pursue a practice with this population. Specifically, the study's CPCC recommended that: each program or course of action be tailored to each client; the CPCC should remember to drop assumptions on what the client may or may not be ready for; when participating in a research study, CPCCs must be invested in their clients and not the outcome of the study; the CPCC should remember that the agenda must come from the client who may or may not want to focus on weight-related issues; CPCCs should be fearless and transparent with their reflections to clients; and a strong sense of empathy is needed when working with this population. Quotes supporting the coach's feedback are presented in Table 5.

Table 5

Quotations supporting CPCC's feedback

Styles of coaching

"….when I look at the three types of coaching, the fulfillment, the balance, and the process, I would say in this client group, the two that were really used most often were the balance and the process coaching."

"I used fulfillment initially in order to get, you know, to get a future-self perspective, but the balance, [was used for] understanding that wheel or using that wheel for choice."

Powerful questions and homework

"So the really powerful questions allowed the clients just to really [learn] and make good use of each and every coaching experience."

"….as a coach I see myself fulfilling two really important functions – one is to ask incredibly powerful questions and the other is to give outrageously difficult homework."

Saboteur

"I mentioned the wheel of life, um we did a lot of values clarification, we did a lot of work on discovering the gremlins [inner critic] um and, and how to handle that self-sabotaging."

"….I really think that this technique [learning about the client's inner critic] played a good part in that. Interestingly enough, I spent time teaching them about their gremlin [a coaching term for the internal judgemental voice of the client]."

Agenda

"So I would often look for an agenda in what they would tell me about, but what they were really um, what I became involved in, as a coach, was more listening to their story and attempting to get them to have an agenda, if you would."

"I guess that's a point I'm trying to make is that from, from the researcher's point of view, they have a certain agenda, but you as a coach don't."

Acknowledgement

"And I had to self-manage to make sure that I used it very sparingly, used acknowledgement very sparingly, and only when um definite action had been taken. Um and then it was interesting for me, and surprising for me, to see how quickly, throughout the process, how quickly, or how much more frequently I was able to acknowledge more quickly as the process went on because they started really making significant change and gain."

"I was very on alert for any small amount of gain or action that I could acknowledge, I had to make sure that I didn't acknowledge as a means of comforting…."

Transparent reflections

"….I realize that I should have, um I should've confronted them far sooner than I did in the study about the fact that we were [having a conversation and not a coaching call]. And um, I think their end result would've been significantly better had I done that sooner and more effectively. So I learned that."

Invested in outcome

"And the … piece of advice is recognize that the ownership, revise with both the coach and the client, that you cannot, absolutely cannot become invested in [the client's weight loss].

"As, as opposed to, you know, teaching the whole student, and I guess that's a point I'm trying to make is that from, from the researcher's point of view, they have a certain agenda, but you as a coach don't."

Empathy

"And you have to have a great deal of understanding and empathy for people who are struggling with pain and suffering."

Discussion

The purpose of this study was to assess qualitatively the impact of MI using CALC as an intervention for adults struggling with obesity. Specifically, using pre- and post-interviews as well as a focus group, the researchers of the current study were interested in what it was like living as an individual struggling with obesity; what it was like being involved in the study; and how participants were planning on moving forward with their lives. At the end of the intervention, the CPCC of the study was interviewed to shed light on the tools and techniques used predominantly with these participants, as well as to provide suggestions for coaches interested in working with this population in the future.

Prior to starting the study, participants reported not recognizing themselves anymore, using weight as a barrier to relationships with others, using excuses to justify their weight, lack of control over their weight, and a desire to be healthy. At the conclusion of the study, participants conveyed a new or increased self-confidence, novel and effective ways for coping with life, putting self first, continued emotional healing, an increase in social networks, and learning to step outside of their comfort zone. Six months after the conclusion of the coaching sessions, six participants returned for a focus group where they discussed how integral the relationship with the coach was to their personal success, how weight was just a symptom to other challenges in their life, how changing lifestyle behaviours is a journey that takes time, how they have maintained their ability to put themselves first and say no to others, how support is needed to make changes that affect their weight, and how a new awareness about the choices they make will affect their body and mind. Participant feedback at the end of the intervention suggests that motivational coaching or MI using CALC skills is an effective method that supports clients, who are struggling with obesity, in making changes that align with their goal of living a healthy life. Although it is known that weight gain is due

to an imbalance of calories in compared to calories out, participants in the current study shed light on the important point that there are far more emotional factors that influence an individual's weight issues.

The overwhelming difference between pre- and post-intervention was that participants felt empowered following the intervention. Prior to the start of the coaching sessions, all participants reported in the pre-interview that they had lost control over their weight. For some, this lack of control led them to not even recognize themselves anymore as they continued to create obstacles that resulted in an inability to make any changes that would benefit their weight. Wallerstein (1992) contends that powerlessness serves as a risk factor for disease. However, empowerment serves as a health-enhancing strategy and an important promoter of health. Whether their weight decreased significantly (n = 6) or remained stable throughout the intervention (n = 2) (see Newnham-Kanas et al., under review), these participants ended the intervention empowered to make choices that validated and supported their desire for a healthier body and mind.

Prior to the start of the intervention, participants demonstrated perceived powerlessness through their low self-confidence and struggle to connect back with others in their lives. It is well documented that self-esteem is lower in adults struggling with obesity compared to non-obese individuals (Ackard, Neumark-Sztainer, Story, & Perry, 2003; Linde et al., 2004; Starky, 2005). Social isolation is often linked with obesity and is thought to augment weight by increasing the psychological vulnerability that may result in over-eating and sedentary behaviour (Puhl & Brownell, 2003). Participants at the end of the intervention and throughout the six-month follow-up period experienced an increase in self-confidence and actively sought out social contact. For example, participants who put themselves first and said no to members of their family and friends whose needs would normally trump their own,

demonstrated and reported an increase in self-confidence. Participants also connected with friends they had not seen in years and joined clubs and groups to fulfill their desire to develop a social network. Aiding individuals to shift their attitudes, beliefs, and behaviour, will ultimately lead to weight loss. With this shift of thinking, their definition of success expands with the ultimate goal that any changes made will remain sustainable (Kausman & Bruere, 2006). For participants in this study, clinically significant increases in self-esteem were also measured and reported in Newnham-Kanas et al. (under review). These pre- and post-results align with previous MI via CALC studies by the research team, thereby reinforcing the relationship between this intervention and increased empowerment (Newnham-Kanas et al., 2008; van Zandvoort et al., 2008; 2009). The increase in self-esteem and self-confidence at the end of the intervention highlights the impact of MI using CALC skills can have when working with individuals who are struggling with their weight.

Six months after the last coaching session, six participants returned for a focus group. Many of the points discussed above were re-iterated; however, specific emphasis was placed on the relationship each participant had with the CPCC and how fundamental that was to her personal success. Whitworth et al (1998; 2007) and Miller and Rollnick (2002) underscore that the power of coaching/MI lives within the coach and client relationship. Whitworth et al. (2007) explain that the reason coaching is a powerful medium for change is because it is "inherently dynamic" (p. 15). In other words, it creates an empowered relationship for change where the coach and client work together, as co-creators, to enable clients to make changes in their life. As a result, these changes are expected to be integrated into their daily living and actually have an impact on their life (Kausman & Bruere, 2006).

Support was reported by participants as critical to their success in managing their weight. Support for participants in this study included the CPCC, family, and friends. It has

been reported that support for individuals struggling with their weight plays an important role in maintaining weight-loss (Perri, Sears, & Clark, 1993; Wolfe, 2004). Prolonged treatment and professional support are also key factors in increasing weight maintenance (Elfhag & Rossner, 2005).

According to Whitworth et al. (2007) asking powerful questions rather than telling answers is a cornerstone of the model that encourages clients to self-examine their own choices and behaviours. Specifically, "powerful questions invite introspection, present additional solutions, and lead to greater creativity and insight" (p. 77). This same skill was found to be used most frequently by CPCCs in a study conducted by Van Zandvoort et al. (2008) where the impact of Co-Active coaching was assessed as an intervention for University students who were obese. According to Kausman and Bruere (2006) and Foster, Makris, and Bailer (2005), this form of questioning empowers clients to find solutions that will actually garner results that work best for them.

Acknowledging participants was another skill used in this study and used frequently in the study conducted by Van Zandvoort et al. (2008). Acknowledgement is used in the Co-Active model to highlight the inner character of the client (Whitworth et al., 2007), not to praise what clients do. In turn, this tool may aid in increasing clients' self-efficacy, or a belief in their ability to complete successfully a given task (AbuSabha & Achterbert, 1997). If individuals perceive that they are capable of completing a task, they are more likely to engage in that task (Donnelly, Eburne, & Kittleson, 2001).

It is important as coaching becomes more niche related, to have suggestions and feedback from CPCCs who have experience working with a particular group of individuals, to share that information with new CPCCs in the area to strengthen their effectiveness in meeting the clients' goals. It became evident very quickly to the CPCC that each program or

course of action had to be tailored to each client. As a result, she had to drop her assumptions regarding client readiness to/for change. The CPCC, especially when working in a research study, cannot be invested in the study's outcome but instead must be fully invested in the client's agenda. Specifically, even if a participant has joined a research study to help him/her lose weight, the participant may not realize that he/she is not ready to start losing the weight. Rollnick, Heather, and Bell (1992) explain that it is important for the counsellor to determine the client's degree of readiness to change and then select a course of action that is most suitable to the client. If there is a mismatch on what the client is ready for and what the CPCC believes the client is ready for, resistance may ensue thereby halting any chance of change for the client. Even if moving forward does not elicit making a decision, let alone changing behaviour, it is considered a suitable outcome for clients.

From the coach's perspective, at times, it is imperative that the CPCC elicits the agenda for the coaching session from the client. Although this is explicitly part of the Co-Active model (Whitworth et al., 2007), often times the client will not have an agenda at the start of a coaching session and it can be very easy, without being aware, that the purpose of the study is now the agenda for the session. Without even realizing it, this shift may form a power imbalance where the CPCC is telling the client what to do which may risk the client feeling disempowered and precluding them from finding their own answers and solutions (Kausman & Bruere, 2006).

It was also noted by the CPCC that in service of participants, the CPCC must be fearless and transparent with his/her reflections, even if those reflections may risk losing the participant from the study. This touches again on the point that the CPCC must be invested in the participant and not in the study's outcome. Finally, the CPCC expressed that a strong sense of empathy is needed when working with this population. All of the participants in this

study had been struggling with their weight for years. Behaviours that have taken years to develop do not disappear quickly and require deep routed empathy to create a safe environment for participants to explore their behaviours, decisions, and lived experiences (Kausman & Bruere, 2006). As well, given the stigma associated with individuals struggling with obesity (Puhl & Brownell, 2003) and the reported frustration these individuals have when working with health professionals that has resulted in preventing clients from seeking help, empathy is crucial in putting individuals struggling with obesity in a comfortable environment where they can explore their situation without fear of being judged (Foster et al., 2005).

Limitations and Conclusions

A limitation of the current study is the small sample size (n=8). However, given that the study used a single-subject multiple-baseline design and had one volunteer coach, increasing the number of participants was not feasible. Although the researchers used a recruitment method that reached a variety of individuals, the sample obtained cannot be assumed to be representative of the entire population of women struggling with obesity between the ages of 35-55. It should be noted that the CPCC was female, which may have influenced the level of trust (i.e., increased the level of trust between coach and participants) for the female participants working on such sensitive issues as weight management. It is unclear what might have changed if the CPCC was male working with eight women and whether it might have played a role in designing the alliance, in the co-active bond, and in the issues shared by participants. The gender alignment between coach and participant is a limitation of this study. This limitation along with the small number of participants, determined by the study's design, reduce the generalizability of the study's results.

Despite these limitations, several important conclusions and recommendations can be derived regarding the coaching experience as an intervention for losing weight and the experience of coaching individuals who are struggling with their weight:

1. Coaching was associated with increased empowerment resulting in greater self-care, increased social networks, greater awareness of choices and consequences, and greater emotional healing.
2. Social support is needed for individuals to maintain their weight.
3. Powerful questions and homework were coaching skills used predominantly in this study.
4. Acknowledgment on behalf of the CPCC was used for supporting clients when change had occurred – not as a comforting tool.
5. Balance and process coaching was used more frequently than fulfillment coaching to impact clients' learning and forward their action.
6. The agenda has to come from the client.
7. The CPCC must decrease his/her assumption on what the client is ready for; readiness must be the client's readiness not the CPCC's aspiration for the client.
8. When involved in an obesity study, the CPCC has to remain invested in the client's outcome – not the desired outcome of the study.
9. The coach-client trust and transparency is fundamental to the client's success.

It is suggested that future research increase the number of participants to increase generalizability. As recommended by participants, it is recommended that a similar study be conducted with coaching sessions lasting a full year. Additionally, we recommend adding a physical activity and nutrition program in conjunction with coaching to determine whether

those programs along with coaching would provide a greater impact on weight-loss and maintenance.

Although the relationship between psycho-social disturbance and obesity reveals inconsistent results in published research (Fabricatore & Wadden, 2003), the results of the current study must be taken into consideration regarding the impact that obesity has on an individual's life and the effect MI via CALC skills can have in helping to resolve or change behaviours that affect an individual's health. This type of qualitative research is an integral part of developing effective treatment options for individuals who are struggling with obesity. As echoed by Kausman and Bruere (2006), if researchers and clinicians concentrate strictly on the changes in weight, waist circumference, and BMI, we lose the ability to understand the factors that play an important role in determining an individual's behaviour that ultimately affects his/her weight.

In addition to the importance of studying the impact of MI via CALC on people who need help, another important set of factors to explore are the characteristics of the individuals who make this method of behaviour change so impactful for participants. Therefore, the following chapter presents findings from a study that profiled CPCCs.

References

AbuSabha, R., & Achterberg, C. (1997). Review of self-efficacy and locus of control for nutrition- and health-related behavior. *Journal of the American Dietetic Association, 97*(10), 1122-1132.

Arkowitz, H., Westra, H.A., Miller, W.R., & Rollnick, S. (Eds.) (2008). *Motivational interviewing in the treatment of psychological problems*. New York: The Guilford Press.

Berg-Smith, S. M., Stevens, V. J., Brown, K. M., Van Horn. L., Gernhofer, N., Peters, E. et al. (1999). A brief motivational intervention to improve dietary adherence in adolescents. *Health Education Research, 14*(3), 399-410.

Butler, C.C., Rollnick, S., Cohen, D., Bachman, M., Russell, I., & Stott, N. (1999). Motivational consulting versus brief advice for smokers in general practice: a randomized trial. *The British Journal of General Practice, 49*(445), 611-616.

Calle, E.E., & Kaaks, R. (August 2004). Overweight, obesity and cancer: Epidemiological evidence and proposed mechanisms. *Nature Reviews, 4*, 579-591.

DiIorio, C., Resnicow, K., McDonnell, M., Soet, J., McCarty, F., Yeager, K. (2003). Using Motivational Interviewing to Promote Adherence to Antiretroviral Medications: A Pilot Study. *Journal of the Association of Nurses in AIDS care, 14*(2), 52-62.

Donnelly, J.W., Eburne, N., & Kittleson, M. (2001). *Mental health*. Massachusetts: Allyn & Bacon.

Elfhag, K., & Rossner, S. (2005). Who succeeds in maintaining weight loss? A conceptual review of factors associated with weight loss maintenance and weight regain. *Obesity Reviews, 6*, 67-85.

Fabricatore, A. N., & Wadden, T. A. (2003). Psychological functioning of obese individuals. *Diabetes Spectrum, 16(4),* 245-252.

Foster, G.D., Makris, A.P., & Bailer, B.A. (2005). Behavioral treatment of obesity. *The American Journal of Clinical Nutrition, 82*(suppl), 230s-5s.

Gortmaker, S., Must, A., Perrin, J., Sobol, A., & Dietz, W. (1993). Social and economic consequences of overweight in adolescence and young adulthood. *The New England Journal of Medicine*, 329(14), 1008-1012.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. London: Sage.

Hasler, G., Pine, D., Kleinbaum, D., Gamma, A., Luckenbaugh, D., Ajdacic, V. et al. (2005). Depressive symptoms during childhood and adult obesity: The Zurich cohort study. *Molecular Psychiatry, 10,* 842-850.

Irwin, J.D., He, M., Sangster Bouck, L.M., Tucker, P., & Pollett, G.L. (2005). Preschoolers' physical activity behaviours. *Canadian Journal of Public Health, 96*(4), 299-303.

Katzmarzyk, P.T., & Janssen, I. (2004). The conomic costs associated with physical inactivity and obesity in Canada: An update. *Canadian Journal of Applied Physiology, 29*(1), 90-115.

Kausman, R. R., & Bruere, T. T. (2006). If not dieting, now what?. *Australian Family Physician, 35(8),* 572-575.

Lau, D.C.W., Douketis, J.D., Morrison, K.M., Hramiak, I.M., & Sharma, A.M. (2007) '2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children'. *Canadian Medical Association Journal,* 176(8 Supplemental), S1-13.

Linde, J.A., Jeffery, R.W., Levy, R.L., Sherwood, N.E., Utter, J., Pronk, N.P., & Boyle, R.G. (2004). Binge eating disorder, weight control self-efficacy, and depression in overweight men and women. *International Journal of Obesity*, *28*, 418-425.

Mesters, I. (2009). Motivational Interviewing: hype or hope? *Chronic Illness*, *5*(3), 3-6.

Miller, W.R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people to change addictive behavior*. New York: The Guilford Press.

Newnham-Kanas, C.E., Gorczynski, P., Irwin, J.D., & Morrow, D. (2009). Annotated bibliography of life coaching and health research. International *Journal of Evidence Based Coaching and Mentoring*, 6 (2), 1-12.

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (2008). Life coaching as an intervention for individuals with obesity. *International Journal of Evidence-Based Coaching and Mentoring*, 6(2), 1-12.

Newnham-Kanas, C., Irwin, J.D., Morrow, D., & Battram, D. (under review). The quantitative assessment of Motivational interviewing using co-active life coaching skills as an intervention for adults struggling with obesity. *International Coaching Psychology Review*.

Newnham-Kanas, C., Morrow, D., & Irwin, J.D. (2010). A functional juxtaposition of three methods for health behaviour change: Motivational Interviewing, Coaching, and Skilled Helping. *International Journal of Evidence-Based Coaching and Mentoring, 8*(2), 27-48.

Patton, M. Q. *(*2002*). Qualitative research and evaluation methods.* Thousand Oaks, CA*:* Sage.

Perri, M.G., Sears, S.F., & Clark, J.E. (1993). Strategies for improving maintenance of weight loss. Toward a continuous care model of obesity management. *Diabetes Care, 16*, 200-209.

Puhl, R., & Brownell, K.D. (2001). Bias, discrimination, and obesity. *Obesity Research, 9(12),* 788-805.

Rollnick, S., Heather, N., & Bell, A. (1992). Negotiating behaviour change in medical settings: The development of brief motivational interviewing. *Journal of Mental Health, 1*, 25-37.

Shaw, K., O'Rourke, P., Del Mar C., & Kenardy, J. (2007). Psychological interventions for overweight or obesity (review). *Cochrane Database of Systematic Reviews*. Issue 2. Art No.:CD003818. DOI 10.1002/14651858.CD003818.pub2.

Shields, M., Tremblay, M.S., Laviolette, M., Craig, C.L., & Janssen, I. (January 2010). Fitness of Canadian adults: results from the 2007-2009 Canadian health measures survey. *Health Reports (Statistics Canada, Catalogue no. 82-003-XPE), 21*(1), 1-15.

van Zandvoort M.M., Irwin, J.D., & Morrow, D. (2009). The impact of Co-active life coaching on female university students with obesity. *International Journal of Evidence-Based Coaching and Mentoring, 7(1),* 104-118

van Zandvoort, M.M., Irwin, J.D., & Morrow, D. (2008). Co-active Coaching as an intervention for obesity among female university students. *International Coaching Psychology Review*, 3(3), 191 - 206.

Wallerstein, N. (1992). Powerlessness, empowerment, and health: implications for health promotion programs. *American Journal of Health Promotion, 6*(3), 197-205.

Wang, S.S., Brownell, K.D., & Wadden, T.A. (2004). The influence of the stigma of obesity on overweight individuals. *International Journal of Obesity, 28,* 1333-1337.

Warschburger, P. (2005). The unhappy obese child. *International Journal of Obesity, 29*, s127-2129.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (1998). *Co-active coaching: New skills for coaching people toward success in work and life.* California: Davis-Black Publishing.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (2007). *Co-active coaching: New skills for coaching people toward success in work and life (2nd ed.).* California: Davis-Black Publishing.

Wolfe, W.A. (2004). A review: maximizing social support – a neglected strategy for improving weight management with African-American women. *Ethnicity and Disease, 14*, 212-218.

World Health Organization. *Obesity and overweight*. (September 2006). Retrieved from http://www.who.int/mediacentre/factsheets/fs311/en/index.html

Study 3

Findings From a Global Survey of Certified Professional Co-Active Coaches[3]

It is clear that life coaching, in both executive and health arenas, is continuing to grow as a means for individuals to make changes in their professional and personal lives, as evidenced by a number of empirical studies (e.g., Grant, Green, & Rynsaardt, 2010; Kilburg, 2004; Newnham-Kanas, Gorzynski, Irwin, & Morrow, 2009; Wasylyshyn, 2003) inclusive of those explored within this dissertation. At the same time, opportunities to become trained as a life coach appear vast given the over sixty training schools that can be found using a simple "google" search. In 1999, The International Coach Federation (ICF), which is self-described as the voice of the global coaching profession, reported over 16,000 coaches affiliated with the ICF worldwide (Morris, 2000) and numbers as high as 50,000 worldwide in 2003 (Hyatt, 2003).

Coaches around the world use a variety of titles ranging from "Executive Coach" and "Business Coach" to "Life Coach" and "Personal Coach" (the term "coaching" will be used throughout the document to refer to any of these titles unless otherwise mentioned in the results section; Gale, Liljenstrand, Pardieu, & Nebeker, 2002; Liljenstrand & Nebeker, 2008). The different titles used extends coaching's boundaries beyond the boardroom into individuals' personal lives (Liljenstrand & Nebeker). Further, the decrease in stigma associated with coaching has also helped increase its popularity and use. For example, in executive coaching, historically only employees who were struggling would be assigned a coach. However, with coaching's professional evolution and elevated profile, it is now fairly common for successful employees to receive coaching to increase performance even further

[3] A version of this chapter has been published in the International Journal of Evidence Based Coaching and Mentoring (2011), 9(2), 23-36. A copyright release can be found in Appendix A.

(Liljenstrand & Nebeker). In addition, coaching has separated itself from traditional mentoring programs with the coach being viewed as a sounding board and "thought partner" (Liljenstrand & Nebeker, p. 58) instead of an expert. Because employee perceptions regarding why a coach was assigned to an employee have shifted, there was a decreased resistance to coaching and an increased demand for coaching services in the workplace.

Coaching is not a new phenomenon. Grant and Zackon (2004) reported that peer-reviewed coaching-specific literature first appeared in 1937 (Gorby, 1937). A significant portion of the literature first released on coaching was focused primarily on organization and executive coaching from the fields of management consulting, training and development, and consulting psychology (Kampa-Kokesch & Anderson, 2001). According to Feldman and Lankau (2005), academic research of executive coaching has been sparse. Grant and Zackon reiterated this point and reported only 131 papers in the peer-reviewed behavioural science press in 2003. Of those 131 articles, only 56 were empirical studies, the majority of which did not use a control group or were case studies. A recent annotated bibliography of health-related coaching publications reported a growing number of empirical studies; however, the majority of those studies lacked methodological rigor or clear explanation of the type of coaching used, thereby reducing any ability to determine whether coaching was actually associated with any behaviour change (Newnham-Kanas et al., 2009).

Currently, research supporting the validity of coaching is on the rise in both executive and life coaching arenas. Grant and Zackon (2004) reported that in the late 1960's more rigorous academic research started to emerge in the form of doctoral dissertations with an emphasis on organizational coaching. At the beginning of the 1990's, there was considerable momentum of doctoral and empirical coaching research. There are a number of studies in the health field in the areas of obesity and smoking cessation that continue the trend of rigorous

academic research that extends beyond executive coaching (Newnham-Kanas, Irwin, & Morrow, 2008; Mantler, Irwin, & Morrow, 2010; van Zandvoort, Irwin, & Morrow, 2008; 2009). Although the literature about and evidence surrounding coaching's effectiveness has grown exponentially over the last few years, very little information is known about coaches, such as their prior professions, training, coaching practices, and client demographics.

In 2004, Grant and Zackon conducted a large-scale survey of International Coach Federation (ICF) members. The ICF is the leading global organization of coaches whose mission is to support and advance the coaching profession. This was the first study specifically to examine characteristics of coaches who were members of the ICF. Grant and O'Hara (2006) contend that coaching is an emerging cross-disciplinary profession that can be considered a para-therapeutic methodology based on its emphasis on enhancing well-being, personal functioning, and goal attainment (Grant & O'Hara, 2006). Traditional therapeutic helping professions such as psychologists, psychiatrists, or social workers are regulated and carefully governed. However, there are no such regulations governing life coaches and their training. Thus, it is vital that a common knowledge base about coaching be developed. Grant and Zackon (2004) stated in their published manuscript that it is intended that future surveys will draw on a sample base that extends beyond the ICF as a means of comparison to forward research and track trends in professional coaching. Based on our team's research program that has focussed specifically on Co-Active life coaching (a particular style of coaching) and as we continue to research its impact on various health behaviours, we are interested in finding out who is drawn to this type of training as we learn more about this particular coaching approach.

Laura Whitworth and Karen and Henry Kimsey-House founded the Coaches Training Institute (CTI) in 1992. CTI offers a certification program (whereby a student can become a

Certified Professional Co-Active Coach (CPCC)) that requires completion of the first four Co-Active core coaching courses – Fundamentals of Co-Active coaching, Fulfillment, Balance, and Process – prior to starting the certification process. Certification includes the completion of a six-month program offered by CTI, an established mentoring relationship with a CPCC, Professional Certified Coach (PCC), or a Master Certified Coach (MCC) from the ICF. After successful completion of the course, and completion of requisite hours of actually coaching clients, students are eligible to take the oral and written exam (Coaches Training Institute, 2011).

Current research has revealed that Co-Active life coaching (CALC) is grounded in health-behaviour theory and, in fact, is an effective tool for putting theory into action (Irwin & Morrow, 2005). Previous research indicates that Co-Active coaching has been associated with positive health behaviour changes in the areas of obesity, physical activity, and smoking cessation (Irwin, & Morrow, 2005; Mantler, Irwin, & Morrow, 2010; Newnham-Kanas et al., 2008; Newnham-Kanas et al., 2009; van Zandvoort, Irwin, & Morrow, 2008; 2009). Co-Active coaching continues to be associated with health behaviour changes. The purpose of this study was to develop a comprehensive, applied coaching profile using a global sample of English-reading and -writing Certified Professional Co-Active Coaches (CPCCs). The intent in creating this profile was to develop a common knowledge base about coaches to track trends and understand who these coaches are. This information can be used to forward research that evaluates coaching services which will, in turn, contribute to the growing body of information needed to form the foundation of professionalism for the coaching industry.

Method

Participants

The present study was limited to CPCC's who were over 18 years of age, could read English, and had access to the Internet. An initial 1,184 CPCC email addresses were retrieved through the CTI website (www.thecoaches.com). This website allows the general public to search for a CPCC using their 'Find-a-Coach' link. Numerous search criteria are listed to help clients narrow their search. However, for the purpose of this study, the only criterion used was country of origin. Of the 1,184 CPCCs retrieved, 102 emails bounced back as undeliverable, leaving a total of 1,082 delivered emails. Participating coaches were also accessed through the main community public discussion board provided on the Co-Active network (which is accessed through the main CTI website), and through an advertisement that was sent out in the CTI e-newsletter. Because CPCC's and non-CPCC's can access the Co-Active network and receive the newsletter, it is unclear how many CPCC's were accessed through those avenues. Prior to the advertisements on the Co-Active network and through the newsletter, 300 CPCC's completed the survey. After the additional advertisement circulated, another 90 CPCC's completed the survey for a total of 390 respondents. Prior to the last two advertisements, there was an approximate 30% response rate (this rate may be higher given that it is unclear how the final 90 CPCC's learned about the survey). Of the 390 CPCC's who started the survey, 82.9% completed the entire survey. Further details regarding participant demographics are provided in the results section. Ethical approval was received from The University of Western Ontario's Office of Research Ethics (see Appendix K).

Instrument

The survey used for this study was a revised version of the Grant and Zackon (2004) coaching survey that they graciously provided to us (see Appendix L). The questionnaire was

adapted to ensure that the purpose of this study was met. As outlined by Grant and Zackon, six broad areas were assessed: demographics (gender, age, education); coaching professionalism (credentialing, training, etc); respondents' coaching career (prior professions, length of time working as a coach etc.); coaching processes used (telephone vs. face-to-face coaching, length of session etc.); coaching practice (number of clients, techniques for generating new clients, fees, etc.); and client profiles (life coaching or executive coaching etc.). SurveyMonkey™ (www.SurveyMonkey.com), a web-based tool for posting questionnaires, was used in order that respondents could open the survey from any location they had Internet access. Once the survey was adapted, it was pilot tested with three different groups: 1) CPCC's who were not academics; 2) academics who were not CPCC's; and 3) CPCC's who were academics. These three groups were selected to ensure that all questions and answer options were applicable to CPCCs while maintaining that questions aligned with the purpose of the study and followed the research protocol. Once the first group sent recommendations for revision, the changes were implemented if they continued to align with the purpose of the study, at which point the survey was sent to the second group and so on. The questionnaire was pilot tested to ensure that the questions were understandable and reasonable (as advised by McKenzie & Smeltzer, 1997); that is, the instrument's face validity was assessed. The final version of the survey included 63 questions with response options using a variety of different response formats, such as yes-no responses, frequency and extent rating scales, multiple response alternatives, and open-ended questions. For some items, participants could choose more than one response.

Procedure

A letter of information was attached to every email that was sent to participants and to the announcement on the Co-Active network (see Appendix M). Completion of the

questionnaire served as explicit consent. Participants completed the survey by accessing the web-based survey link included in every email and advertisement. The survey took approximately 10-15 minutes to complete. The survey instrument automatically recorded participants' responses while maintaining respondent anonymity. The survey remained accessible from October 2010 to January 2011. Upon closing the survey site, responses were stored on a computer server and later downloaded for analysis. Respondents interested in receiving a copy of the results were asked to email the lead author.

Results

Coach Demographics

The majority of respondents were female (76.7%), with 36.7% between the ages of 45-54, 31.5% were aged 55-64, and 21.9% were between 35-44 years (only one coach was under 25). The majority of respondents resided in the United States (55.2%), followed by Canada (25.6%), and the United Kingdom (4.6%). The remaining 14.6% resided in Bahrain, Belgium, Denmark, Egypt, France, Germany, Israel, Japan, Luxembourg, the Netherlands, Norway, Poland, Singapore, South Africa, Spain, Sweden, Turkey, and the United Arab Emirates.

The majority of respondents held a college degree or equivalent (87.3%) with a substantial number having completed a graduate degree (45.7%). Please refer to Figure 1 for further education information.

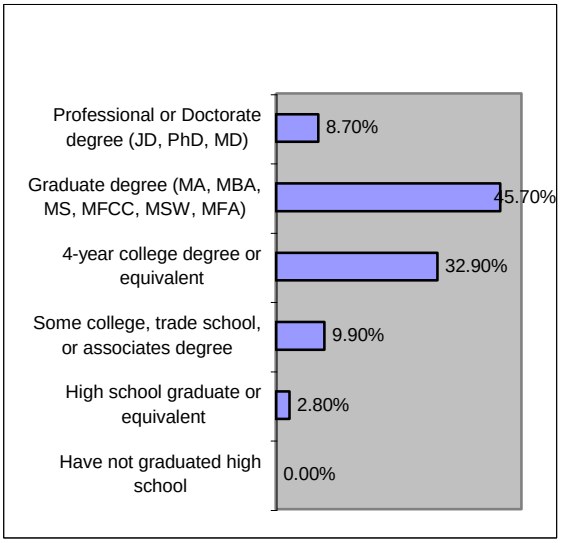


Figure 1. Highest Level of Formal Education Among CPCCs Surveyed

Coaching Professionalism

The majority of respondents had been CPCCs for a fairly short period of time with 16.4% having been a CPCC for less than a year, 30.9% for one to three years, 32.7% for three to seven years, and 19.5% for more than seven years. In addition to their CPCC certification, half of the respondents held additional coaching credentials (notably, 55.7% held an ICF credential either an Associate Certified Coach, Master Certified Coach, or Professional Certified Coach designations). Only 7.6% reported working towards an additional coaching credential. Thirty percent reported having no additional certification other than their CPCC designation.

Because the CTI website was used for coach recruitment, it was not surprising that 75.9% of respondents belonged to CTI as their professional coaching organization. A majority of the respondents also belonged to the ICF (69.2%) and membership within various regionally-formed or "local" ICF chapters was also fairly high (39.7%).

A minority of coaches (25.5%) have served in a formal role with a professional coaching organization (e.g., board of directors, local chapter host). A third of respondents (38.7%) have attended at least one ICF conference.

The majority of respondents did not have any formal training in recognizing issues of mental health (63.4%). However, 96.5% of respondents did feel comfortable referring clients to other services and 79.5% of respondents have referred clients to other services (e.g., psychologist).

Over half of the respondents have paid money to receive coaching (58.3%). At the time the survey was completed, 37.4% of respondents had a coach to whom they paid money to receive coaching and 12.1% had a coach with whom they bartered to receive coaching (e.g., they coach each other).

Coaching Career

Virtually all respondents came to the coaching profession from a prior professional background (98.9%). Previous professional backgrounds included consultants (29.4%), educators (19.5), and the helping professions such as counsellors or social workers (16%). The majority of respondents considered themselves part-time coaches who also had another profession or business (46.8%) and 36.6% considered themselves full-time coaches. A large percent of part-time coaches were also consultants (49.1%), formal educators such as teachers and professors (20.8%), and helping professionals (e.g. psychologist, counsellor; 15.6%).

Respondents fell predominantly into two age group categories when reporting when they started their coaching training: 35-44 years (35.3%) and 45-54 years (37.2%). The majority of respondents earned money as a coach for two to five years (34.7%), 23% earned money for coaching for less than two years, 29.6% earned money as a coach for five to ten

years, and only 11.8% for 10 to 15 years. The estimated personal income (in US dollars) from coaching-related services in the last year ranged primarily from less than $10,000 to between $30,000-$39,999 with 58.2% earning less than $30,000 and 37.1% making less than $10,000.

The most common coaching-related activities over the last six months reported by participants included one-on-one coaching (98.6%) and team or group coaching (55.7%). Please refer to Figures 2 and 3 for the full distribution of reported coaching-related activities in the last six months.

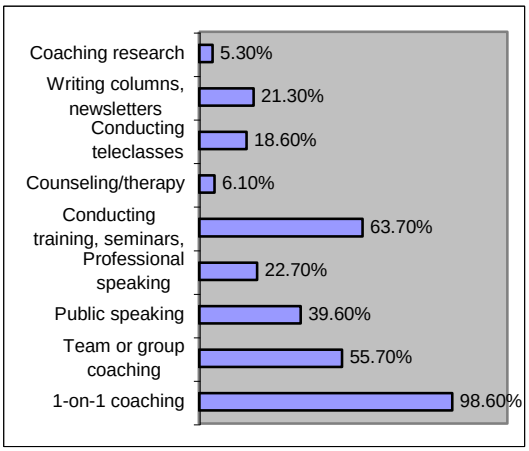


Figure 2. Results of the Distribution of Coaching-Related Activities Engaged in the Last Six Months

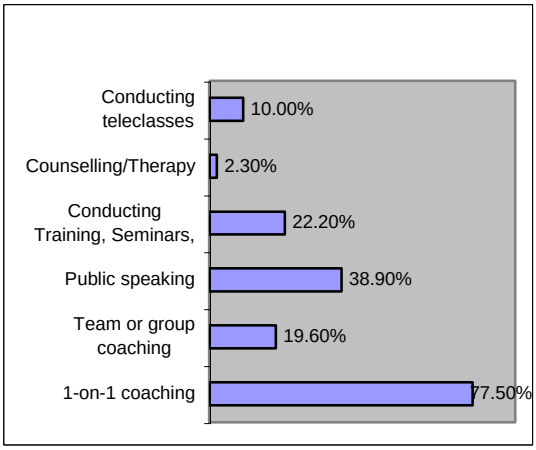


Figure 3. Results of the Distribution of Unpaid/Pro-Bono Activities in the Past Six-Months Coaching

Coaching Processes Used

The results in this section refer to how CPCCs structure their coaching sessions with their clients. Respondents primarily coached clients who lived in their same country (69.8%) and locally (within the same city/state/province of residence) (65.8%), followed by international clients (48.5%). Individual coaching sessions lasted predominantly 30 minutes to one hour (56.9%), followed by one-hour in length (37.5%). CPCCs typically worked with clients for 6 to 12 months (40.3%), followed by 3 to 6 months (29.0%).

The majority of respondents reported conducting their coaching over the phone (94.0%), followed closely by in-person (78.3%). Some CPCCs also used email or instant messaging (19%) and Internet video conferencing (24.2 %) to coach clients.

Just over 35% of CPCCs spent an average of two to five hours per week coaching clients, with an additional 32.4% spending five to ten hours per week, 19.8% dedicated 10-20 hours per week to coaching clients. Slightly more than a third (31.3%) of CPCCs coached four to six clients per month, and just under a third (28.6%) coached seven to ten clients each month.

Just over one third (31.7%) of respondents' indicated that they *sometimes* use other methods/models with their CPCC skills and 34.4% reported they *often* use additional methods/models. Many of the "additional" methods/models identified by respondents were derived from pre-existing psychological therapies, including but not limited to Gestalt therapy, Cognitive Behaviour Therapy (CBT), Positive Psychology, and Rogerian counselling techniques.

Coaching Practice

Owners or partners of a coaching practice. The majority of respondents considered themselves self-employed and sole practitioners (74.9%). Of the small number of self employed CPCCs with others working for them (3.6%), only 5.0% had another employee also working as a coach, the majority of self-employed CPCCs worked alone in their coaching business (88.4%). The majority of coaches had owned their business for between 1-6 years (77.1%) and it took 3-6 months to 1-2 years to secure ten clients. Please refer to Figures 4 and 5 for additional information on how long CPCC have owned their business and how long it took to secure ten clients.

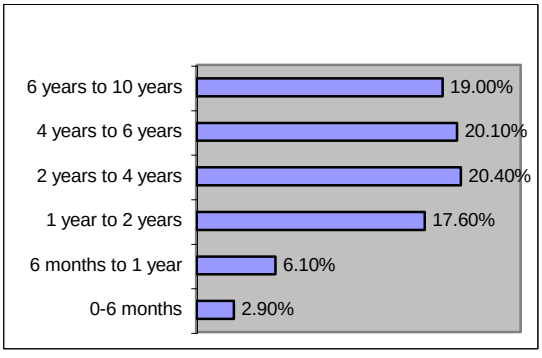


Figure 4. Results of How Long CPCCs Have Owned Their Business

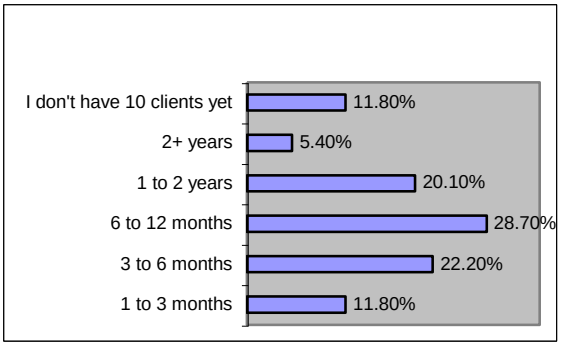


Figure 5. How Long it Took to Secure Ten Clients

Just over half (53.5%) of CPCCs who started their own company had a background in business training (ranging from a Business Administration degree to a short course such as the Business Builder course offered through CTI) while 46.8% did not. The majority of respondents did not take a business training course to start their coaching practice (74.7%). From those who did engage in a training program or come from a business background, 43.3% found the training *very useful* when starting their business, 17.2% found it *useful*, and 11.6% found it *slightly useful*.

Coaching referral services offers clients and coaches the opportunity to search online for a coach that fits the criteria they require (e.g., location, fee schedule, etc.). Thirty-nine percent of CPCCs who owned their own business did find ICF referral services *useful*, while 41.0% and 66.9% found referrals from other professionals and referrals from clients respectively, as *very useful* in bringing in new clients. Other popular recruitment techniques included offering a free coaching session (33.2%) and creating a business website to attract clients (23.0%).

Owners or partners of a coaching practice spent an average of 11-20 hours per week (23.7%), 6-10 hours per week (23.0%), 2-5 hours per week (23.0%), and less than two hours per week (18.2%) engaged in coaching business-related activities. As well, 73.7% spent less

than $200 per month on coaching marketing as a means of finding new clients, whereas 20% spent $200-$499 per month on marketing. During the past 12 months, CPCCs worked with clients on a sliding scale (53.0%), *pro bono (*53.0%), and used a barter system (35.4%).

CPCCs who owned their own business often priced their session by the hour or session (62.8%) or by month which included a set number of sessions (49.6%). Other CPCCs charged by the project (e.g., workshops or series of sessions for employees for a pre-determined fee; 34.3%) or by a monthly retainer fee (10.6%). CPCCs hourly rate ranged with the largest number of respondents having charged $100-$149 (US) per hour (41.2%). Only 4.7% charged $300 or more, while 14.1% charged $200-$299, 17.6% charged $150-$199, 10.6% charged $75-$99, 9.4% charged $50-$74, and only 2.4% charged less than $50/hour. More than half of respondents' (51.5%) coaching companies' estimated gross sales or revenues (in US dollars) in the past year were less than $30,000 with the majority making less than $10,000 (30.2%). Only 12.6% earned more than $100,000 from coaching.

Internal coaches (coaches who are employed by an organization to work with individuals inside the organization). Internal coaches worked predominantly with mid- to upper-level managers (55.6%), followed by non-supervisory professionals (22.2%), and management or executive teams (16.7%). Only 5.6% worked with top-level executives. Please refer to Figure 6 for a detailed summary of internal CPCCs' yearly salary.

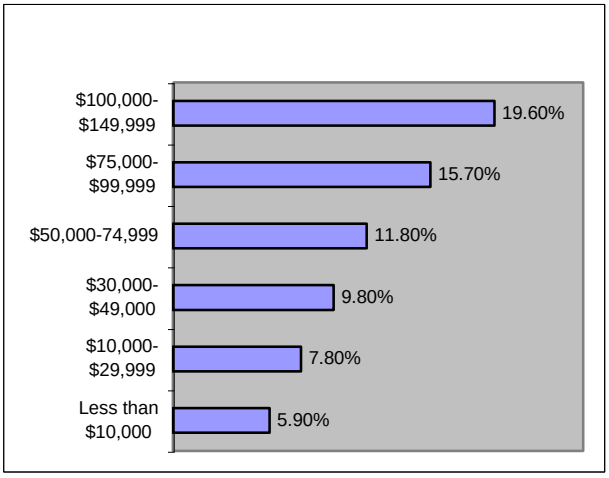


Figure 6. Current Annual Salary of Internal CPCCs in USD

All CPCCs (regardless of whether they owned their own practice or were considered internal coaches). Coaching effectiveness tools are instruments used to assess how well the coaching sessions are meeting the needs of the client. When asked if coaching effectiveness tools were available, 39.8% reported they would *likely* use them in their practice, 37.0% reported they would *absolutely* use them, 19.4% were *not sure* if they would use them, and only 3.7% reported they were *not inclined at all* to use them. There were very few measures of effectiveness used by CPCCs. However, informal client feedback was used *very often* (50.2%), while systematic interviews (40.1%), quantitative measures (49.6%), periodic performance measures (41.3%), and client satisfaction surveys (36.8%) were *very seldom/not at all* used. When asked through an open-ended question what they would need more of in their practice, the most common answers were clients and marketing training.

Eighty-seven percent of respondents did not participate in any formal coaching-related referral service. Of those who did participate in a formal coaching referral service, 42.4% participated in the ICF coach referral services and 48.6% participated in the CTI coach referral service.

Thirty-nine percent of CPCCs reported that they *sometimes* seek out and read published coaching research, whereas nearly a quarter (24.8%) reported they *often* do this, and another 10.4% indicated they *very often* search for this information. About another quarter (23.7%) of respondents indicated they *seldom* consume coaching-related research. For those who did read coaching related research, over half (55.5%) *sometimes* found this information changed what they did in their practice, and another 6.5% and 1.1% reported that they *often* and *very often*, respectively, found this information changed their practice. Meanwhile, over a third (36.8%) stated they *rarely* integrated coaching research into their practice.

Coaches' Clientele Profiles

Half of the respondents indicated they *very often* worked in the area of personal/life coaching (53.5%), followed by executive and corporate coaching (23.1%), and career/transition coaching (21.9%). CPCCs *very seldom* worked in the areas of internal coaching (63.9%), non-profit coaching (41.2%), and executive and corporate coaching (23.4%).

Personal coaches (coaches who work with clients outside of a work setting but from their own practice) typically worked with adults aged 36-55 (93.9%), followed by adults aged 25-35 (47.8%), adults aged 56-70 (33.6%) and young adults aged 18-25 (21.0%). Personal coaches worked primarily with individuals seeking personal growth (79.3%), and they reported *sometimes* working with people experiencing career issues (56.0%), spiritual crises (55.5%), relationship issues (53.7%), and people with health issues (48.0%).

Business/Executive coaches' target audience were individual professionals or executives (28.7%), followed by large companies including Fortune 500 (more than 1000 employees; 23.6%), mid-size companies (100-1000 employees; 16.7%), small businesses

(20-100 employees; 12.6%), start up companies and entrepreneurs (1-5 people and/or employees; 14.9%), and not-for-profit organizations (3.4%). The group or individual most often targeted for coaching were management or executive teams (28.7%), followed by mid- to upper- level management (27.7%), and the business owner or partner (22.9%).

CPCCs (regardless of whether they identified themselves as personal or executive coaches) worked *very often* with their clients on clarifying and pursuing goals (63.3%); living a balanced life (49.7%); managing their time, energy, and resources (44.4%); interpersonal or relationship issues (43.3%); communication skills (37.1%); and leadership development (31.3%). They *seldom/not at all* worked on globalization and/or merger and acquisition issues (68.6%), company loyalty (51.1%), increasing sales and/or revenues (40.5%), and career transition (39.3%).

Discussion

The purpose of this study was to develop a comprehensive, applied coaching profile using a global sample of English-reading and -writing Certified Professional Co-Active Coaches (CPCCs). As the coaching industry advances, and with full knowledge that there are over sixty different coaching training schools, it is important to develop a common knowledge base about coaches and particular schools/systems of coaching to track trends and understand who these coaches are in order to forward research that reliably evaluates coaching services. In creating a profile of CPCCs, we adapted a previously developed and utilized questionnaire (Grant & Zackon, 2004) to specifically target one school of coaching, but it can be used and adapted for other coaching schools by other researchers in order to profile the profession in all its complexity.

The survey utilized to explore CPCCs and their coaching practices was pilot tested with three distinct groups of professionals and academics to ensure CPCCs were provided

with relevant questions and numerous response options to garner the most accurate and robust information possible. The survey was easily uploaded using SurveyMonkey, LLC. Utilizing an online survey provider allowed the researchers to contact CPCCs from around the world (respondents resided in 21 countries) in an attempt to garner a comprehensive profile. As well, the questionnaire provided the researchers with an abundant amount of information needed to compile a profile of CPCCs. It should be noted that the response rate was approximately 30%, which is considered a good response rate for such surveys (Bickman & Rog, 1998) and is higher than comparable surveys (Gale et al., 2002; Liljenstrand & Nebeker, 2008).

With respect to our findings, most CPCCs made it clear that online coaching referral systems are ineffective and they are not being used. CPCCs received their clients mainly from current clients or other professional referrals which is similar to the findings of Brooks and Wright (2007) and Grant and Zackon (2004). This profile identified a gap between the referral resources available and their accessibility. Perhaps clients who are dealing with personal issues would prefer knowing from a friend or a respected professional that they are being referred to an effective life coach rather than inputting personal information into a generic website. As well, the referral sites may not ask questions that are specific enough to meet the needs of clients. Moreover, prospective clients may not know about the existence of online coaching referral systems. This information could ignite coaching organizations to ameliorate their service to attract the attention and meet the needs of clients.

Using this study's survey, we learned that close to 90% of CPCCs had a college degree or equivalent and over 40% had completed a graduate degree. As well, these coaches tended to be educated in helping professions such as social work, consulting, psychology, and teaching. This is an important point because these results align with the findings from

Gale et al. (2002), Grant and Zackon (2004), and Brooks and Wright (2007) which illustrate that the coaching industry is attracting trained individuals who view coaching tools as more beneficial or an excellent adjunct to tools learned in their primary or formal education or profession.

Coaching is cross-disciplinary in nature, and Grant and Zackon (2004) claim that this is both a strength and liability as it pulls from a variety of different experiences and expertise that can enhance and strengthen the profession. At the same time, it can also detract from standardizing the term "life coach" and "also means that defining the field of coaching is fraught with complexity" (p.12). Work is underway through professional bodies – such as the ICF – to define core competencies across all coach-training schools/programs that must continue in order to build credibility within the profession and to the public that the profession serves.

Scope of professional practice is an increasingly important aspect in the domain of coaching. Among our important profile findings is the fact that over 60% of CPCCs are not trained in identifying mental health issues. Even though CPCCs are appraised of and asked to subscribe to CTI's code of ethics during the certification process, scope of practice in the coaching industry is a developing process. Thus, for example, the lack of mental health training for coaches has been an area of concern in the literature for quite some time (Berglas, 2002). At the same time, even though CPCCs were not trained in this area, they felt comfortable referring clients to additional mental health services. CPCCs reportedly are conscious to not jeopardize their clients' safety or well-being and instead, most are comfortable to take the necessary steps to get the help their clients needed. Although CPCCs do refer clients to mental health services, it is imperative and ethically necessary in service of clients that coaches remain confident in their ability to identify clients who need additional,

perhaps complimentary services. Training schools need to consider incorporating this type of scope of practice training into their curriculum.

Results from the survey highlighted that over half of CPCCs are part-time coaches. These results are similar to Gale et al. (2002) and Grant and Zackon (2004). While a private coaching practice may not encounter a steady flow of clients on a regular basis, CPCCs are still able to engage in a profession they enjoy while maintaining the security of a regular and stable income from another source of employment. This showcases the commitment on the part of CPCCs to continue following their passion for helping others in their lives, even if it is not enough to support fully the CPCC with daily life expenses. Perhaps until the coaching industry reaches some 'tipping point', life coaching will be a predominantly part-time profession.

The yearly income for coaching reflected the part-time nature of coaching and was comparable to the monetary values released in 2004 (Grant & Zackon, 2004). However, the reported values in the current study may still be lower than normal, possibly as a result of the economic downturn many countries experienced in the recent years preceding our data collection – especially the United States in which many CPCCs reside. The results of the current study complement the statement made by Liljenstrand and Nebeker (2008) when they reported that the stereotype of coaching had shifted from a service need for ineffective employees toward a more pro-active focus on strengthening the effectiveness of successful employees. For CPCCs working within an organization, they are routinely working with mid- to upper-level management. This shift in image may assist all coaches in gaining overall recognition and status as a viable behaviour change service provider, especially for those working outside of the executive arena. It would be instructive to learn why individuals who have other professions and occupations decide to get trained as a life coach and pursue a part-

time or full-time career in the field. This information could be useful in attracting potential coaches and serve as a building block to create more graduate level coaching programs.

CPCCs' primary professional coaching organization is the ICF. We suggest the main reason for belonging to the ICF is for professional credibility. Most CPCCs do not attend the annual ICF conference. Equally, most do not seek out new published research, and of those who do, very few actually incorporate that research into their practices. It is postulated that knowledge translation in the field of life coaching is under-developed and/or the limited research available is esoteric and does not apply to their coaching practice. For a profession to flourish, it must have a body of knowledge or evidentiary studies and for coaching, that body of knowledge is fledgling. At the 4th International Executive Coaching Summit in 2002, the continued trend of executive and life coaching being an unregulated profession and the need for credentialing of executive coaches was discussed and continues to be an area of concern for the coaching industry (Feldman & Lankau, 2005; Sanson, Atond-Thomas, & Guilday, 2003). However, programs such as the Centre for Coaching in Healthcare offered through the Institute of Coaching at McLean Hospital – which is a Harvard Medical School Affiliate, the graduate coaching programs offered by the Adler School of Professional Psychology, and the graduate work conducted at Canadian and Australian Universities such as The University of Western Ontario and The University of Sydney underscore how the body of knowledge for coaching is growing.

Recommendations and Conclusions

This study establishes a solid platform for other coaching schools to research their coaches and for the survey used in this study to be applied and utilized by other organizational bodies such as the ICF. Moreover, given the lack of use of online referral services, perhaps researchers could create a client profile to increase the accessibility and

matching between coach and client. With the strong emphasis in the literature regarding training coaches in identifying mental health issues in order to refer to a mental health specialist, it is recommended that CTI include a mental health component to their introductory courses and certification program. Given that the majority of respondents came from prior professional backgrounds, it is recommended that future research investigate how their prior professional background impacts their coaching practice. Because CPCCs are not accessing coaching research literature that may impact their coaching practice, it is recommended that the Co-Active training model explicitly incorporates material teaching Co-Active coaches how to access, understand, and apply the coaching literature in their practice.

Life coaching is a dynamic and continually evolving profession. Through this survey we have learned about the previous training and education of CPCCs, their coaching career to date, how they attract clients, the type of clients they coach, and how they structure their practice. This information contributes to the growing body of knowledge needed to support and characterize the nature of the profession. As additional evidence emerges regarding the effectiveness of Co-Acitive coaching in facilitating health behaviour change, as it has in the health-related areas of obesity, smoking cessation, and physical activity, it is important to have information about CPCCs to corroborate why this type of coaching is powerful in helping change clients' behaviours and lives. This study contributes to and encourages further research needed to advance the coaching industry.

In addition to the importance of having a profile of CPCC's backgrounds and current experiences, understanding what draws them to the profession is an added piece for creating a larger picture of this group. Therefore, prompted by one of the questions from this survey,

the following chapter examines what it is about coaching that attracts CPCCs to the profession.

References

Berglas, S. (2002) The very real dangers of executive coaching. *Harvard Business Review* (June), 87-92.

Bickman, L., & Rog, D.J. (Eds.). (1998). *Handbook of applied social research methods: (1998)*. xix, 580pp.

Brooks, I. & Wright, S. (2007). A survey of executive coaching practice in New Zealand. International Journal of Evidence Based Coaching and Mentoring, 5(1), 30-41.

Coaches Training Institute (CTI). (2010). Coach training: Certification. Retrieved March 14, 2011, from http://www.thecoaches.com/coach-training/certification/.

Feldman, D.C., & Lankau, M.J. (2005). Executive coaching: A review and agenda for future research. *Journal of Management, 31*(6), 829-848.

Frank Bresser Consulting. (2009). The state of coaching across the globe: The results of the Global Coaching Survey 2008/2009 retreived June 19th 2011 from http://www.frank-bresser-consulting.com/globalcoachingsurvey.html

Gale, J., Liljenstrand, A., Pardieu, J., & Nebeker, D.M. (2002). Coaching: Who, what, where, when and how. *Coaching World-International Coach Federation, 93*. Retrieved February 2, 2011, from http://www.coachfederation.org/includes/docs/004CoachingPracticesStudyGaleMar02.pdf

Gorby, C.B. (1937). Everyone gets a share of the profits. *Factory Management & Maintenance, 95*, 82-83

Grant, A.M., Green, L. S., & Rynsaardt, J. (2010). Developmental coaching for high school teachers: executive coaching goes to school. *Consulting Psychology Journal: Practice and Research, 62*(3), 151-168.

Grant, A.M. & O'Hara, B. (2006). The self-presentation of commercial Australian life coaching schools: cause for concern? *International Coaching Psychology Review, 1*(2), 21-32.

Grant, A.M. & Zackon, R. (2004). Executive, workplace and life coaching: Findings from a large-scale survey of International Coach Federation Members. *International Journal of Evidence Based Coaching and Mentoring, 2*(2), 1-15.

Irwin, J.D., & Morrow, D. (2005). Health promotion theory in practice: an Analysis of Co-active Coaching. *International Journal of Evidence-Based Coaching and Mentoring*, 3(1), 29-38.

Kampa-Kokesch, S., & Anderson, M.Z. (2001). Executive coaching: A comprehensive review of the literature. *Consulting Psychology Journal: Practice and Research, 53,* 205-228.

Kilburg, R. R. (2004). Trudging toward dodoville: Conceptual approaches and case studies in executive coaching. *Consulting Psychology Journal: Practice and Research, 56,* 203–213.

Liljenstrand, A.M., & Nebeker, D.M. (2008). Coaching services: A look at coaches, clients, and practices. *Consulting Psychology Journal: Practice and Research, 60*(1), 57-77.

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.

McKenzie, J.F., & Smeltzer, J.L. (1997). Planning, implementing, and evaluating health promotion programs. Third Edition. Needham Heights, MA: Allyn and Bacon.

Morris, T.W. (2000). Coaching: Rebirth of an age-old remedy. *AFP Exchange, 20*(3), 34-36.

Newnham-Kanas, C.E., Gorczynski, P., Irwin, J.D., & Morrow, D. (2009). Annotated bibliography of life coaching and health research. International *Journal of Evidence Based Coaching and Mentoring,* 6 (2), 1-12.

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (2008). Life coaching as an intervention for individuals with obesity. *International Journal of Evidence-Based Coaching and Mentoring,* 6(2), 1-12.

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (n.d.). Motivational interviewing using co-active life coaching skills as a treatment for adults struggling with obesity. Manuscript in preparation.

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (n.d.). The impact of Motivational Interviewing using Co-Active life coaching skills on adults struggling with obesity. Manuscript in preparation.

Newnham-Kanas, C., Morrow, D., & Irwin, J.D. (2010). A functional juxtaposition of three methods for health behaviour change: Motivational Interviewing, Coaching, and Skilled Helping. *International Journal of Evidence-Based Coaching and Mentoring, 8*(2), 27-48.

Sanson, M., Around-Thomas, M., & Guilday, E. (2003). Executive coaching summit IV: Necessary dialogue post event reflections. Retrieved June 20, 2011 from http://www.innovativeleader.com/articles/ECSIVreport.pdf

van Zandvoort M.M., Irwin, J.D., & Morrow, D. (2009). The impact of Co-active life coaching on female university students with obesity. *International Journal of Evidence-Based Coaching and Mentoring, 7(1),* 104-118.

van Zandvoort, M.M., Irwin, J.D., & Morrow, D. (2008). Co-active Coaching as an intervention for obesity among female university students. *International Coaching Psychology Review*, 3(3), 191 - 206.

Wasylyshyn, K.M. (2003). Executive coaching: An outcome study. *Consulting Psychology Journal: Practice & Research, 55*(2), 94-106.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (1998). *Co-active coaching: New skills for coaching people toward success in work and life.* California: Davis-Black Publishing.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (2007). *Co-active coaching: New skills for coaching people toward success in work and life (2nd ed.).* California: Davis-Black Publishing.

Study 4

Certified Professional Co-Active Coaches: Why They Enjoy Coaching[5]

By the mid-2000s, the coaching industry had developed so rapidly that its growth outpaced the research needed to underpin its credibility (Grant & Cavanagh, 2004; Linley, 2006). Thus, there was a need to ground practice in concrete theoretical understandings and empirical tests. To date, the life coaching industry continues to grow and alongside its growth is an increase in research highlighting its theoretical underpinnings (e.g., Irwin & Morrow, 2005; Stober & Grant, 2006) and validating its effectiveness as a behaviour change methodology. More specifically, over the past ten years, research that operationally defined the type of coaching used and followed rigorous research methodology has been published in the areas of attention deficit disorder (ADD) and attention deficit hyperactivity disorder (ADHD) (Ratey, 2002; Ratey & Jaska, 2002), diabetes (Joseph, Griffin, Hall, & Sullican, 2001), mental health (Grant, 2003), obesity (Newnham-Kanas, Irwin, Morrow, & Battram, D., under review; Newnham-Kanas, Morrow & Irwin, under review; Newnham-Kanas, Irwin, & Morrow, 2008; Zandvoort, Irwin, & Morrow, 2008; 2009), physical activity (Gorczynski, Morrow, & Irwin, 2008), and smoking cessation (Mantler, Irwin, & Morrow, 2010). Although the evidence-base for the *practice* of coaching continues to blossom, very little is known about the *practitioners* (i.e., the coaches) themselves. It is important to learn how coaches chose coaching as a profession and how they have developed their practice. Such information can be utilized to create a common knowledge-base about coaches that can be used, in turn, to track trends and understand who these coaches are to forward research that evaluates coaching services. This information about coaches is necessary to inform and form the foundation of professionalism towards which the coaching industry strives.

---

[5] A version of this chapter has been submitted for publication.

In 2004 Grant and Zackon (2004) were interested in exploring the characteristics of executive, workplace, and life coaches by conducting an online survey of coaches who belonged to the International Coach Federation (ICF; the worlds largest coaching professional organization). This large-scale survey retrieved information on coaches' credentialing and training, prior professional career, how they coached (e.g., over the phone vs. face-to-face), how they ran their practice, client profiles, and coach demographics. According to Grant and Zackon, in order to foster the research needed to bolster the foundation of professionalism, researchers needed to continue tracking trends among coaches with future research extending beyond the ICF. A study conducted by Newnham-Kanas, Irwin, and Morrow (under review), surveyed Certified Professional Co-Active Coaches (CPCC) to create a profile of this one accredited classification of coach. The current study is part of that larger study.

Laura Whitworth and Karen and Henry Kimsey-House founded the Coaches Training Institute (CTI) in 1992. This particular style of coaching is based on a collaborative model whereby the coach and client work together to fulfill the goals/agenda articulated by the client (for a full review please refer to Whitworth, Kimsey-House, & Sandahl 1998; 2007). As Co-Active coaching was later deemed to be grounded in behaviour change theory (Irwin & Morrow, 2005) and empirically tested as a viable behaviour change intervention for individuals struggling with obesity (Newnham-Kanas et al., 2008; under review; under review; van Zandvoort et al., 2008; 2009) and smoking cessation (Mantler et al., 2010), it intrigued the researchers to seek out additional information on the actual interventionists within the studies, that is, CPCCs. In 2004, 25% of coaches surveyed were trained at CTI and it was the most frequently cited training program. Given the over 60 training schools, it is fair to say that CPCCs make up a fairly large portion of certified coaches. With permission from

Grant and Zackon (2004), their survey was adapted and utilized to gain profile information on CPCCs. A common trend between the study conducted by Grant and Zackon and the current researchers (Newnham-Kanas et al., under review) was the extremely high (99.9% and 98.9% respectively) percentage of coaches who were trained in a prior professional background before becoming trained as a coach. It begged the question: what attracts individuals to coaching? Therefore, the purpose of this study was to evaluate what entices professionals from existing vocations to life coaching.

This specific question was contained within a larger survey and it received such an abundance of rich responses that helped to explain why Co-Active coaching has been an effective behaviour change tool that it deserved its own focus. This question was not included in the Grant and Zackon (2004) survey. Current knowledge suggest that this is the first time coaches have been asked what they enjoy about their profession. The information provided by CPCCs regarding this question adds to the growing knowledge base needed to continue advancing the coaching industry towards professionalization. Specifically, this question provided insight into why CPCCs chose this profession over or as an adjunct to their prior professional work and why they continue to engage in a profession that is performed primarily on a part-time basis and may not result in any large monetary reward.

Methods

Participants and Procedure

Participants who were CPCCs, 18 years or older, were proficient in reading and writing English, and had access to the Internet were eligible to participate in the study. Participants were contacted via email addresses, which were made available through CTI's online referral system. Participants were also contacted through the Co-Active network's e-

newsletter and the main community discussion board accessed through the CTI website. A total of 390 CPCCs from around the world (the majority of whom resided in the United States (55.2%), Canada (25.6%), and the United Kingdom (4.6%)) accessed the survey and 82.9% completed the entire survey. The survey was available to CPCCs for three months. After this period, results were collected from an online server. A total of 351 CPCCs responded to the question, *What do you enjoy most about being a coach?* This was an open-response question to which participants could enter their unique answers. Completing the survey served as explicit consent. Further information regarding participant recruitment and response rate are provided elsewhere (Newnham-Kanas et al., under review). Ethical approval was received from The University of Western Ontario's Office of Research Ethics (see Appendix J).

Instrument

The final version of the survey included 63 questions with response options using a variety of different formats including: yes-no responses; frequency and extent rating scales; multiple response alternatives; and open-ended questions. Further information on the questionnaire development and pilot testing are provided elsewhere (Newnham-Kanas et al., under review).

Data Analysis and Interpretation

Inductive content analysis, previously described by Patton (2002), was employed on the responses. This technique was used to group the participant answers into main themes that emerged from the data. The lead researcher (CNK) and an undergraduate research assistant, who was not previously involved with the study, analyzed the data separately and then came together to compare themes and determine which themes were most prominent in expressing what CPCCs enjoyed most about being a coach.

Results

The results for this study were grouped into six themes: witnessing clients change their lives; sense of satisfaction and fulfillment from coaching; collaborative relationship with clients; CPCCs appreciation of autonomy and flexibility that stem from being a coach; and CPCCs enjoyment in using their skill set. Themes along with illustrative comments that embody the majority of responses by participants are presented below.

Witnessing clients change their lives

Participants credited helping clients transform their lives as one of the main reasons they enjoyed coaching. Whether it was challenging clients to help them meet their full potential, realize their true mission in life, or witnessing their clients take responsibility for their own life, CPCCs expressed their passion for assisting clients to make meaningful differences in their clients' lives. Illustrative comments that represent the majority of responses are displayed in Table 1.

Sense of satisfaction and fulfillment from coaching

Participants expressed the fulfillment they received when working with clients to help change their lives as a main reason they enjoyed coaching. Through the changes clients were making in their own life, CPCCs felt they, themselves, were living their passion and doing what they loved. Illustrative comments that represent the majority of responses are displayed in Table 2.

Collaborative relationship with clients

Participants articulated that not only through these collaborative relationships with their clients were they able to witness their clients changing their lives and engage in work they found to be truly fulfilling (as described in the themes above), but the connection and partnerships in and of themselves was another reason they enjoyed coaching. The connection

and sense of partnership they experienced with clients fuelled CPCCs' desire to remain a life coach. Illustrative comments that embody the majority of responses by participants for the following theme are presented in Table 3.

CPCCs appreciation of autonomy and flexibility that stem from being a coach

CPCCs disclosed the desire for professional autonomy as a benefit of being a life coach. Through a sense of autonomy, CPCCs described creating environments that were flexible and creative for clients to explore their issues. Illustrative comments that represent the majority of responses are displayed in Table 4.

CPCCs enjoy using their skill set

CPCCs genuinely enjoyed using their skill sets to make a difference in clients' lives. Whether they used only the tools and techniques provided by the Co-Active model or as an adjunct to previous training, CPCCs revealed their skill set provided them with the opportunity to create positive change with their clients. Illustrative comments are provided in Table 5.

Table 1

Quotations reflecting the "witnessing clients change their lives" theme regarding what coaches enjoy about coaching

"Transforming lives - letting go of needless suffering towards more inner peace/joy/fulfillment. Love and away from fear."
"Being part of the growth and joy of my clients as they learn to love and believe in themselves and create lives that fulfill them."
"Supporting people in recognizing and stepping into their own greatness."
"Providing an opportunity for others to take the time to truly look at themselves and their lives."
"Being part of the growth and joy of my clients as they learn to love and believe in themselves and create lives that fulfill them."
"Contributing to people's lives in a meaningful way. Knowing I have supported them is being and bringing more of all they are into the world."
"Helping people move beyond self-imposed limitations and achieve a greater sense of joy, purpose and achievement in their life."
"Working with people who want to make positive changes in their lives - and who want a coach to challenge them to go beyond what they believe is possible!"
"Making a qualitative difference to people's lives and their ability to experience themselves at their highest."
"Watching the transformation that occurs as people increase their awareness and step beyond their comfort zones trying on new behaviours and taking on new challenges."
"Challenging people to grow and develop beyond the limitations they have had imposed on them (by themselves and by other people)."

“Empowering individuals and seeing them succeed beyond their wildest dreams.” nothing more rewarding than that.”

Table 2

Quotations supporting the "sense of satisfaction and fulfillment from coaching" theme

"It is fulfilling to participate in the growth of others. My particular assignment has me being fully used."
"The fulfilling aspect of the work, helping people attain their goals and see beyond their limits."
"It fulfills me when I see others deeply enjoy and express themselves. Supporting development of others gives meaning to my life."
"The ability to live the fullness of my Purpose and Passion...that is every single day; I am helping people to grow and evolve into higher consciousness..."
"It is extremely rewarding to play a part in a client's life that enables them to realize their own strengths and capabilities. I enjoy being a witness to a client's experience of self-realization."
"Helping people come into their own, loving the satisfaction of the intimacy of the relationships and loving seeing people with a sense of accomplishment and new life skills."
"Being the person who witnesses the transformation in people's lives. I believe there is nothing more rewarding than that."

Table 3

Quotations supporting the "collaborative relationship with clients" theme

"Collaborative relationship with clients is what I love about coaching
"Connection to people, forward thinking clients and coaching people who would like to learn about themselves. Positive, engaged work."
"Creating a coaching relationship with my clients that empowers them to be their best."
"It's people centred work. I love working with people who are attracted to personal development. It's great to be immersed in positive forward focused work."
"Connecting deeply with another individual for the purpose of them finding their joy and fulfillment. Freedom of the profession - creativity and pioneering."
"I love working with others, particularly women in transition. The feeling of connection, excitement, seeing people take big risks and going for their personal, career, spiritual aspirations is thrilling."
"The magic meeting with clients to grow together with them."
"Working one on one with committed people that want to make a change."

Table 4

Quotations supporting the "CPCCs appreciation of autonomy and flexibility that come from being a coach" theme regarding why they enjoy coaching.

"Professional autonomy is one reason why I love coaching."
"The flexibility and autonomy in my work. Helping to shift culture in organizations."
"I appreciate having the flexibility to coach wherever I am, allowing me to pursue other unique opportunities, and to coach people from all over the world."
"The creativity and variety of the clients. It's never the same twice."
"Independence and actually making a difference with people."
"Freedom of the profession - creativity and pioneering."
"Flexibility in my schedule."
"I love that it is my business and I have the flexibility to manage my time to stay balanced. I love helping people challenge themselves to change, grow and be there best."
"Being an entrepreneur, creating my own style and business, helping others reach their goals."

Table 5

Quotations supporting the "CPCCs enjoy using their skill set" theme regarding what they enjoy about coaching.

"Having a professional tool kit to support the personal and professional growth of others Using my skills and talents to encourage others to remember and revitalize their strengths to live happier and fuller lives."
"The process of coaching, as I was trained, is so positive. It places the coach as a facilitator of another's insights and forward focus. It holds the clients big agenda. It is about more.... more happiness, more success, more fulfillment,.... and about less.... less stress, less self-defending behaviours and patterns, less victim... more empowerment."
"Helping others see the bigger potential in themselves. Using coaching as a complementary skill to my consulting practice."
"I enjoy using what I think of as pioneering/innovative tools and skills to help people find their own answers in order to create meaningful and lasting forward movement and positive change. I also enjoy being in relationship with people in this way and being hired to guide them and work WITH them on behalf of their own growth, learning and forward movement."
"Applying the skills learn[ed] to assist others and myself in learning through experience."
"The opportunity to use my intuition and vision in a professional setting in a way that demonstrably moves others forward in achievement of their objectives while enhancing their self-knowledge."
"Utilizing my talent and skills for the benefit of others. Making a living by being who I am."

Discussion

The purpose of this study was to discern the reasons CPCCs enjoyed coaching. Given that 98% of CPCCs who participated in the survey had prior professions, it intrigued the authors to try to determine why they would combine coaching with their prior profession or leave their previous profession entirely. To the authors' knowledge, this is the first study that investigated why CPCCs enjoyed coaching and respondents rendered an overwhelming number of responses that provided insight into their fascination with and passion for life coaching.

CPCCs described being committed to their profession because it acts, in part, as an outlet for facilitating meaningful changes in the lives of others. Life coaching, in general, is a field where individuals do not have to invest in long undergraduate or graduate degree programs – many CPCCs have already completed before becoming a coach (Newnham-Kanas et al, under review) – to make a difference in someone's life. Given the prior education level of CPCCs, perhaps coaching served as the perfect adjunct or missing component of fulfillment to their current profession. Specifically, CPCCs, the classification of coach examined in the current study, moved through four levels of required training prior to certification, which can vary in duration, followed by a standardized certification process that takes six months and can be accomplished simultaneously with working full time. However, like any longer-term training program, it can be viewed as a costly process for some; the necessary investment may serve to attract truly committed individuals to the profession. That commitment translates into profound enjoyment in being a coach which, in turn, may contribute to coaching's success as an effective intervention for individuals struggling with behaviour change (Mantler, 2010; Newnham-Kanas et al.; under review; under review; 2008; van Zandvoort et al., 2008; 2009).

Participants in the current study described their passion for being involved in synergistic work that held such value and provided personal fulfillment for them. CPCCs also stressed the importance of the coaching profession's autonomy and resultant flexibility and creativity that was infused into their coaching sessions. True to the Co-Active model of coaching, a number of the themes presented in this paper reflected the client-centered collaboration between coach and client. The literature regarding behaviour change stresses the importance of empowering patients/clients in their change processes (Elfhag & Rossner, 2005; Kausman & Bruere, 2006). Listening to clients and involving them in creating solutions to their issues is one way to empower clients to find solutions that will actually work. When individuals feel they are involved actively in their change process, they are more likely to maintain the changes made (Elfhag & Rossner; Kausman & Bruere). Individualizing treatment is another component to successful behaviour change (Egger, Pearson, & Pal, 2005). These foregoing points speak to the collaboration needed between practitioner and client in order to create an environment for true change to occur and for those changes to be sustainable. Given the enjoyment CPCCs exuded through working co-actively with clients, it is not surprising that empirical studies assessing Co-Active coaching's effectiveness as a behaviour change intervention have garnered such success (Mantler, 2010; Newnham-Kanas et al.; under review; under review; 2008; van Zandvoort et al., 2008; 2009). Collaboration whereby the coach works with the client instead of telling clients what to do is the essence of co-activity and at the centre of why CPCCs enjoy coaching and the reason it has been demonstrated as a viable behaviour change tool.

Results from this study illustrated that life coaching, specifically Co-Active life coaching (the type studied in this investigation) is a profession where its members are truly passionate and committed to the process of facilitating change in their clients' lives. This

type of research is essential because it highlights what CPCCs enjoy most about their profession, how this may be used to strengthen training, or attract individuals to the profession. In 2004, 25% of coaches surveyed were trained by CTI (Grant & Zackon, 2004) and currently, there are over 4,800 CPCCs practicing their craft globally. As life coaching research continues to escalate and as pressure mounts toward standardization and professionalization, it is fundamentally important to create a knowledge-base regarding the individuals who are attracted to practicing particular styles of coaching. That is, this could and should be done for the 60 different schools that currently exist in order to gain an understanding of why individuals chose a particular school and style of coaching to study, what coach characteristics and what characteristics of each school's model contribute to the success of their particular style of coaching. Insight into these areas might serve to assist coaching training schools to continue evolving and assessing their model/method's effectiveness as a behaviour change tool and provide criteria for potential clients to use when choosing a training school to attend or when selecting their own personal life coach. This information will continue to feed the knowledge-base needed to move the profession forward. This study and the larger study from which these results were removed contribute to and encourage the continued research needed to advance the professional field of coaching.

A summary of the results reported in this dissertation, along with implications and future directions are presented in the next chapter.

References

Egger, G., Pearson, S., & Pal, S. (2006). Individualising weight loss prescription: A management tool for clinicians. *Australian Family Physician, 35*(8), 591-594.

Elfhag, K., & Rossner, S. (2005). Who succeeds in maintaining weight loss? A conceptual review of factors associated with weight loss maintenance and weight regain. *Obesity Reviews, 6*, 68-85.

Gorczynski, P., Morrow, D., & Irwin, J.D. (2008) The impact of Co-active Coaching on the physical activity levels of children. *International Journal of Evidence-Based Coaching and Mentoring*, 6(2), 13-26.

Grant, A.M. (2003). The impact of life coaching on goal attainment, metacognition and mental health. *Social Behavior and Personality, 31*(3), 253-263.

Grant, A.M., & Cavanagh, M.J. (2004). Toward a profession of coaching: Sixty-five years of progress and challenges for the future. *International Journal of Evidence Based Coaching and Mentoring, 2*(1), 1-16.

Grant, A.M. & Zackon, R. (2004). Executive, workplace and life coaching: Findings from a large-scale survey of International Coach Federation Members. *International Journal of Evidence Based Coaching and Mentoring, 2*(2), 1-15.

Irwin, J.D., & Morrow, D. (2005). Health promotion theory in practice: an Analysis of Co-active Coaching. *International Journal of Evidence-Based Coaching and Mentoring*, 3(1), 29-38.

Joseph, D.H., Griffin M., Hall, R., & Sullivan, E. (2001). Peer coaching: an intervention for individuals struggling with diabetes. *Diabetes Educator, 27*, 703-710.

Kausman, R., & Bruere, T. (2006). If not dieting, now what? *Australian Family Physician, 35*(8), 572-575.

Linley, P.A. (2006). Coaching research: who? what? where? when? why? *International Journal of Evidence Based Coaching and Mentoring, 4*(2), 1-7.

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.

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (2008). Life coaching as an intervention for individuals with obesity. *International Journal of Evidence-Based Coaching and Mentoring,* 6(2), 1-12.

Newnham-Kanas, C., Irwin, J.D., Morrow, D. & Battram, D. (under review). The quantitative assessment of Motivational interviewing using co-active life coaching skills as an intervention for adults struggling with obesity. Manuscript in preparation. *International Coaching Psychology Review.*

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (under review). Findings from a global sample of Certified Professional Co-Active Coaches. *International Journal of Evidence Based Coaching and Mentoring.*

Newnham-Kanas, C., Morrow, D, & Irwin, J.D. (under review). 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.*

Ratey, N. (2002). Life coaching for adult ADHD. In S. Goldstein & A.T. Ellison (Eds.), *Clinician's guide to adult ADHD: Assessment and intervention*. London: Academic Press.

Ratey, N., & Jaska, P. (Eds.). (2002). *The ADDA Guiding Principles Coaching Individuals with Attention Deficit Disorder*. Illinois: Hyde Park.

Stober, D.R., & Grant, A.M. (Eds.). (2006). *Evidence Based Coaching Handbook*. John Wiley & Sons, In.,: Hoboken, New Jersey.

van Zandvoort M.M., Irwin, J.D., & Morrow, D. (2009). The impact of Co-active life coaching on female university students with obesity. *International Journal of Evidence-Based Coaching and Mentoring, 7(1),* 104-118.

van Zandvoort, M.M., Irwin, J.D., & Morrow, D. (2008). Co-active Coaching as an intervention for obesity among female university students. *International Coaching Psychology Review*, 3(3), 191 - 206.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (1998). *Co-active coaching: New skills for coaching people toward success in work and life.* California: Davis-Black Publishing.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (2007). *Co-active coaching: New skills for coaching people toward success in work and life (2nd ed.).* California: Davis-Black Publishing.

Summary, Implications, and Future Directions

Summary

In this dissertation, four studies were carried out to provide insight into (a) MI using CALC skills (a process we have labeled motivational coaching) as a client-centered behaviour change intervention for adults struggling with obesity, and (b) the individuals who integrate this interviewing/coaching method into their everyday practices.

The first study was conducted to examine the short- and longer-term impact of six-months of MI, administered via CALC skills on the weight, waist circumference, self-esteem, self-efficacy, quality of life, physical activity, dietary intake, and functional health status of eight adults struggling with obesity (aged 35-55; body mass index values greater than 30). Results indicated that weight decreased for all participants by the end of the intervention. At the six-month follow-up, participants four, five, six, and eight continued to decrease or maintain their weight. Participants one, two, three, and seven gained weight at the six-month follow-up but participants one and seven were still below their baseline weight. Additionally, after finishing the intervention, participant effect sizes for self-esteem, functional health status, quality of life, and self-efficacy indicated a clinically significant improvement.

The second study used in-depth interviews and a focus group to gain an understanding of the following qualitative factors: what it was like living as an individual struggling with obesity; what it was like completing the intervention; and what it was like six-months after the final coaching session. Also, what it was like to work with this population was explored with the Certified Professional Co-Active Coach (CPCC). Following the intervention, participants attributed the following changes to the intervention: increased self-confidence; learning to cope with life in a healthy manner; putting self first; increased emotional healing; the importance of social networks in weight loss; and learning

to step outside their comfort zone. During the focus group, the following themes emerged: weight was a symptom; increased self-care; life coaching and weight loss as a journey; support required as a motivator; and the importance of the coach/client relationship. The CPCC identified the most frequently used styles of CALC (balance and process), the most influential tools employed during sessions with clients (powerful questions and "outrageous" homework), and important suggestions for future CPCCs working with this population including, tailoring each program to each client, dropping assumptions about client readiness to change, and remaining invested in the client and not the outcome of the study.

The purpose of the third study was to develop a comprehensive, applied coaching profile using a global sample of English-reading and -writing CPCCs. Results revealed that all CPCCs came from pre-existing professional backgrounds, the majority of CPCCs had a college degree or equivalent, and half of CPCCs were part-time coaches. CPCCs did not find online referral services useful in attracting clients; they did not attend the annual ICF conference; and they did not seek out new published research. The results from this survey created a coaching profile of CPCCs.

Finally, the purpose of the fourth study was to elucidate the characteristics of CPCCs, by qualitatively assessing why they enjoyed being coaches. Results revealed that witnessing clients change their lives, the sense of satisfaction and fulfillment they received from coaching, the collaborative relationship they experienced with their clients, the autonomy and flexibility of the profession, and the gratification they received from using their skill set to be the main reasons they enjoyed coaching.

Implications

Taken together a number of conclusions can be made from these four studies. Studies one and two provide evidence to support MI using CALC skills as a feasible way to motivate

clients to make behavioural changes in their lives. MI and Co-Active coaching are more like two sides of the same coin than they are disparate interventions. Thus, the concept of Motivational Coaching (MC) is one that represents a blending of the two, and one that is effective as an intervention for individuals struggling with obesity. First, MC – or MI applied via CALC skills – for six-months was a viable intervention for losing weight, even when co-morbidities were present that may have impacted the amount of weight lost. In this case, the intervention aided in maintaining the weight lost six-months after the program was complete. These are concrete, demonstrable, and important findings that represent a step in ameliorating the desperate need for programs that integrate tools that allow behaviour changes made to remain sustainable (Kausman & Terrill, 2006).

Moreover, these results highlight the detrimental impact psycho-social factors have on a person struggling with her weight. Through MI via CALC skills, participants were able to work through issues that hindered their ability to lose weight including, but not limited to low self-worth, low self-efficacy, and lack of social networks. These underlying issues were core components contributing to and resulting from obesity which stresses that obesity is a symptom of a complex set of factors. These findings corroborate previous research (e.g. Lau, Douketis, Morrison, Hramiak, & Sharma, 2007; Shaw, O'Rourke, Del Mar, & Kenardy, 2007), which accentuate the need for behavioural components as part of a comprehensive treatment plan.

Another implication is that as coaching becomes more niche-related, it is important to have suggestions and feedback from CPCCs who have experience working with a particular group of individuals. This information might be shared with new and experienced CPCCs in the niche-area to strengthen their effectiveness in meeting the clients' goals. The findings

from these results outlined some key skills and strategies in working with clients struggling with their weight.

Finally, a CPCC coaching profile, a relatively new and important profiling protocol was established. As the coaching industry advances, and with full knowledge that there are over sixty different coaching training schools, it is essential to develop a common knowledge-base about coaches and particular schools/systems of coaching to track trends and understand who these coaches are in order to forward research that reliably evaluates coaching services. In creating a profile of CPCCs, a previously developed and utilized questionnaire (Grant & Zackon, 2004) was adapted in order to target one specific school of coaching. However, the instrument and its dispersion and utilization through an online tool such as SurveyMonkey™ could be used and adapted for other coaching schools by other researchers in order to profile the profession in all its complexity.

Based on the results presented in this dissertation, in conjunction with previous research findings, it is reasonable to conclude that MI via CALC skills was a beneficial tool in aiding individuals conquer their battle with weight. The information retrieved regarding the characteristics of CPCCs provided baseline information needed to forward research that evaluates coaching services and in turn, contributes to the growing body of information needed to advance the professional field of coaching.

Future Directions

It is reasonable to conclude that the findings reported in this dissertation have advanced the knowledge-base regarding (a) MI via CALC skills as an intervention for individuals struggling with obesity and (b) the interventionists who integrate this method into their practice. These implications also provide direction for future research. Currently there are two other studies (Newnham-Kanas, Irwin, & Morrow, 2008; Van Zandvoort et al., 2008)

that have reported MI using CALC skills as an innovative intervention for obesity. Thus, MC effectiveness has been documented and thereby points the way toward integrating formal physical activity and nutritional programs in conjunction with MC to determine what impact these adjunct programs would have on obesity; however, the Co-Active model and skills, as this study has demonstrated, virtually embeds the principles of MI in its framework and applied skills utilized in working with clients. As well, it is apparent that increasing the number of coaching sessions from six-weeks (Newnham-Kanas et al., 2008) to six-months had a beneficial effect on weight loss. Based on suggestions from participants, it is recommended that longitudinal MC studies continue for at least one year due to the multiplicity of areas in participants' lives that obesity affects, and vice versa. It is also suggested that future research increase the number of participants to increase generalizability. In the same vein, including a comparison group would enhance internal validity and therefore, increase confidence that the results could be credited with greater certainty to the intervention.

Because the area of life coaching is expanding, and the research on Co-Active life coaching is increasing with empirical studies demonstrating its practical use in facilitating behaviour change, it is important that other research and researchers identify the type of coaching used. This dissertation establishes a solid platform for other coaching schools to profile their coaches and for the survey used in this research to be applied and utilized by other organizational bodies.

It is important for researchers and health professionals to be aware of the benefits of MC, to use and apply this information in the development of weight management interventions, and to pursue further investigation in this potent and emerging area of research.

References

Grant, A.M. & Zackon, R. (2004). Executive, workplace and life coaching: Findings from a large-scale survey of International Coach Federation Members. *International Journal of Evidence Based Coaching and Mentoring, 2*(2), 1-15.

Kausman, R. R., & Bruere, T. T. (2006). If not dieting, now what?. *Australian Family Physician, 35(8),* 572-575.

Lau, D.C.W., Douketis, J.D., Morrison, K.M., Hramiak, I.M., & Sharma, A.M. (2007) '2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children'. *Canadian Medical Association Journal,* 176(8 Supplemental), S1-13.

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (2008). Co-Active life coaching as an intervention for individuals with obesity. *International Journal of Evidence Based Coaching and Mentoring, 6*(2), 1-12.

Newnham-Kanas, C., Irwin, J.D., Morrow, D., & Battram, D. (under review). The quantitative assessment of Motivational interviewing using co-active life coaching skills as an intervention for adults struggling with obesity. *International Coaching Psychology Review.*

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (under review). Findings from a global sample of Certified Professional Co-Active Coaches. *International Journal of Evidence Based Coaching and Mentoring.*

Newnham-Kanas, C., Morrow, D., & Irwin, J.D. (under review - a). 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.*

Newnham-Kanas, C., Morrow, D., Irwin, J.D. (under review - b). Certified Professional Co-Active Coaches: why they enjoy coaching. *International Journal of Evidence Based Coaching and Mentoring.*

Shaw, K., O'Rourke, P., Del Mar, C., & Kenardy, J. (2007). Psychological interventions for overweight or obesity (review). *Cochrane Database of Systematic Reviews*. Issue 2. Art No.:CD003818. DOI 10.1002/14651858.CD003818.pub2.

Appendix A

Copyright Release

Elaine Cox via uwo.ca to Courtney show details Mar 3 Reply

Dear Courtney

Yes, that's fine Courtney. Go ahead - the journal is Open Access, so no restrictions.

Best Regards
Elaine

Dr Elaine Cox
Director: Doctor of Coaching and Mentoring Programme (DCaM)
Editor: International Journal of Evidence Based Coaching and Mentoring

- Show quoted text -

ICPR - Courtney Newnham "The Quantitative Assessment of Motivational Interviewing Using Co-Active Life Coaching Skills as an Intervention for Adults Struggling with Obesity."

Stephen Palmer via uwo.ca to Courtney, Jennifer, L, Geoff show details Jun 24 Reply

Dear Courtney

I've CC in my colleague, Geoff Ellis, at the BPS offices to keep him in the loop. There is not a problem with you including your article with your PhD thesis unless your co-authors disagree. Do ensure the article is properly referenced.

However, if you later get the whole PhD thesis published in a book format for retail or an online PDF, then you would need to seek further permission from us due to the copyright restrictions. Tracy will be sending you a copyright form next month when we get the ICPR typeset.

Best wishes and good luck with your PhD.

Stephen

Permission Request Inbox

Courtney Newnham	Good Afternoon Dr. Short, My name is Courtney Newnham-Kanas and I have a manu...	Aug 15 (3 days ago)
Emma Short	Hello Courtney, Congratulations on getting to this point. A lond journey! I a...	Aug 16 (2 days ago)
Courtney Newnham	Hi Dr. Short, The manuscript I submitted has already been accepted. I was ask...	Aug 17 (2 days ago)

Emma Short via uwo.ca to **Almuth**, cnewnham show details 2:26 PM (1 hour ago) Reply

Hello, the confusion all mine!

Yes please do use what you have submitted to us and, we wish you every success with it.

Best wishes Emma and Almuth

- Show quoted text -

Appendix B

The University of Western Ontario Research Ethics Approval Notice

Studies 1 and 2

Western

Office of Research Ethics

The University of Western Ontario

Telephone: Fax: (519) Email:
Website: www.uwo.ca/research/ethics

Use of Human Subjects - Ethics Approval Notice

Principal Investigator: Dr. D.L. Morrow
Review Number: 16179E **Review Level:** Expedited
Review Date: May 20, 2009

Protocol Title: Co-Active Life Coaching as a Treatment for Individuals with Obesity
Department and Institution: Faculty of Health Sciences, University of Western Ontario
Sponsor:
Ethics Approval Date: August 10, 2009 **Expiry Date:** September 30, 2010
Documents Reviewed and Approved: UWO Protocol, Letter of Information and Consent, Advertisement x 2
Documents Received for Information:

This is to notify you that The University of Western Ontario Research Ethics Board for Health Sciences Research Involving Human Subjects (HSREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the Health Canada/ICH Good Clinical Practice Practices: Consolidated Guidelines; and the applicable laws and regulations of Ontario has reviewed and granted approval to the above referenced study on the approval date noted above. The membership of this REB also complies with the membership requirements for REB's as defined in Division 5 of the Food and Drug Regulations.

The ethics approval for this study shall remain valid until the expiry date noted above assuming timely and acceptable responses to the HSREB's periodic requests for surveillance and monitoring information. If you require an updated approval notice prior to that time you must request it using the UWO Updated Approval Request Form.

During the course of the research, no deviations from, or changes to, the protocol or consent form may be initiated without prior written approval from the HSREB except when necessary to eliminate immediate hazards to the subject or when the change(s) involve only logistical or administrative aspects of the study (e.g. change of monitor, telephone number). Expedited review of minor change(s) in ongoing studies will be considered. Subjects must receive a copy of the signed information/consent documentation.

Investigators must promptly also report to the HSREB:

a) changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
b) all adverse and unexpected experiences or events that are both serious and unexpected;
c) new information that may adversely affect the safety of the subjects or the conduct of the study.

If these changes/adverse events require a change to the information/consent documentation, and/or recruitment advertisement, the newly revised information/consent documentation, and/or advertisement, must be submitted to this office for approval.

Members of the HSREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the HSREB.

Chair of HSREB: Dr. Joseph Gilbert

Ethics Officer to Contact for Further Information			
☐ Janice Sutherland	☐ Elizabeth Wambolt	☑ Grace Kelly	☐ Denise Grafton

This is an official document. Please retain the original in your files.

cc: ORE File

Appendix C

Letter of Information and Consent Form

Studies 1 and 2

Obesity Treatment Through Life Coaching Letter of Information

Investigators
Dr. Jennifer Irwin, Ph.D., Faculty of Health Sciences, University of Western Ontario
Dr. Don Morrow, Ph.D., Faculty of Health Sciences, University of Western Ontario
Courtney Newnham-Kanas, Ph.D. (Candidate), Faculty of Health Sciences, University of Western Ontario

Background
Dr. Irwin, Dr. Morrow, and Ms. Newnham-Kanas are conducting research to determine the effectiveness of life coaching for treating obesity. If you are between the age of 35-55, have a body mass index greater than 30, and are not currently being treated by a physician to treat existing medical ailments (e.g., diabetes), the researcher would like you to participate in the study. There will be a total of 8 participants in the study.

What will happen in this study?
If you agree to participate, you will receive six-months of one-on-one coaching with a Certified Co-active Professional Coach for $10/session (i.e., 18 x 35-minute sessions). The typical fee is $80 to $120 per coaching session. Participants who cannot afford this fee will not be excluded from the study. The foundation of the Co-active coaching method is that participants have the answers to their own questions and the coach helps them to access these answers through the use of a variety of techniques. At the beginning of the study you will be contacted to complete a series of questionnaires and will be requested to complete these questionnaires again at the end of the study.
As a participant, you will be requested to attend a one-hour meeting to meet the research assistant, complete the questionnaires (requiring approximately 15 minutes using an online survey program), and pay the $180 fee for the 18 coaching sessions. The research assistant will conduct an interview before your first coaching session and again at the end of your 18 coaching sessions. Data collected will be stored in a locked file cabinet only accessed by the research team. The login and password information for the online surveys will only be provided to the direct research team. This information will be kept for a period of five years at which point it will be destroyed. The study will run for six-months following the completion of the introductory meeting and during the 7th month you will be requested again to respond to a series of questionnaires. Interested participants will be invited to participate in a focus group where participants will have the opportunity to meet other participants in the study. Baseline measurements and monthly weight measurements will occur in Room 215 in the Arthur and Sonia Labatt Health Sciences Building at the University of Western Ontario. Parking will be compensated. Participants are required to provide transportation to/from the University for measurements. The research assistant will provide detailed directions to the study location and instructions/schedule regarding the coaching sessions and measurement time points. The purpose of the study is to determine if co-active life coaching is an effective method to treat obesity.

Alternatives and your right to withdraw from the study
Your participation in this study is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time.

Possible benefits and risks to you for participating in the study
There are no known physical, social, or economic risks due to participation in this study. Subjects may experience feelings of sadness, frustration, or anger when talking with the Co-active coach about being obese and how it impacts their lives.
Possible benefits include decreases in body mass index and waist circumference and increases in functional health status values, quality of life, self-efficacy, physical activity, proper nutrition, and self-esteem. Increased feelings of well-being and self-satisfaction may also result.

Confidentiality
The researcher will keep your identity, comments, written data, and questionnaire responses confidential and secure. No names will appear on any documents published as a result of this study, all results will be presented in aggregate form.

Costs and compensation
Participants are required to pay $10/session (totaling $180 for 18 sessions). The Co-Active coaching model necessitates that an investment be made by clients to encourage their buy-in to the coaching process, thereby ensuring that they will be punctual for each coaching session and will be dedicated to doing the required work between sessions.

When the results of the study are published, your name will not be used. If you would like to receive a copy of the overall results of the study, please put your name on a blank piece of paper and give it to the researcher. Representatives of the University of Western Ontario Health Sciences Research Ethics Board may contact you or require access to your study-related records to monitor the conduct of the research.

Contact Person (should you have nay further questions about the study):
Dr. Jennifer Irwin, University of Western Ontario. Phone:

- If you have any further questions regarding your rights as a study participant, please contact the Office of Research Ethics at

This letter is for you to keep. You will also be given a copy of the consent form once it has been signed.

Obesity Treatment through Life Coaching Consent Form

I have read the letter of information, and I have had the nature of this study explained to me. I have been given the opportunity to ask questions. All questions have been answered to my satisfaction.

I agree to participate in the study.

_____	_____	_____
Date	Participant's Name	Participant's Signature
_____	_____	_____
Date	Person Obtaining Consent Name	Person Obtaining Consent Signature

Appendix D

Functional Health Status Questionnaire

Study 1

SF-36 Functional Health Status Scale

This survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities.

Please answer these questions by "check-marking" your choice. Please select only one choice for each item.

1- In general, would you say your health is:

□ 1. Excellent □ 2. Very good □ 3. Good □ 4. Fair □ 5. Poor

2- Compared to ONE YEAR AGO, how would you rate your health in general NOW?

□ 1. MUCH BETTER than one year ago.

□ 2. Somewhat BETTER now than one year ago.

□ 3. About the SAME as one year ago.

□ 4. Somewhat WORSE now than one year ago.

□ 5. MUCH WORSE now than one year ago.

3- The following items are about activities you might do during a typical day. **Does your health now limit you** in these activities? If so, how much?

Activities	**1. Yes, Limited A Lot**	**2. Yes, Limited A Little**	**3. No, Not Limited At All**
a) **Vigorous activities,** such as running, lifting heavy objects, participating in strenuous sports?	□ 1. Yes, limited a lot	□ 2. Yes, limited a little	□ 3. No, not limited at all
b) **Moderate activities,** such as moving a table, pushing a vacuum cleaner, bowling, or playing golf?	□ 1. Yes, limited a lot	□ 2. Yes, limited a little	□ 3. No, not limited at all
c) Lifting or carrying groceries?	□ 1. Yes,	□ 2. Yes, limited a	□ 3. No, not limited

	limited a lot	little	at all
d) Climbing **several flights** of stairs?	□ 1. Yes, limited a lot	□ 2. Yes, limited a little	□ 3. No, not limited at all
e) Climbing **one** flight of stairs?	□ 1. Yes, limited a lot	□ 2. Yes, limited a little	□ 3. No, not limited at all
f) Bending, kneeing or stooping?	□ 1. Yes, limited a lot	□ 2. Yes, limited a little	□ 3. No, not limited at all
g) Walking **more than a mile**?	□ 1. Yes, limited a lot	□ 2. Yes, limited a little	□ 3. No, not limited at all
h) Walking **several** blocks?	□ 1. Yes, limited a lot	□ 2. Yes, limited a little	□ 3. No, not limited at all
i) Walking **one** block?	□ 1. Yes, limited a lot	□ 2. Yes, limited a little	□ 3. No, not limited at all
j) Bathing or dressing yourself?	□ 1. Yes, limited a lot	□ 2. Yes, limited a little	□ 3. No, not limited at all

4- During the **<u>past 4 weeks</u>**, have you had any of the following problems with your work or other regular activities *<u>as a result of your physical health</u>*?

	Yes	No
a) Cut down on the **amount of time** you spent on work or other activities?	□ 1. yes	□ 2. No
b) **Accomplished less** than you would like?	□ 1. yes	□ 2. No
c) Were limited in the **kind** of work or other activities?	□ 1. yes	□ 2. No
d) Had **difficulty** performing the work or other activities (for example it took extra effort)?	□ 1. yes	□ 2. No

5. During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

	Yes	No
a) Cut down on the **amount of time** you spent on work or other activities?	□ 1. yes	□ 2. No
b) **Accomplished less** than you would like?	□ 1. yes	□ 2. No
c) Didn't do work or other activities as **carefully** as usual?	□ 1. yes	□ 2. No

6. During the **past 4 weeks**, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

□ 1. Not at all □ 2. Slightly □ 3. Moderately □ 4. Quite a bit □ 5. Extremely

7. How much **bodily pain** have you had during the **past 4 weeks**?

□ 1. None □ 2. Very mild □ 3. Mild □ 4. Moderate □ 5. Severe □ 6. Very severe

8. During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)?

□ 1. Not at all □ 2. A little bit □ 3. Moderately □ 4. Quite a bit □ 5. Extremely

9. These questions are about how you feel and how things have been with you **during the past 4 weeks**. For each question , please give the one answer that comes closest to the way you have been feeling. How much of the time during the **past 4 week** …

	1. All of the time	2. Most of the time	3. A good bit of the time	4. Some of the time	5. A little of the time	6. None of the time

a) Did you feel full of pep?	□ 1. All of the time	□ 2. Most of the time	□ 3. A good bit of the time	□ 4. Some of the time	□ 5. A little of the time	□ 6. None of the time
b) Have you been a very nervous person?	□ 1. All of the time	□ 2. Most of the time	□ 3. A good bit of the time	□ 4. Some of the time	□ 5. A little of the time	□ 6. None of the time
c) Have you felt so down in the dumps that nothing could cheer you up?	□ 1. All of the time	□ 2. Most of the time	□ 3. A good bit of the time	□ 4. Some of the time	□ 5. A little of the time	□ 6. None of the time
d) Have you felt calm and peaceful?	□ 1. All of the time	□ 2. Most of the time	□ 3. A good bit of the time	□ 4. Some of the time	□ 5. A little of the time	□ 6. None of the time
e) Did you have a lot of energy?	□ 1. All of the time	□ 2. Most of the time	□ 3. A good bit of the time	□ 4. Some of the time	□ 5. A little of the time	□ 6. None of the time

f) Have you felt downhearted and blue?	□ 1. All of the time	□ 2. Most of the time	□ 3. A good bit of the time	□ 4. Some of the time	□ 5. A little of the time	□ 6. None of the time
g) Do you feel worn out?	□ 1. All of the time	□ 2. Most of the time	□ 3. A good bit of the time	□ 4. Some of the time	□ 5. A little of the time	□ 6. None of the time
h) Have you been a happy person?	□ 1. All of the time	□ 2. Most of the time	□ 3. A good bit of the time	□ 4. Some of the time	□ 5. A little of the time	□ 6. None of the time
i) Did you feel tired?	□ 1. All of the time	□ 2. Most of the time	□ 3. A good bit of the time	□ 4. Some of the time	□ 5. A little of the time	□ 6. None of the time

10. During the **past 4 weeks**, how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting with friends, relatives, etc.)?

□ 1. All of the time

□ 2. Most of the time.

□ 3. Some of the time

□ 4. A little of the time.

□ 5. None of the time.

11. How TRUE or FALSE is **each** of the following statements for you?

	1. Definitely true	2. Mostly true	3. Don't know	4. Mostly false	5. Definitely false
a) I seem to get sick a little easier than other people?	□ 1. Definitely true	□ 2. Mostly true	□ 3. Don't know	□ 4. Mostly false	□ 5. Definitely false
b) I am as healthy as anybody I know?	□ 1. Definitely true	□ 2. Mostly true	□ 3. Don't know	□ 4. Mostly false	□ 5. Definitely false
c) I expect my health to get worse?	□ 1. Definitely true	□ 2. Mostly true	□ 3. Don't know	□ 4. Mostly false	□ 5. Definitely false
d) My health is excellent?	□ 1. Definitely true	□ 2. Mostly true	□ 3. Don't know	□ 4. Mostly false	□ 5. Definitely false

Appendix E

The Rosenberg Self-Esteem Scale

Study 1

The Rosenberg Self-Esteem Scale

BELOW IS A LIST OF STATEMENTS DEALING WITH YOUR GENERAL FEELINGS ABOUT YOURSELF. IF YOU **STRONGLY AGREE**, CIRCLE **SA**. IF YOU **AGREE** WITH THE STATEMENT, CIRCLE **A**. IF YOU **DISAGREE**, CIRCLE **D**. IF YOU **STRONGLY DISAGREE**, CIRCLE **SD**.

		1. STRONGLY AGREE	2 AGREE	3. DISAGREE	4. STRONGLY DISAGREE
1.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
2.	I feel that I have a number of good qualities.	SA	A	D	SD
3.	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.	I feel I do not have much to be proud of.	SA	A	D	SD
6.	I take a positive attitude toward myself.	SA	A	D	SD
7.	On the whole, I am satisfied with myself.	SA	A	D	SD
8.	I wish I could have more respect for myself.	SA	A	D	SD
9.	I certainly feel useless at times.	SA	A	D	SD

10.	**At times I think I am no good at all.**	**SA**	**A**	**D**	**SD**

Appendix F

Adapted Self-Efficacy Questionnaires

Study 1

Adapted Self-Efficacy Questionnaires

Overcoming Barriers to Nutrition

Please indicate below how confident you are that you can successfully carry out each of the activities listed below using the following scale.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
No Confidence at All Somewhat Confident Completely Confident

How certain are you that you could overcome the following barriers?

I can manage to stick to eating a well-balanced diet with predominately healthful foods, and reduced junk food…

1. …even if I need a long time to develop the necessary routines _____
2. …even if I have to try several times until it works _____
3. …even if I have to rethink my entire way of nutrition _____
4. …even if I do not receive a great deal of support from others when making my first attempts _____
5. …even if I have to make a detailed plan _____
6. …even if I am traveling _____
7. …even if it means bringing my meal to work _____
8. …even if I am eating at a restaurant _____
9. …even if I am going to a friends house for a meal _____
10. …even if the healthful meal is more expensive _____
11. …even if junk food is more available than healthful food _____

Overcoming Barriers to Physical Activity

The items below reflect common reasons preventing people from participating in physical activity programs or, in some cases, dropping out or quitting the program altogether. Using the scale below, please indicate how confident you are that you could be physically active in the event that any of the following circumstances were to occur.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
No Confidence at All Somewhat Confident Completely Confident

For example, if you have *complete confidence* that you can continue to be physically active, even if you are bored by the activity, you would record 100% in the space provided. However, if you are absolutely sure that you *could not* be physically active if you failed to make or continue make progress you would record 0% in the space provided.

I believe that I can be moderately physically active 5 times per week if:

1. The weather is very bad (hot, humid, rainy, snow, cold)_____
2. I was bored by the program or activity _____
3. I was on vacation_____
4. I felt pain or discomfort when being active _____
5. I had to be active alone_____
6. Physical activity was not enjoyable or fun_____
7. It became difficult to get to the activity location_____
8. I didn't like the particular activity program I was doing_____
9. My work schedule conflicted with my activity program_____
10. I felt self-conscious about my appearance when active_____
11. The class instructor did not offer me any encouragement_____
12. I was under personal stress of some kind_____

Achieving Tasks in Physical Activity

Please indicate below how confident you are that you can successfully carry out each of the activities listed below using the following scale.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
No Confidence at All Somewhat Confident Completely Confident

For example, if you have *complete confidence* that you can complete 15-minutes of continuous moderate intensity activity each day, you would record 100% in the space provided. However, if you are *not very confident* that you could complete 30-minutres of continuous moderate intensity activity each day, you would record a number closer to 0% in the space provided.

I believe that I can be moderately physically active 5 times per week…

1. For 3 bouts of activity, each lasting 10 consecutive minutes _____
2. For 2 bouts of activity, each lasting 15 consecutive minutes _____
3. For 1 bout of activity, lasting 30 consecutive minutes _____
4. For 1 bout of activity, lasting more than 30 consecutive minutes_____

Appendix G

International Physical Activity Questionnaire

Study 1

INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.

Think about all the **vigorous** activities that you did in the **last 7 days**. **Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

1. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, aerobics, or fast bicycling?

   _____ **days per week**

   ☐ No vigorous physical activities → ***Skip to question 3***

2. How much time did you usually spend doing **vigorous** physical activities on one of those days?

   _____ **hours per day**

   _____ **minutes per day**

   ☐ **Don't know/Not sure**

Think about all the **moderate** activities that you did in the **last 7 days**. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Think only about those physical activities that you did for at least 10 minutes at a time.

3. During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking.

   _____ **days per week**

   ☐ No moderate physical activities → ***Skip to question 5***

4. How much time did you usually spend doing **moderate** physical activities on one of those days?

_____ **hours per day**

_____ **minutes per day**

☐ **Don't know/Not sure**

Think about the time you spent **walking** in the **last 7 days**. This includes at work and at home, walking to travel from place to place, and any other walking that you might do solely for recreation, sport, exercise, or leisure.

5. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time?

_____ **days per week**

☐ No walking → ***Skip to question 7***

6. How much time did you usually spend **walking** on one of those days?

_____ **hours per day**

_____ **minutes per day**

☐ **Don't know/Not sure**

The last question is about the time you spent **sitting** on weekdays during the **last 7 days**. Include time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television.

7. During the **last 7 days**, how much time did you spend **sitting** on a **week day**?

_____ hours per day

_____ minutes per day

☐ **Don’t know/Not sure**

This is the end of the questionnaire, thank you for participating.

Appendix H

Three-Day Food Intake Record

Study 1

Food Intake Record – Instructions

Record all food and drink consumed over the course of the day. Start with the first thing that is taken to eat and/or drink in the morning and finish with the last food or beverage that is consumed in the evening. Don't change eating patterns for the record.

- Include any late night meals, snacks and beverages consumed.
- List foods and drinks as soon as possible after they are consumed.
- Be specific about the type of food or beverage eaten (e.g. whole grain, 100% fruit juice etc). Check the label of the food/beverage and be as accurate as possible.
- Indicate the time that the food or beverage was consumed.
- Be sure to list the **amount** of food and drink that you consume.

Time	**Food/Beverage Consumed**	**Amount**	**(For Office Use Only)**			

Appendix I

The World Health Organization Quality of Life (WHOQOL)-BREF

Study 1

The World Health Organization Quality of Life (WHOQOL)-BREF

Please read each question, assess your feelings, and circle the number on the scale that gives the best answer for you for each question.

	(Please circle the number)				
	Very poor	**Poor**	**Neither poor nor good**	**Good**	**Very Good**
1. How would you rate your quality of life?	**1**	**2**	**3**	**4**	**5**

	(Please circle the number)				
	Very dissatisfied	**Dissatisfied**	**Neither satisfied nor dissatisfied**	**Satisfied**	**Very satisfied**
2. How satisfied are you with your health?	**1**	**2**	**3**	**4**	**5**

The following questions ask about **how much** you have experienced certain things in the last two weeks.

	(Please circle the number)				
	Not at all	**A little**	**A moderate amount**	**Very much**	**An extreme amount**
To what extent do you feel that physical pain prevents you from doing what you need to do?	**1**	**2**	**3**	**4**	**5**
How much do you need any medical treatment to function in your daily life?	**1**	**2**	**3**	**4**	**5**
How much do you enjoy life?	**1**	**2**	**3**	**4**	**5**
To what extent do you feel your life to be meaningful?	**1**	**2**	**3**	**4**	**5**

	(Please circle the number)				
	Not at all	**Slightly**	**A Moderate amount**	**Very much**	**Extremely**

		(Please circle the number)				
		Not at all	**Slightly**	**A Moderate amount**	**Very much**	**Extremely**
7.	How well are you able to concentrate?	**1**	**2**	**3**	**4**	**5**
8.	How safe do you feel in your daily life?	**1**	**2**	**3**	**4**	**5**
9.	How healthy is your physical environment?	**1**	**2**	**3**	**4**	**5**

The following questions ask about **how completely** you experience or were able to do certain things in the last two weeks.

		(Please circle the number)				
		Not at all	**A little**	**Moderately**	**Mostly**	**Completely**
10.	Do you have enough energy for everyday life?	**1**	**2**	**3**	**4**	**5**
11.	Are you able to accept your bodily appearance?	**1**	**2**	**3**	**4**	**5**
12.	Have you enough money to meet your needs?	**1**	**2**	**3**	**4**	**5**
13.	How available to you is the information that you need in your day-to-day life?	**1**	**2**	**3**	**4**	**5**
14.	To what extent do you have the opportunity for leisure activities?	**1**	**2**	**3**	**4**	**5**

		(Please circle the number)				
		Very poor	**Poor**	**Neither poor nor well**	**Well**	**Very well**
15.	How well are you able to get around?	**1**	**2**	**3**	**4**	**5**

The following questions ask you to say how **good** or **satisfied** you have felt about various aspects of your life over the last two weeks.

		(Please circle the number)

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16.	How satisfied are you with your sleep?	**1**	**2**	**3**	**4**	**5**
17.	How satisfied are you with your ability to perform your daily living activities?	**1**	**2**	**3**	**4**	**5**
18.	How satisfied are you with your capacity for work?	**1**	**2**	**3**	**4**	**5**
19.	How satisfied are you with your abilities?	**1**	**2**	**3**	**4**	**5**
20.	How satisfied are you with your personal relationships?	**1**	**2**	**3**	**4**	**5**
21.	How satisfied are you with your sex life?	**1**	**2**	**3**	**4**	**5**
22.	How satisfied are you with the support you get from your friends?	**1**	**2**	**3**	**4**	**5**
23.	How satisfied are you with the conditions of your living place?	**1**	**2**	**3**	**4**	**5**
24.	How satisfied are you with your access to health services?	**1**	**2**	**3**	**4**	**5**
25.	How satisfied are you with your mode of transportation?	**1**	**2**	**3**	**4**	**5**

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

(Please circle the number)				
Never	**Seldom**	**Quite often**	**Very often**	**Always**

		(Please circle the number)				
26.	How often do you have negative feelings, such as blue mood, despair, anxiety, depression?	**1**	**2**	**3**	**4**	**5**

Thank you for your help

Appendix J

Consent Forms for Focus Group

Study 2

Focus Group Consent Form

I have had the nature of this study explained to me. I have been given the opportunity to ask questions. I understand that my participation is completely voluntary and I may withdraw from this focus group at any time without penalty. All information obtained in this study will be kept strictly confidential. All participants will be asked not to disclose anything said within the context of the discussion. All identifying information will be removed from the collected materials. I also understand that my words may be quoted directly.

All questions have been answered to my satisfaction.

I agree to participate in the focus group.

_____	_____	_____
Date	Participant's Name	Participant's Signature

_____	_____	_____
Date	Person Obtaining Consent Name	Person Obtaining Consent Signature

Appendix K

The University of Western Ontario Research Ethics Approval Notice

Study 3 and 4

Office of Research Ethics

The University of Western Ontario

Telephone: (519) . Fax: (519) - - Email:
Website: www.uwo.ca/research/ethics

Use of Human Subjects - Ethics Approval Notice

Principal Investigator: Dr. J. Irwin
Review Number: 17138E **Review Level:** Expedited
Review Date: May 26, 2010 **Approved Local # of Participants:** unk
Protocol Title: Co-Active Life Coaching: Findings From a Large-Scale Survey of Certified Professional Co-Active Life Coaches.
Department and Institution: Health & Rehabilitation Sciences, University of Western Ontario
Sponsor:
Ethics Approval Date: June 23, 2010 **Expiry Date:** October 31, 2010
Documents Reviewed and Approved: UWO Protocol, Letters (2) of Information and Consent (Coaches Profile Survey, Focus Groups)
Documents Received for Information:

This is to notify you that The University of Western Ontario Research Ethics Board for Health Sciences Research Involving Human Subjects (HSREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the Health Canada/ICH Good Clinical Practice Practices: Consolidated Guidelines; and the applicable laws and regulations of Ontario has reviewed and granted approval to the above referenced study on the approval date noted above. The membership of this REB also complies with the membership requirements for REB's as defined in Division 5 of the Food and Drug Regulations.

The ethics approval for this study shall remain valid until the expiry date noted above assuming timely and acceptable responses to the HSREB's periodic requests for surveillance and monitoring information. If you require an updated approval notice prior to that time you must request it using the UWO Updated Approval Request Form.

During the course of the research, no deviations from, or changes to, the protocol or consent form may be initiated without prior written approval from the HSREB except when necessary to eliminate immediate hazards to the subject or when the change(s) involve only logistical or administrative aspects of the study (e.g. change of monitor, telephone number). Expedited review of minor change(s) in ongoing studies will be considered. Subjects must receive a copy of the signed information/consent documentation.

Investigators must promptly also report to the HSREB:

a) changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
b) all adverse and unexpected experiences or events that are both serious and unexpected;
c) new information that may adversely affect the safety of the subjects or the conduct of the study.

If these changes/adverse events require a change to the information/consent documentation, and/or recruitment advertisement, the newly revised information/consent documentation, and/or advertisement, must be submitted to this office for approval.

Members of the HSREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the HSREB.

Chair of HSREB: Dr. Joseph Gilbert
FDA Ref. #: IRB 00000940

Ethics Officer to Contact for Further Information

☐ Janice Sutherland	☐ Elizabeth Wambolt	☐ Grace Kelly	☐ Denise Grafton

This is an official document. Please retain the original in your files.

cc: ORE File

Appendix L

Adapted Certified Professional Co-Active Coach Questionnaire

Study 1 and 2

ADAPTED CO-ACTIVE LIFE COACHING QUESTIONNAIRE

1. How long have you earned money as a professional coach?

0 to 6 months
6 months to 1 year
1 year to 2 years
2 years to 5 years
5 to 7 years
7 to 10 years
10 to 15 years
15 to 20 years
More than 20 years

2. Do you consider yourself a full or part-time coach?

Part-time coach, and I have another profession or business.
Part-time coach, with no other profession or business
Full-time coach (skip Question #8)
Other (please specify)

3. Which of the following best describes your employment situation as a coach?

Self employed, sole practitioner
Self employed, with others working for me [If yes, go to question #4]
Partner or co-owner in a firm that is primarily engaged in coaching
Partner or co-owner in a firm primarily engaged in a field other than coaching
Employee in a firm that is primarily engaged in coaching:
Employee in a firm that is primarily engaged in a field other than coaching
Other (please specify)

4. You said that you are self-employed, with others working for you. How many of your employees, besides yourself, are working as coaches? (this Q is only if they chose 3b)

0 2 4
1 3 5+

5. Do you work with coaching clients who live (check all that apply):

Locally (in your city or state or province of residence)
Nationally (in your country of residence)
Internationally (outside of your country of residence)

6. Which of the following best describes your experience as a coaching client?

I currently have a coach I pay to receive coaching
I have never had a coach I paid to receive coaching
I have in the past had a coach (or coaches) I paid to receive coaching
I currently have a coach with whom I barter to receive coaching (e.g. we coach each other)?

7. What profession(s) was/were you engaged in prior to becoming a coach? (Check as many as apply)

Psychologist Social Worker Teacher
Counselor Financial Advisor Consultant

Physician	Lawyer	None
Other health care provider	Professor Other (specify)	

8. In addition to coaching, are you currently engaged in any of the professions listed below? Please select as many as apply.

Psychologist	Consultant	Other (specify)
Counselor	Physician	None
Social Worker	Other health care provider	
Financial Advisor	Lawyer	
Teacher	Professor	

9. What coaching credential or certification do you currently hold (please check all that apply)?

Associate Certified Coach (ACC)	Certified Professional Co-Active Coach (CPCC)
Professional Certified Coach (PCC)	Master Personal and Executive Coach Certificate (MCEP)
Master Certified Coach (MCC)	I am currently working towards a coaching certification
Registered Corporate Coach (RCC)	None
Certified Executive Coach (CEC)	Other (please specify)
Certified Business Coach (CBC)	

10. Where did you receive your coach training (choose all that apply)?

AAA Coaching Partners	Coaches Training Institute, The (CTI)
Academy for Coach Training (ACT)	Coaching and Leadership International Inc. (CLI)
Academy of Coaching, The	Coaching de gestion, inc.
Academy of Executive Coaching, The	Coaching Group, The (TCG)
ADD Coach Academy, The	Coaching Practice Incubator / Fill Your Practice
Adler School for Professional Coaching	Coachville
B-Coach	College of Executive Coaching
Career Coach Institute	Comprehensive Coaching U (CCU)
Coach 21 Co., Ltd.	Core Path
Coach For Life - Coach U	Corporate Coach U International (CCUI)
CoachTrainer	EduCoach
Coach Training Alliance (CTA)	
Coaches Certification Institute	

Emotionology Coach University (ECU)
Executive Coach Academy
Executive Coaching Institute, The
Financial Leadership Executive Coaching Program
Franklin Covey Personal Coaching Division
George Washington University, The Georgetown University Center for Professional Development
Graduate School of Coaching
Hudson Institute of Santa Barbara, The - *ACTP
Institute for the Application of the Social Sciences
Institute for Life Coach Training (formerly Therapist U)
Institute for Professional Empowerment Coaching
International Coach Academy
JFK University
Kadmon Academy of Human Potential
Life On Purpose Institute (LOPI)
MentorCoach
National Association of Business Coaches
Newfield Network, The
New Ventures West (NVW)
North American Lifestyle Planning Corporation
Optimal Functioning Institute, The
Peer Resources
Publications for Heart and Spirit Inc.
Rancho Strozzi Institute
Relationship Coaching Institute
Results Life Coaching Australia
Results Life Coaching USA
Success Unlimited Network (SUN)
University of North Carolina, Charlotte, Business Coaching Certificate Program
Weiterbildungsforum Basel
Other (please specify)

Do not have formal coach training

10. When coaching, do you ever incorporate or deviate from your CPCC skills and use other methods/models?
Yes
No
If yes, which one(s)?

11. Have you had formal training in recognizing issues of mental health?
Yes
No
Not sure

11a. Given your current coaching training, do you feel comfortable referring clients to other services (e.g. psychologist)?
Yes
No

11aa. Given your current coaching training, do you refer clients to other services?
Yes
No
If yes, which ones?

11b. Do you actively seek coaching research?
Yes (send to question 11c if chosen)
No

11c. To what extent does this research change what you do in practice?

12. Which of the following paid coaching-related activities have you engaged in the last 6 months? (Please select all that apply)

1-on-1 coaching	Conducting Training, Seminars, Workshops	Writing columns, newsletters
Team or group coaching	Counseling/Therapy	Coaching research
Public Speaking	Conducting teleclasses	Other, specify

12a. Which of the following unpaid/probono activities have you engaged in the last 6 months?
(Please select all that apply)
1-on-1 coaching
Team or group coaching
Public Speaking
Conducting Training, Seminars, Workshops
Counseling/Therapy
Conducting teleclasses
Writing columns, newsletters
Coaching research
Other, specify

13. On average, how long are your individual coaching sessions?

15 minutes or less	1 hour
15-30 minutes	More than 1 hour
30 minutes to 1 hour	Other (please specify)

14. On average, how frequently do you work with an individual client?

Once a month	Four times a month
Twice a month	Five or more times a month
Three times a month	Other (please specify)

15. How do you conduct your coaching? (Indicate all that apply)
Over the phone
In-person
E-mail or Instant Messaging
Other (please specify)

16. On average, how long do you work with an individual client?

1 to 3 months	1 to 2 years
3 to 6 months	More than 2 years
6 to 12 months	Other (please specify)

17. On average, how much time per week are you engaged in actual coaching with clients?

None	10-20 hours
Less than 2 hours	20-30 hours
2-5 hours	30-40 hours
5-10 hours	Over 40 hours

18. What is the average number of clients you coached per month over the past 12 months?

None	11-15
1-3	16-20
4-6	21+
7-10	

19. How often do you work in each of the specialty areas of coaching listed below?

	Not at all/very seldom	**seldom**	**sometimes**	**often**	**very often**
Career/Transition Coaching					
Personal/Life Coaching					
Small Business Coaching					
Executive and Corporate Coaching					
Non-profit Coaching					
Internal Coaching					
Other					

20. Please tell us how often you work on the following areas with your coaching clients:

	Not at all/very seldom	**seldom**	**sometimes**	**often**	**very often**
Leadership development					
Management training					
Communication skills					
Organizational development					
Team building					
Conflict management					
Understanding individual differences and/or diversity issues					
Focusing their time, energy, and resources					
Building employee morale					
Company loyalty					
Finding new clients					
Marketing their products or services					
Developing new products or services					
Improving customer relationships					
Working with the top level executives and/or executive team					
Globalization and / or M&A issues					
Clarify and pursue goals					
Transitions and change management issues					
Career management issues					

Increase sales and/or revenues	Interpersonal or relationship issues	Other (please specify)
Family issues	Living a balanced life	
Career transitions	Spiritual issues	

INTERNAL COACHES ONLY (Coaches who work with individuals inside their organization)

21. Which group of people do you most frequently coach in your organization? (select one):

Business Owner or Partner	Management or Executive Teams
Top-level Executive (CEO, CFO, COO)	Mid to Upper level Managers
	Sales people
President or equivalent	Non-supervisory professional
Vice-President	Other (please specify)

22. What is you current yearly salary? INTERNAL COACHES ONLY

Less than $10,000	$50,00 - $4,999	$150,000 or more
$10,000 - $29,999	$75,000 - $99,999	No Response
$30,00 - $49,999	$100,00 - $149,999	

22a. What proportion of your current yearly salary is from coaching?

Less than $10,000
$10,000 - $29,999
$30,00 - $49,999
$50,00 - $4,999
$75,000 - $99,999
$100,00 - $149,999
$150,000 or more
No Response

BUSINESS COACHES ONLY

23. What is your primary target audience (check one):

Start up companies and entrepreneurs (1-5 people and/or employees)	Large companies including the Fortune 500 (more than 1000 employees)
Small businesses (20-100 employees)	Individual professionals or executives
Mid-size companies (100-1000 employees)	Not for profit organizations
	Other (please specify)

24. Which group of people do you most frequently coach in a company or organization (select one):

Business Owner or Partner	President or equivalent
Top-level Executive (CEO, CFO, COO)	Vice-President
	Management or Executive Teams

Mid to Upper level Managers
Sales people
Non-supervisory professional
Other (please specify)

PERSONAL COACHES ONLY

25. Which of the following best describes your typical coaching client?
Children and youth (under 12)
Adolescents (under 18)
Young adults (18-25)
Adults (25-35)
Adults (36-55)
Adults (56-70)
Adults (over 71)

26. Which of the following issues do you help your clients with?

	Not at all	sometimes	primary
People with career issues			
People in a spiritual crisis			
People seeking personal growth			
People with relationship issues			
People with ADD			
Business professionals and/or executives			
People with health issues			
Other (please specify)			
No specialty			

OWNERS OR PARTNERS OF A COACHING PRACTICE ONLY (INCLUDING SOLE PRACTITIONERS)

27. How old is your coaching business?
0-6 months
6 months to 1 year
1 year to 2 years
2 years to 4 years
4 years to six years
6 years to 10 years
More than 10 years

28. How long did it take you to go from starting up your company to finding your first 10 paying clients?
1 to 3 months
3 to 6 months
6 to 12 months
1 to 2 years
2+ years
I don't have 10 clients yet

28a. Did you have a background in business training of did you take a business training course to start up your coaching practice?
Yes
No
If yes, please specify: _____

29. On a scale of one to five, with one being "not at all useful" and five being "very useful", how useful have the following techniques proven in bringing in new clients?

Not at all useful (1)	**(2)**	**(3)**	**(4)**	**very useful (5)**	**Do not use/not applicable (6)**
ICF Referral Service					
Referrals from other professionals					
Referrals from clients					
Networking at local organizations					
Giving paid seminars and workshops					
Giving free seminars and workshops					
Giving paid presentations					
Giving free presentations					
Publishing articles or interviews in newspapers, journals, or ezines					

Writing and publishing a book/ebook
Offering a free coaching session
Website
Media publicity
Exhibiting at trade shows
Advertising
Yellow pages listing
Interviews on TV/radio
Donations/auctions,
Producing tapes/CDs/manuals
Direct mail campaigns (letters, postcards, or emails)
CTI referral
Other (please specify)
No response

30. How many hours per week, on average, are you engaged in coaching business-related activities, but not actually coaching (such as marketing, professional development, developing coaching related products and services, delivering seminars, writing articles, research, administration of your coaching business, etc.)?

None
Less than 2 hours
2-5 hours
6-10 hours
11-20 hours
21-30 hours
31-40 hours
Over 40 hours

31. How much money (in US dollars equivalence) do you spend on coaching marketing related activities in a typical month?
Less than $200

$200-$499
$500-$999
$1000 or more

32. How do you price your services?
By the hour or session (Logic)
By the month
By the project
Monthly retainer fee
Other (please specify)

33. How much do you typically charge per hour (in US dollars equivalence) for your coaching services?

Under $50	$100-149	$300 OR MORE
$50-74	$150-199	
$75-99	$200-299	

34. What was your company's estimated gross sales or revenues (in US dollars equivalence) for coaching-related services and products in your last tax year?

Less than $10,000	$40,000 - $49,999	$150,000 - $499,999
$10,000 - $19,999	$50,000 - $74,999	$500,000 - $999,999
$20,000 - $29,999	$75,000 - $99,999	$1 million or more
$30,000 - $39,999	$100,000 - $149,999	No Response

35. What was your personal income (in US dollars equivalence) from coaching-related services and products in your last tax year?

Less than $10,000	$40,000 - $49,999	$150,000 - $499,999
$10,000 - $19,999	$50,000 - $74,999	$500,000 - $999,999
$20,000 - $29,999	$75,000 - $99,999	$1 million or more
$30,000 - $39,999	$100,000 - $149,999	No Response

36. During the past 12 months, have you worked with any clients on a sliding scale, pro bono or barter basis? (Check all that apply)

Sliding scale

Pro Bono (free)

Barter (trade services)

ALL
37. What measures of effectiveness do you currently use with your clients, if any? (list)

Not at all/very seldom **seldom** **sometimes** **often** **very often**

Informal client feedback
Systematic interviews
Quantitative measures
Periodic performance measures
Client satisfaction surveys
Other (specify)
None

38. If methods of coaching effectiveness were available, I would be interested in using them in my practice?

Yes
No

39. To which professional coaching organizations do you belong (please check all that apply)?

Christian Coaches Network
CoachVille
International Coach Federation
National Association of Business Coaches
The Coach2Coach Network
The Coach Connection
The Coaching and Mentoring Network
The International Consortia of Business Coaches
The International Mentoring Association
The International Consortia of Business Coaches (I-CBC)
The Peer Resources Network
The Professional Coaches and Mentors Association
A local / regional coaching group or network excluding local ICF chapters
Local ICF chapter
Local/virtual CTI chapter
None of the above
Other (please specify)

40. Which of the following do you consider to be your **primary** professional coaching organization? (Select only one)

Christian Coaches Network
CoachVille
International Coach Federation
National Association of Business Coaches
The Coach2Coach Network
The Coach Connection
The Coaching and Mentoring Network
The International Consortia of Business Coaches
The International Mentoring Association
The International Consortia of Business Coaches (I-CBC)
The Peer Resources Network
The Professional Coaches and Mentors Association
A local / regional coaching group or network
Coaches Training Institute (CTI)

None of the above

Other (please specify)

41. How long have you been a CPCC member?

Less than 1 year
Between 1 to 2 years
Between 2 to 3 years
Between 3 to 5 years
Between 5 to 7 years
More than 7 years
Don't know

42. Are you currently, or have you ever served in a formal role with any of your professional coaching organizations (e.g. board of directs, local chapter host, etc.)?

Yes

No

43. Do you presently participate in the ICF Coach Referral Service Listing?

Yes
No
Not sure

43a. Do you presently participate in the CTI referral service listing?

Yes

No

43b. Do you presently participate in any formal coaching related referral service?

Yes

No

If yes, please specify _____

44. How many ICF Annual International Conferences have you attended?

None
1
2
3-5
6-7

45. How old were you when you started your coaching training?
    Less than 18
    18-24
    25-34
    35-44
    45-54
    55-64
    65-74

46. Are you…?
    Male
    Female

47. How old are you?

Less than 18	35-44	65-74
18-24	45-54	75+
25-34	55-64	

48. In what country do you reside?

49. Please indicate the highest level of formal education you have obtained:
    Have not graduated high school
    High school graduate
    Some college, trade school, or associated degree
    4-year college degree
    Graduate degree (MA, MBA, MS, MFCC, MSW, MFA)
    Professional or Doctorate degree (JD, PhD, MD)

Appendix M

Letter of Information

Study 3 and 4

Certified Professional Co-Active Coaches Coaching Profile Letter of Information

Investigators
Courtney Newnham-Kanas, M.A., Ph.D. (candidate) Faculty of Health Sciences, University of Western Ontario
Dr. Jennifer D. Irwin, Ph.D., Faculty of Health Sciences, University of Western Ontario
Dr. Don Morrow, Ph.D., Faculty of Health Sciences, University of Western Ontario

Background

In 2004, Grant and Zackon conducted a large-scale survey of International Coach Federation (ICF) members. This was the first study to specifically examine characteristics of coaches. The authors contend that coaching is an emerging cross-disciplinary profession that can be considered a para-therapeutic methodology based on its emphasis on enhancing well-being, personal functioning, and goal attainment (Grant & O'Hara, 2006). Traditional therapeutic helping professions such as psychologists, psychiatrist, or social workers are regulated and carefully governed. However, there are no such regulations governing life coaches and their training. As such, it is vital that a common knowledge base about coaching be developed.

Investigators at the University of Western Ontario are conducting research to develop a comprehensive, applied coaching profile using a global sample of English-speaking and -writing Certified Professional Co-Active Coaches (CPCCs). If you are 18 years of age, read and speaks English fluently, have a CPCC designation, and have access to the Internet and phone, the researchers would like to invite you to participate in the study.

What will happen in this study?

If you agree to participate, you will be asked to fill out a previously used coaching profile questionnaire on-line using Survey Monkey to administer the questionnaires. We are looking to survey 2000 coaches over a four-month period of time.

Alternatives and your right to withdraw from the study

Your participation in this study is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time.

Possible benefits and risks to you for participating in the study

There are no known risks or benefits due to participation in the study. The benefit to society as a whole is an increased understanding of Co-Active coaches.

Confidentiality

The research team will keep your identity, comments, written data, and questionnaire responses confidential and secure. No names will appear on any documents published as a result of this study. Only the researchers listed as part of this study will have access to the security password for SurveyMonkey. No identifiers will be collected on Surveymonkey. A separate email containing information for additional studies will be used and will not be attached to responses.

Consent: You indicate your consent to participate in the study by completing and submitting the on-line questionnaire.

Costs and compensation

There is no cost to you for participating in the study
When the results of the study are published, your name will not be used. If you would like to receive a copy of the overall results of the study, please send an e-mail to

Contact Person (should you have any further questions about the study):
Courtney Newnham-Kanas, University of Western Ontario,
Dr. Jennifer D. Irwin, University of Western Ontario
Dr. Don Morrow, University of Western Ontario

- If you have any further questions regarding your rights as a study participant, please contact the Director of the Office of Research Ethics at

This letter is for you to keep.

CURRICULUM VITAE

PERSONAL INFORMATION

NAME: Courtney Newnham-Kanas

PLACE OF BIRTH: Toronto, Ontario

EDUCATION

2007 – 2011	***University of Western Ontario***, London, ON PhD, Health Promotion, Faculty of Health Sciences
2005 – 2007	***University of Western Ontario***, London, ON Masters of Arts, Faculty of Health Sciences, Kinesiology
2001 – 2005	***University of Western Ontario***, London, ON Honors Bachelor of Health Sciences, Faculty of Health Sciences

---

PhD Thesis Title

Motivational Coaching: Its Efficacy as an Obesity Intervention and a Profile of Professional Coaches

Masters Thesis Title

Co-Active Life Coaching as a Treatment for People with Obesity

HONOURS AND DISTINCTIONS

2005 – 2010	**Nomination for Teaching Assistance Award of Excellence**, *The University of Western Ontario*
2009	**Graduate Student Teaching Award Recipient**, *The University of Western Ontario*
2003 – 2005	**Dean's Honour List,** *The University of Western Ontario*
2001 – 2005	**Dependent Scholarship,** *The University of Toronto*
2001	**Entrance Scholarship,** *The University of Western Ontario*

TEACHING EXPERIENCE
THE UNIVERSITY OF WESTERN ONTARIO

Summer 2011	Health Science 2700a Health Issues in Childhood & Adolescence	Instructor
Fall 2010	Health Science 2250 Health Promotion	Teaching Assistant
Fall 2010	Sociology 2245 Sociology of Health (King's College)	Teaching Assistant
Winter 2010	Health Science 4200 Advanced Health Promotion	Teaching Assistant
Fall 2009	Health Science 3200 Health Promotion	Teaching Assistant/ Seminar Instructor
Fall 2008	Health Science 306a Health Promotion	Teaching Assistant/ Seminar Instructor
Fall 2007	Health Science 306a Health Promotion	Teaching Assistant/ Seminar Instructor
Fall 2006	Health Science 303 Communication and Interpersonal Relationships	Teaching Assistant/ Seminar Instructor
Winter 2006	HS 411G Critical Appraisal of Research	Teaching Assistant
Fall 2005	HS 282 Research Methods and Analysis in the Health Sciences	Teaching Assistant/ Lab Instructor

Guest Lectures

February 2011	Presented Introduction to APA Guidelines to an undergraduate Methods in Evidence-Based Practice class (Health Sciences 4810) at the University of Western Ontario.
November 2010	Presented The Canadian Health Care System to an undergraduate Sociology class (Sociology 2245: Sociology of Health) at King's College at the University of Western Ontario
September 2010	Presented *Experiencing Health and Illness* to an undergraduate Sociology class (Sociology 2245: Sociology of Health) at King's College at the University of Western Ontario.

May 2010	Presented *Co-Active Life Coaching as an Individual-Based Health Behaviour Change Method* to an undergraduate Health Sciences class (Health Science 2250: Health Promotion) at the University of Western Ontario.
November 2009	Presented Health Behaviour Change Models to a graduate Health and Rehabilitation Sciences class (Special Topics in Health Promotion (Health & Rehabilitation Sciences 9602) at the University of Western Ontario.
October 2009	Presented *Co-Active Life Coaching* to an undergraduate Health Sciences class (Health Sciences 3200: Health Promotion, 200 students) at the University of Western Ontario.
March 2009	Presented *Individual-Based Health Behaviour Change Part II & III* to an undergraduate Health Sciences class (Health Sciences 4600G: Advanced Health Promotion) at the University of Western Ontario.
March 2009	Presented Individual-*Based Health Behaviour Change Part I* to an undergraduate Health Sciences class (Health Sciences 4600G: Advanced Health Promotion) at the University of Western Ontario.
November 2008	Presented *Obesity and Other Related Health Issues* to an undergraduate Health Sciences class (Health Sciences 021: Health and Wellness, 30 students) at the Six Nations Polytechnic college.
June 2008	Presented *Individual-Based health Behaviour Change* lecture to an undergraduate Health Sciences class (Health Sciences 306a: Health Promotion, 50 students) at The University of Western Ontario.
June 2008	Presented *Obesity and Other Related Health Issues* lecture to an undergraduate Health Sciences class (Health Sciences 021: Health and Wellness, 60 students) at The University of Western Ontario.
March 2007	Presented *Life Coaching as a Treatment for Obesity* lecture to an undergraduate Health Promotion class (Health Sciences 406G: Advanced Health Promotion, 40 students) at The University of Western Ontario
May 2007	Presented *Obesity – The Expanding Epidemic* lecture to an undergraduate Health Sciences class (Health Sciences 021: Health and Wellness, 60 students) at The University of Western Ontario
November 2007	Presented *Obesity – The Expanding Epidemic* lecture to an undergraduate Health Sciences class (Health Sciences 021: Health and Wellness, 500 students) at The University of Western Ontario

Academic Convention

September 7, 2005 Graduate Student Conference on Teaching
University of Western Ontario, Teaching Support Centre

PROFESSIONAL TRAINING

January 20-21, 2011 Motivational Interviewing Training
London, Ontario

June 2010-March 2011 Co-Active Life Coaching Training
The Coaches Training Institute, Toronto location

PUBLICATIONS IN REFEREED JOURNALS

Newnham-Kanas, C., Irwin, J.D., & Morrow, D. (2011). Findings from a global sample of Certified Professional Co-Active Coaches. *International Journal of Evidence Based Coaching and Mentoring, 9*(2), 23-36.

Newnham-Kanas, C., Morrow, D., & Irwin, J.D. Participants' Perceived Utility of Motivational Interviewing Using Co-Active Life Coaching Skills on Their Struggle With Obesity. (In print). *Coaching: An International Journal of Theory, Research and Practice.*

Newnham-Kanas, C., Irwin, J.D., Morrow, D., & Battram, D. (2011). Motivational interviewing using co-active life coaching skills as an intervention for adults struggling with obesity. *International Coaching Psychology Review, 6*(2), 211-228.

Newnham-Kanas, C., Morrow, D., Irwin, J.D. (2010) A functional juxtaposition of three methods for health behaviour change: Motivational Interview, Coaching, and Skilled Helping. International Journal of Evidenced Based Coaching and Mentoring, 8(2), 27-48.

Newnham-Kanas, C., Gorzynski, P., Morrow, D., Irwin, J.D. (2009). Annotated bibliography of life coaching and health research. International Journal of Evidenced Based Coaching and Mentoring, 7(1), **39-103**.

Newnham-Kanas, C., Irwin, J.D., Morrow, D. Life coaching as a treatment for individuals with obesity. (2008). International Journal of Evidenced Based Coaching and Mentoring, 6(2), 1-12.

Papers Under Review

Newnham-Kanas, C., Morrow, D., & Irwin, J.D. Certified Professional Co-Active Coaches: why they enjoy coaching. *International Journal of Evidence Based Coaching and Mentoring.*

Stewart, S., Leschied, A., **Newnham-Kanas, C**., Somerville, L., Armieri, A., & St Pierre, J. Residential Treatment Outcomes with Maltreated Children who Experience Serious Mental Health Disorder. (Submitted June 2009). *Child Abuse and Neglect*.

Conference Presentation

Newnham-Kanas, C., Irwin, J.D., Morrow, D., & Battram, D. Motivational interviewing using co-active life coaching skills as a treatment for adults struggling with obesity. 2nd Canadian National Obesity Summit. Montreal, QC, April 28-May 1, 2011. ***Poster Presentation***

Newnham-Kanas, C., Morrow, D., Irwin, J.D. The impact of motivational interviewing using co-active life coaching skills on adults struggling with obesity. 2nd Canadian National Obesity Summit. Montreal, QC, April 28-May 1, 2011. ***Poster Presentation***

Newnham-Kanas, C., Irwin, J.D., Morrow, D. Motivational Interviewing (MI) Using Co-Active Life Coaching Skills as a Treatment for Obesity. 2011 Health and Rehabilitation Sciences Research Forum. London, ON, February 9, 2011. ***Poster Presentation***

Stewart, S., Leschied, A., **Newnham-Kanas, C**., Somerville, L., Armieri, A., St. Pierre, J. Residential Treatment Outcomes with Maltreated Children who Experience Serious Mental Health Disorder. Pathways to Resilience II Conference. Halifax, NS, June 7-10, 2010. ***Paper Presentation***

Newnham-Kanas, C., Irwin, J.D., Morrow, D. Motivational Interviewing (MI) Using Co-Active Life Coaching Skills as a Treatment for Obesity. 2nd Canadian Obesity Student Meeting. Ottawa, ON, June 9-12, 2010. ***Poster Presentation***

Newnham-Kanas, C. Roundtable Discussion on Student Recognition. 2009 Canadian Intramural Recreation Athletics Conference, Ontario, May 21-22, 2009. ***Oral Conference Presentation***

Newnham-Kanas, C., Wagler, M. Effective Hiring and Training. 2009 Canadian Intramural Recreation Athletics Conference, Ontario, May 21-22, 2009. ***Oral Conference Presentation***

Newnham-Kanas, C, Irwin, J.D, Morrow, D. Co-Active Life Coaching as a Treatment for People with Obesity. 2008 International Society for Behavioral Nutrition and Physical Activity, Banff, May 20-25, 2008. ***Poster Conference Presentation***

Newnham-Kanas, C, Irwin, J.D, Morrow, D. Co-Active Life Coaching as a Treatment for People with Obesity. 2007 International Union for Health Promotion and Education, Vancouver, June 10-15, 2007. ***Oral Conference Presentation***

Newnham-Kanas, C, Irwin, J.D, Morrow, D. Obesity Treatment Through Life Coaching. 2006 International Coach Federation Conference. St. Louis, Missouri, USA, November 1-4, 2006. ***Poster Presentation***

Newnham-Kanas, C, Irwin, J.D, Morrow, D. Assessing The Effectiveness of Life Coaching as a Treatment For Obesity. 10th Annual Eastern Canadian Sport and Exercise Psychology Symposium. Ottawa, ON, March 17-18, 2006. ***Oral Conference Presentation***

Newnham-Kanas, C, Oulahen, S, Rasmussen, S, Reynolds, A. Nurse-physician collaboration on patient length-of-stay and job satisfaction in surgical intensive care units. Advanced Measurement and Research in Health Sciences, the University of Western Ontario. April 2005. ***Poster Presentation***

RELATED WORK EXPERIENCE

September 2005 –	Assistant Coordinator of Membership Services Campus Recreation, Sport and Recreation Services *The University of Western Ontario*
Fall 2009/Winter 2010	Project Coordinator and Assessment Administrator Co-Active Life Coaching as a Treatment for Adults with Obesity, *The University of Western Ontario*
Summer 2008	Research Assistant: Investigating the Impact of Intensive Residential Treatment on Children Referred from the Child Welfare System: The Nature of Maltreatment, *Child and Parent Resource Institute*
Summer/Fall 2006	Project Coordinator and Assessment Administrator Co-Active Life Coaching as a Treatment for People with Obesity, *The University of Western Ontario*
Summer 2005	Research Assistant: How to manual for Edvance Program City Adult Learning Centre, *Toronto District School Board*