

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

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Self-determination theory (SDT) and Co-Active life coaching (CALC) serve in a complementary capacity whereby both are concerned with investigating the natural growth tendencies of individuals with respect to self-motivation. SDT provides a framework for examining the processes that regulate health behaviours, while the Co-Active model provides the tools necessary to bring desired changes to fruition. Although an increasing amount of empirical support for CALC exists, its motivation-specific underpinnings have yet to be examined theoretically. Given that motivation has been linked to the behaviour change process, the purpose of present paper was to explore the motivational foundations of CALC as they relate to SDT in order to provide theory-based evidence for its effectiveness and validate further, its utility as a viable health behaviour change method. Through deconstructing the techniques inherent in CALC and analysing its three key principles (i.e. fulfilment, balance and process coaching), a protocol for increasing motivation and enhancing self-determination as a function of satisfying SDT's needs for autonomy, competence and relatedness was uncovered. This exploratory analysis provides an important first step in positioning CALC as a theoretically grounded behaviour change method from a motivational perspective. Empirical research is now warranted to confirm these mechanisms with respect to the behaviour change process and treatment outcomes.

Keywords: Co-Active life coaching; self-determination theory; motivation; behaviour change; health

It has been well established in the literature that interventions targeting health behaviour change should be planned based upon proven theories (e.g. Brug, Oenema, & Ferreira, 2005; Elder, Ayala, & Harris, 1999; Fishbein & Yzer, 2003). Health behaviour theories provide explicit, valuable insights into the psychological and structural processes that are hypothesised to guide and regulate behaviour (Rothman, 2004). Specifically, these types of theories delineate the various determinants that influence health (e.g. the facilitators and barriers to engaging in health-promoting behaviours) with a view towards providing a justification for the design and implementation of interventions aimed at eliciting behaviour change. Moreover, researchers can articulate important assumptions that underlie

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intervention protocols and evaluate the effectiveness of an intervention based on the framework provided by an a priori set of theoretical constructs (Rothman, 2004).

A position paper by Brug et al. (2005) examined the utility of theoretical applications in dietary and physical activity-based behaviour change interventions. These two behaviours are frequent foci in the health field given their amenable nature and correlational relationships with a myriad of preventable conditions and diseases (World Health Organization [WHO], 2010). In light of the fact that behaviour theory is reflective of the compiled evidence-base of behavioural research, the authors concluded that applying theory should, in fact, improve the likelihood that these types of interventions will elicit desired changes effectively (Brug et al., 2005). However, it was also noted that despite the ability of many theories to establish 'what' needs to be changed in order to promote healthy behaviours, the mechanisms or 'how to' for effecting these changes are often lacking (Brug et al., 2005; Rothman, 2004). Theories have been described as systematic arrangements of fundamental principles that provide a basis for explaining certain occurrences while models, on the other hand, provide researchers with a plan for investigating phenomena (McKenzie & Smeltzer, 2001). Thus, when taking into account both the 'what' and the 'how to' of the behaviour change process, incorporating a model or tool that has been grounded in a theoretical framework is an important consideration.

Health-related coaching is a proliferating area of research that has been utilised effectively to mitigate several conditions and diseases, including but not limited to: obesity, depression, attention deficit hyperactivity disorder, cancer, asthma, diabetes and poor cardiovascular health (Newnham-Kanas, Gorczynski, Irwin, & Morrow, 2009). Given that there are a number of different coach-training schools and subsequent conceptualisations about the nature of coaching, it is important to be explicit regarding the method being applied when targeting behavioural change (Irwin & Morrow, 2005). One particular style of life coaching founded empirically in practical application, that is being employed increasingly to effectuate improvements in health and health behaviours is Co-Active life coaching (CALC; Irwin & Morrow, 2005; Whitworth, Kimsey-House, Kimsey-House, & Sandahl, 2007). The Co-Active model involves a collaborative alliance between a certified coach and client that is created to meet the client's needs, and established through fluid, ongoing dialogue. In order to reach enhanced levels of performance, learning, growth or fulfilment, goals and aspirations are explored through this relationship and set by the client (Whitworth et al., 2007). To facilitate CALC's validation as an evidence-based practice, the Co-Active model has been grounded previously in several wellestablished behavioural theories including: Social Cognitive Theory; the Theory of Reasoned Action; and the Theory of Planned Behaviour (Irwin & Morrow, 2005). These particular theories address multiple elements inherent within this model (e.g. expectations, self-efficacy and reinforcement) and provide a substantial framework for behaviour change through the application of various CALC tools and strategies. However, despite this evolving theoretical foundation and an increasing amount of empirical support for CALC and health behaviour change (Mantler, Irwin, & Morrow, 2010; Newnham-Kanas, Irwin, & Morrow, 2008; van Zandvoort, Irwin, & Morrow, 2008, 2009), its motivational underpinnings have not yet been examined from a theoretical perspective.

Failure to adhere to recommended health-promoting protocols (e.g. regular exercise, a balanced diet and smoking abstinence) is a major public health concern,

and origins of attrition are often motivationally related (Silva et al., 2008). Several studies have demonstrated the important function of motivated behaviours with respect to the preservation of health in areas such as physical activity (Ingledew & Markland, 2008; Wilson, Rodgers, Blanchard, & Gessell, 2003) and smoking cessation (Williams et al., 2006). In many cases, those individuals at risk do, in fact, have the capacity to make positive changes, assuming they are willing to take action (Silva et al., 2008). Given that motivation has been linked inextricably to the behaviour change process (Ryan & Deci, 2000) and the fact that health behaviour theories provide important insights into why people are (or are not) engaging in various health behaviours (Irwin & Morrow, 2005), a theory-based exploration of the Co-Active model is now warranted from a motivational perspective. Moreover, positioning the Co-Active model within one theory (as opposed to several) is essential in order to develop a streamlined process for eliciting health behaviour change through the application of CALC tools and strategies.

Self-determination theory (SDT; Deci & Ryan, 2000, 2002; Ryan & Deci, 2000, 2001) is an approach to examining human motivation and personality that focuses on the causes and processes through which individuals acquire motivation for not only initiating, but also maintaining new health-related behaviours over time (Ryan & Deci, 2000; Ryan, Patrick, Deci, & Williams, 2008). Through considering the reasons that move individuals to act, SDT posits a continuum of distinct types of motivation, each of which elicits explicit consequences for performance, learning, personal experience and overall well-being (Ryan & Deci, 2000). Additionally, SDT focuses on goal-directed behaviour with respect to the fulfilment of three basic psychological needs (i.e. autonomy, competence and relatedness) which are considered imperative for comprehending the content and processes of goal pursuits (Deci & Ryan, 2000).

In light of SDT's fundamental pertinence to Co-Active coaching (i.e. both are concerned with the role that motivation plays with respect to bringing healthy behaviour change to fruition (Ryan & Deci, 2000; Whitworth et al., 2007), the purpose of the present paper is to deconstruct the CALC model in order to ascertain which constructs can be grounded in this theory. More specifically, this process will entail an exploration of SDT's motivational continuum and psychological needs as they relate to the skills and strategies involved in the Co-Active method. Once established, these elements will be positioned to provide theory-based evidence for the efficacy of this health behaviour change model from a motivational perspective.

The method of Co-Active life coaching and its foundational premises

The field of life coaching is vast and complex as evidenced by its various training schools, styles and methodologies (Irwin & Morrow, 2005). Thus, when implementing coaching as a tool for behaviour change, it is important to be explicit regarding its foundational premises and applications. According to the Co-Active model, clients are not broken or in need of fixing, but are considered experts in their lives and recognised as having the answers to their own questions (Irwin & Morrow, 2005; Whitworth et al., 2007). The client is in control of the coach-client relationship. That is, he or she is responsible for establishing the agenda or discussion topics of each coaching session (Whitworth et al., 2007). The coaching process itself begins with a personal interview which is conducted in order to: ascertain the scope of the

coach-client relationship (i.e. how the coach and client will work together); identify any opportunities or challenges the client is facing; and establish, if possible, specific desired outcomes. Subsequent sessions are usually conducted over the telephone for a pre-determined length of time. The client may be asked to complete specific actions or assignments between scheduled coaching sessions in service of achieving previously identified personal goals. The duration of the coach-client relationship is not pre-determined, but dependent on the needs and preferences of the client (Whitworth et al., 2007).

Within the coach-client relationship, the roles of the coach are to: act in a supportive, thought provoking manner to elicit answers which emanate from the client; facilitate the exploration of what he or she wants to achieve; and help to develop and implement solutions towards goal attainment. Responsibilities of the coach involve listening, asking questions and empowering the client as opposed to providing instruction or advising (Whitworth et al., 2007). Co-Active coaches are trained in using skills such as intuition, active-listening and curiosity. The types of coaching skills and techniques employed are dependent upon the individual needs of the client being coached, and the context of each particular session (Whitworth et al., 2007). When interacting with clients, coaches are taught to self-manage; that is, the coach does not share any personal thoughts, beliefs or feelings on a particular subject. This aims to ensure that the coach remains engaged and able to determine what is true based on the client's perspective. Ultimately, the CALC method works to deepen the client's learning and/or forward the client towards some action of his or her choosing (Whitworth et al., 2007). In essence, this is accomplished through addressing the client's agenda which is featured at the centre of the Co-Active model, and encapsulates three key principles or styles of coaching (i.e. fulfilment, balance and process). These principles, depicted in Figure 1, are used to guide and enrich the behaviour change process circumstantially within each coaching session. Fulfilment coaching involves exploring the client's values with a view towards helping him or her to experience a purposeful life and reach his or her self-defined potential. In balance coaching, clients are assisted with exploring the multiple compartments of their lives, while they work to identify a widened range of perspectives for viewing particular issues and situations. The purpose of examining these different viewpoints is to allow for the development of multiple options or choices from which the client may draw when making decisions. Through process coaching clients work with the coach to 'stay in the moment' of where they are in their lives (e.g. a particular experience or emotion). This principle focuses on the journey of behaviour change as opposed to a destination or end point. According to Whitworth et al. (2007), these three principles are fundamental to living a full, lively life, and are therefore, an essential feature of the coaching method (for a more in-depth account of the CALC method, please refer to Whitworth et al., 2007).

Self-determination theory and health behaviour change

Self-determination theory is grounded on the assumption that all individuals possess 'natural, innate, and constructive tendencies to develop an ever more elaborated and unified sense of self' (Deci & Ryan, 2002, p. 5). Essentially, SDT highlights people's inherent need to evolve and be integrated socially (Palmeira et al., 2007). From a health behaviour perspective, this suggests that careful attention be paid to the

patient/participant experience and motivation (Ryan et al., 2008). In the context of SDT, motivation concerns all aspects of intention and activation (e.g. energy, direction, persistence; Ryan & Deci, 2000). Specifically, behavioural regulation of a particular activity can be amotivated, extrinsically motivated or intrinsically motivated. Expressed on a continuum (see Figure 1), these classifications are differentiated by the extent to which they are self-determined or autonomous; each classification represents a varying degree of external goal and value internalisation and integration. Within this theory, internalisation involves taking in a regulation or value; integration refers to transforming the regulation further as one's own so that, ultimately, it emerges from a sense of self (Ryan & Deci, 2000; Thøgersen-Ntoumani & Ntoumanis, 2006). According to SDT, internalising and integrating values and skills for change and experiencing self-determination are important requirements for maintaining behaviours over time.

Amotivation is found at the left end of the continuum and represents a state of lacking the intention to act or engage in a behaviour (Ryan & Deci, 2000). When amotivated, individuals generally do not value an activity or the outcomes that it might yield, resulting subsequently in their acting without intent, or not acting at all (Ryan, 1995; Ryan & Deci, 2000). To the right of amotivation are four dimensions of extrinsically motivated behaviours (i.e. induced by elements found outside the individual such as rewards or social pressure) which range in their degree of autonomous regulation: external regulation, introjected regulation, identified regulation and integrated regulation. External regulation, the least self-determined dimension, refers to one's engagement in a behaviour for the purposes of satisfying some form of external demand, or to obtain a separable outcome such as a reward or to avoid punishment. Behaviours that are externally regulated emanate from an external perceived locus of causality and are often experienced as controlled. Therefore, minimal effort and poor performance quality are likely, and behavioural compliance occurs generally in the presence of the control only (Markland, Ryan, Tobin, & Rollnick, 2005). The second dimension, introjected regulation, arises from self-imposed feelings of pressure to perform a particular behaviour that is contingent on aspects of self-esteem (e.g. guilt, anxiety, shame and pride). Thus, the regulation is taken in, but not accepted fully as one's own. Identified regulation, the third dimension, is also guided externally and is derived from a sense of motivation towards attaining personal goals; the action is accepted as personally important and valued consciously although it may not be inherently enjoyable. As these actions are personally endorsed, they are accompanied by an increased level of perceived autonomy. The most highly self-determined dimension along the extrinsic motivational continuum is integrated regulation which refers to a need to confirm one's sense of self by performing a particular behaviour. Integrated regulations are indicative of actions that are performed by choice or for instrumental reasons, and have therefore been brought into congruence with an individual's other core values and needs. Finally, to the far right of the motivation continuum is intrinsic motivation which represents the only true form of behavioural regulation that is fully self-determined. The most desirable form of motivation when considering health behaviour change, intrinsic motivation is achieved when an individual derives genuine internal pleasure, enjoyment or satisfaction as a result of engaging in a particular behaviour (Deci & Ryan, 2002; Ryan & Deci, 2000; Thøgersen-Ntoumani & Ntoumanis, 2006).

Research has examined extrinsic versus intrinsic motivation. In exercise for example, Ryan and Deci (2000) found that when compared with individuals who were externally controlled for an action (e.g. by a bribe or to please others), those who possessed authentic, intrinsic motivation to complete the action had greater interest and confidence resulting in enhanced performance, persistence, self-esteem and general well-being. Moreover, a considerable body of research (Ryan & Deci, 2000) has demonstrated that greater regulatory internalisation is related to a myriad of improved outcomes with respect to health such as: increased medication adherence within chronically ill populations; improved maintenance of weight loss among the morbidly obese; and improved glucose self-management among diabetics.

A basic premise of SDT is that individuals have three innate psychosocial needs which support self-determined motivation: autonomy, competence and relatedness (Ryan & Deci, 2000; Williams, 2002). Autonomy is defined as the degree to which an individual feels a sense of personal agency and responsibility, such that his or her behaviour is perceived to come from an internal locus of causality as opposed to a coercive or controlled origin. Within SDT, to be autonomous entails acting with a sense of volition and choice because an activity or behaviour is appealing, or holds personal importance (Williams, 2002). Competence involves interacting effectively with one's environment and mastering challenging tasks, while considering one's ability to achieve desired goals and outcomes. Relatedness is feeling a sense of meaningful connection in one's social milieu. The social environment has been identified as a key predictor of whether or not individuals will display vitality, and the extent to which surroundings elicit favourable conditions is indicative of an individual's ability to develop the necessary personal resources for engaging in behaviours autonomously (Deci & Ryan, 2000). According to SDT, by satisfying all of these basic needs through the social environment, enhancements to psychological growth and adaptability will occur, leading to improvements in physical and mental health, in addition to overall well being (Deci & Ryan, 2000; Ryan et al., 2008; Williams, 2002).

Co-Active coaching and self-determination theory

It is clear that the Co-Active model and SDT share complementary tenets and underlying assumptions. Most importantly, both aim to enhance human growth and potential through exploring and regulating goal pursuits as they relate to health behaviours or actions (Deci & Ryan, 2000; Irwin & Morrow, 2005; Ryan et al., 2008; Whitworth et al., 2007). Based on this common principle, it could be asserted that by applying the Co-Active model, the coach aims to move the client through the motivational continuum towards internalisation and integration, such that behaviours become more self-determined and performed autonomously. Essentially, this is accomplished through supporting and facilitating the development of the client's basic psychological needs (Ryan & Deci, 2000) as a function of applying various coaching tools and techniques (Whitworth et al., 2007), thereby helping him or her to live true to personal values. This collaborative health behaviour change process is depicted in Figure 1 and will be the focus of the ensuing discussion.

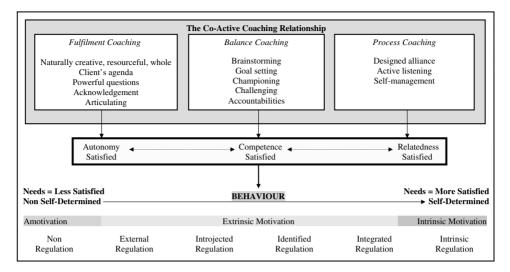


Figure 1. Co-Active coaching and self-determination theory: protocol for health behaviour

Note: Many of these coaching concepts can be applied to satisfy one or more of SDT's psychological needs. However, they have been placed strategically in the present figure under the assumption that the chosen position will elicit optimal behaviour change outcomes. Information pertaining to the SDT continuum showing types of motivation was adapted from Ryan and Deci (2000).

Facilitating autonomy through the Co-Active model

A fundamental cornerstone of the Co-Active model states that clients are *naturally* creative, resourceful and whole (NCRW), and therefore capable of finding the answers that they need themselves with the assistance of a coach (Whitworth et al., 2007). This pre-established assumption connotes a sense of personal agency and ownership on the part of the client with respect to decision making. As a result, he or she will be more apt to develop efficacious solutions with a greater propensity for behavioural follow-through (Whitworth et al., 2007). In the realm of health behaviour change, this has obvious important implications. In addition, the Co-Active model focuses entirely on the agenda of the client and obtaining desired outcomes based on his or her unique needs: a notion that supports SDT's contention that individuals benefit from experiencing a sense of authorship with respect to performing actions and behaviours (Vansteenkiste & Sheldon, 2006).

From a practical perspective, increasing autonomy as conceptualised in SDT can occur through the integration of *fulfilment coaching*, a key principle found within the Co-Active model. As noted previously, being autonomous within SDT entails acting with a sense of volition because a behaviour holds personal importance. If behaviours are to be maintained beyond a controlled environment or treatment setting successfully, it is imperative that individuals come to place value on the behaviours and endorse their importance. This is especially the case for behaviours that may not be inherently enjoyable, such as quitting smoking, or increasing physical activity frequency (Ryan et al., 2008). An emotive and deeply personal technique, fulfilment coaching involves evoking discovery, insight and commitment by tapping into a client's personal values and life purposes. This is accomplished,

in part, through the use of open-ended, *powerful questions*. As the coach makes these thought provoking inquiries, clients explore and gain clarification into their values with the aim of uncovering what is truly essential to their lives. In turn, this helps clients to take a stand and make autonomous choices based on what is considered fulfilling to them (Whitworth et al., 2007). For example, when making a decision regarding a behaviour change, clients might be asked: 'How will this action move you closer to honouring your values?'. According to Whitworth et al. (2007), a decision that is made based on important values will be a fulfilling decision. Therefore, the likelihood that the behaviour will become more self-determined increases.

An additional concept inherent within SDT which bears resemblance to the premises of Co-Active coaching is autonomy support (Deci & Ryan, 1985; Ryan & Deci, 2000; Williams, 2002). In a health-promoting context, a climate is considered autonomy supportive when authority figures (e.g. a physician or researcher): consider the perspectives of the patients or participants; encourage these individuals to take responsibility for their health behaviours; elicit meaningful interactions by listening and asking about goals and aspirations; and suspend judgement while making inquiries (Williams, 2002). Previous research has demonstrated the causal role that autonomy support plays in increasing the internalisation of more autonomous regulations (e.g. Williams et al., 2006; Wilson & Rodgers, 2004). A study by Deci, Eghrari, Patrick, and Leone (1994) examined the elements that constitute autonomy support and isolated two important facilitators that lead to greater internalisation and integration of relevant regulations, namely: applying an interpersonal communication style which promotes choice and minimises control and pressure, and acknowledging the feelings and perspectives of the patient/client so that he or she feels understood. These elements are also consistent with the Co-Active method. The container of the coaching relationship is a dynamic one. That is, the coach and client act in a collaborative and co-creative fashion where the client is empowered to make decisions, thus minimising barriers such as control and pressure (Whitworth et al., 2007).

Coaches also employ the tools of *acknowledgement* and *articulating* to assist in creating an environment that is safe, autonomy supportive and thereby conducive to enabling clients to take risks, clarify choices and make changes (Whitworth et al., 2007). Acknowledgement involves the coach openly recognising clients for who they are, and who they had to be in order to accomplish an action or make an attempt to move forward. Through being acknowledged, a client is able to reflect on how performing that action honoured his or her values. This, in turn, allows that client greater access to those values and his or her inner character which can facilitate internalisation and integration of the behaviour (Irwin & Morrow, 2005; Whitworth et al., 2007).

Additionally, coaches use the skill of articulating what's going on which is associated with listening, and works to increase the client's feelings of being understood. When clients are immersed in the bustle of their lives, it may be difficult for them to see what they are doing or saying. Articulating 'helps clients to connect the dots so they can see the picture they are creating by their action, or sometimes, lack of action' (Whitworth et al., 2007, p. 41). Utilising this skill allows the coach to share succinct observations without judgement, and provide an alternate view of what is going on with the client, thus increasing his or her self-awareness. The cumulative impact of these skills, facilitated through the application

of fulfilment coaching, can contribute to enhancing the client's autonomy and ability to make decisions that will assist with moving him or her towards the intrinsic regulation of behaviours.

Enhancing competence through the Co-Active model

With respect to engaging in health behaviours, it is important that individuals understand how to go about attaining their goals and feel confident that they can carry out the necessary actions efficaciously (Ryan & Deci, 2000; Silva et al., 2008). Competence is considered a requirement of internalisation and, within SDT, is facilitated when patients or participants are: provided with positive, relevant feedback on progress; helped to develop achievable goals; provided with pertinent tools and skills; encouraged to believe that they possess the capacities necessary for change; and supported accordingly when barriers to behaviour change emerge (Markland et al., 2005; Ryan et al., 2008). One method within the Co-Active model that is congruent with these tenets is the principle of balance coaching. In CALC, the concept of balance is viewed as fundamental to quality of life; this type of coaching is applied when the client is facing a barrier to change or is 'stuck' in a perspective or way of looking at a particular situation (Whitworth et al., 2007). According to Irwin and Morrow (2005), balance coaching applies seven methodological steps. First of all, the coach works with the client to identify the perspective and acquaint him or her with the experience of being 'stuck.' Secondly, the coach and client work collaboratively to explore additional perspectives, some of which may be considered outrageous to the client. The third step involves the client viewing the issue by 'trying on' or experiencing the various perspectives. Clients are then asked to choose a perspective (step 4) and subsequently develop a plan to address the issue based on that new viewpoint or *lens* (step 5). In step 6, clients commit to the plan and finally in step 7, take appropriate action which generally occurs outside of the coaching session. Throughout this process, the coach acts as a guide and sounding board, encouraging clients to think in alternative and often unnatural ways with a view towards increasing their confidence and ability to address the issue or situation in question. Inherent in the balance formula is the skill of brainstorming: a 'how to,' creative collaboration between coach and client whereby ideas are generated to assist in goal development, and ultimately enable behaviour change as a function of viewing the situation through the chosen perspective. The role of the coach in this instance is to push the client beyond familiarity, and expand the net of possibility by making a wide variety of suggestions including some which may be viewed as 'out of the box.' Clients are encouraged to ruminate all of the brainstorming options and choose those which have the most appeal to them (Whitworth et al., 2007). In essence, balance coaching empowers the client to make choices based on his or her natural resources and abilities, a process which contributes to satisfying the need for competence.

Within SDT, the more competent individuals perceive themselves to be at a particular activity, the more likely it is that they will become intrinsically motivated (Ryan & Deci, 2000). The Co-Active model promotes the use of several tools which augment the coaching experience, and promote competence simultaneously. Championing, accountabilities and challenging highlight the client's capacities and serve to support his or her efforts with respect to invoking health behaviour change.

According to Whitworth et al. (2007), championing clients mean standing up for them when they question or doubt their abilities. Acting in a supportive capacity, the coach reminds the client of past achievements, while pointing out his or her strengths and abilities. Throughout this process, the coach reflects on why the client can absolutely succeed and works to forward him or her into action, or deeper selflearning (Irwin & Morrow, 2005). An additional coaching tool that supports competence as a function of providing tangible evidence of progress is accountabilities. According to the Co-Active model, an accountability is a measuring tool for action and learning; clients make commitments through considering what they will do, when they will do it and how will they let the coach, or someone else of their own choosing, know about their progress (Whitworth et al., 2007). Accountabilities can take multiple forms (e.g. personal journals, daily e-mails and homework assignments) and hold the client accountable to his or her self-chosen action or behaviour. Additionally, accountabilities allow the client to view his or her progress and measure success which can assist in facilitating self-esteem, an important concept to consider when seeking endorsement of this psychological need.

Given that competence focuses on the inherent need of individuals to experience themselves as effective through their interactions with the social and physical environments (Skinner & Edge, 2002), it stands to reason that promoting mastery through extending challenges would elicit salient advancements in this construct. In the CALC method, a challenge is a request that extends clients beyond their selfimposed limits and alters the way they view themselves. A coach's perception of the client's potential is larger than that which he or she would hold. Thus, a challenge extended by a coach is often near the edge of improbability which may elicit feelings of exasperation on the part of the client. However, empowerment often ensues due to the fact that the coach believes in the client and his or her abilities that much. Generally, the client reacts to the challenge with a counter offer which is often greater than the concession or action that he or she intended to make originally (Whitworth et al., 2007). This self-authored, revised challenge is evidence of the ongoing role that autonomy plays within the Co-Active method with respect to constructing goals and making choices. In the realm of health behaviour change, SDT contends that a developed sense of autonomy and competence are imperative to the processes of internalisation and integration (Ryan et al., 2008). According to Ryan et al. (2008), competence alone is not sufficient to promote optimal motivation and adherence to a behaviour; it must be accompanied by autonomy (see Figure 1). Once individuals are engaged in a behaviour volitionally and feel inclined to act, they are more likely to take risks and apply new strategies which are essential features of promoting competence (Markland et al., 2005). As a result of applying these tools and procedures collectively, the Co-Active model enforces the client's skills and abilities while enhancing the likelihood of goal attainment, thus contributing to the satisfaction of competence as conceptualised in SDT.

Promoting relatedness through the Co-Active model

According to SDT, satisfying the need for relatedness, to feel connectedness and belongingness with others (Ryan & Deci, 2000), is considered imperative for the process of internalisation and is facilitated through supportive, interpersonal

contexts (Deci & Ryan, 2000). In health care, the relationship formed between a provider and patient/client is paramount when implementing change (Ryan et al., 2008). Individuals needing assistance are often in a vulnerable position and reliant on the expertise and guidance of a professional to bring their goals to fruition. Within this relationship, feelings of being respected, cared for and understood are essential for establishing a sense of connection and trust. Experiencing relatedness can thereby increase a patients' openness to information and likelihood of treatment compliance (Ryan et al., 2008). Similarly, the coaching process emphasises the importance of these variables through the coach-client relationship.

In the Co-Active model, the environment plays a crucial role in helping the client to clarify choices and make decisions (Whitworth et al., 2007). Consisting of both physical surroundings and the coaching relationship, the environment is made up of collaboratively constructed ground rules, expectations and agreements. Through the designed alliance, the coach and client determine what conditions need to be in place to work together effectively while indentifying potential obstacles that could impede this process (Whitworth et al., 2007). Designed alliances are revisted regularly in order to ensure that the coaching relationship is beneficial to the client. Certain qualities are emphasised between a coach and client from the inception of the relationship including a clear commitment to maintaining confidentiality, and the notion that the coaching climate is 'safe' and enveloped by a cloak of non-judgement. Under these assumptions, clients are encouraged to take risks and be courageous in their approach to their lives and the choices they make. As stated previously, the coaching relationship is based on the premise that clients are naturally creative, resourceful and whole and therefore capable of making the decisions that are best suited for them. This sentiment automatically instils a sense of trust in the client's integrity and capacities which, in turn, contributes to satisfying the need for relatedness (Whitworth et al., 2007).

A key principle of the Co-Active model that is used to facilitate the client's experience of living in the moment is process coaching. This empathic technique allows the coach to provide clients with ample support and companionship, while enabling them to live more fully and deeply within the compartments of their lives (Whitworth et al., 2007). In opposition to fulfilment and balance coaching which focus on moving forward, process coaching stays in the present to target the emotions that individuals are experiencing both overtly, and beneath the surface. Through exploring and purposefully experiencing the positive and negative feelings that surround a particular situation or issue, the coach is able to 'be with' the client. 'To be with is to be present and fully engaged, attentive, open, even interacting, but with no goal other than simply being together with that person in the experience' (Whitworth et al., 2007, p. 167). When making an important health behaviour change, it is often the case that clients need to talk out, and experience what they are feeling emotionally. Process coaching allows this to occur through the interpersonal, safe environment provided by the coaching relationship, while also enabling a sense of connectedness.

Active-listening and self-management are two skills in the Co-Active method that are applied readily in all coaching sessions regardless of the principle being utilised. However, these particular skills play an especially useful role in enhancing feelings of relatedness within the coaching relationship. Active listening involves taking in

information, not only through the ears, but with all of the senses. When coaches are listening actively, their attention is on the client entirely with a focus on what is, and what is not being said in relation to the client's agenda and goals. Moreover, an essential component of active listening in the Co-Active model is self-management whereby the coach refrains from imparting his or her personal agenda about a particular topic or issue (Irwin & Morrow, 2005). In order for the coach to truly 'be with' the client, it is imperative that his or her opinions, preferences, personal experiences, judgements and beliefs be put aside in service of moving clients forward or deepening their learning (Whitworth et al., 2007). By doing so, distractions within the environment are minimised, thus enabling favourable conditions for internalisation and satisfaction of the need for relatedness as the client feels truly seen and heard.

Conclusions and future directions

In order to provide theory-based evidence for its effectiveness with respect to eliciting health behaviour change, the purpose of the present paper was to explore the motivational underpinnings of Co-Active coaching as they relate to SDT. Through deconstructing the tools and techniques inherent in the CALC method, a process for increasing motivation and enhancing self-determination was uncovered as a function of satisfying SDT's needs for autonomy, competence and relatedness. This involved a comparative analysis of three key principles applied within the CALC model: namely fulfilment, balance and process coaching.

Self-determination theory and Co-Active coaching serve in a complementary capacity whereby both are concerned with investigating the natural growth tendencies of individuals with respect to self-motivation, personal resources and behavioural regulation (Ryan & Deci, 2000; Whitworth et al., 2007). SDT provides a useful framework for examining the psychological and structural processes that regulate health behaviours (Rothman, 2004), while the Co-Active model provides the mechanisms and tools necessary to bring desired changes to fruition. In accordance with the recommendations made by Brug et al. (2005), the cumulative impact of this motivation-based theory and intervention model satisfy both the 'what' and 'how to' of the health behaviour change process. Building on the work of Irwin and Morrow (2005), this exploratory analysis provides an important first step in positioning Co-Active coaching as a theoretically grounded, viable health behaviour change method from a motivational perspective.

Research on SDT suggests that health professionals can enhance treatment efficacy and patient/client outcomes through supporting these psychological needs in accordance with this theory; a process which serves to promote autonomy and responsibility in health care decision-making (Ryan et al., 2008). It is clear that the Co-Active model reflects a tangible method to facilitate this process. However, it is important to note that although the present analysis builds a theoretical case for the underpinnings of SDT in the Co-Active method, further empirical research is needed in order to confirm how the techniques used in CALC increase satisfaction of the basic psychological needs and self-determined motivation (e.g. intrinsic motivation); specifically, what the behaviour change process involves in practice, and how a

Co-Active coaching-based intervention grounded in SDT can impact treatment outcomes, Further, comparing CALC in this manner to other types of coaching, or incorporating a control group could also be useful for isolating the precise components of the model responsible for effecting health behaviour change. Empirical research of this nature will assist in validating further, the utility of CALC as a viable health behaviour change tool and evidence-based practice.

Notes on contributor



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