

Academic Paper

Clients' and Coaches' Perspectives of a Life Coaching Intervention for Parents with Overweight/Obesity

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Abstract

This qualitative study explored the coaching-related experiences of clients (parents who were overweight/obese) and coaches who participated in a 3-month obesity intervention. Semi-structured interviews were conducted at multiple time points and were audio-recorded and analysed by question and via inductive content analysis. Clients reported increased accountability, goal setting skills, awareness, and external support in relation to health behaviours. Coaches shared tools they utilised, insights from working with this population, and advice for future coaches. This research informs the client-coach relationship; insights from both parties will allow researchers to create effective programming for this population.

Keywords

overweight/obesity, co-active life coaching, coach perspectives, client perspectives, lifestyle intervention,

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Introduction

Overweight/obesity is a growing global health concern leading to epidemics of preventable chronic disease (Public Health Agency of Canada [PHAC], 2011). In Canada, 61.4% of adults and 33% of children have overweight or obesity, and each year health complications associated with obesity (e.g., hypertension, stroke, various types of cancers) are responsible for up to 66,000 deaths (Ogilvie & Eggleton, 2016). While overweight/obesity can lead to chronic disease, it is also associated with stigma, and reduced self-esteem and psychological well-being (PHAC, 2011). Of particular concern is that obesity developed during childhood is known to continue into adulthood (Ventura & Birch, 2008), suggesting the risk and burden of chronic disease may develop earlier and persist into later life stages. Overweight/obesity is potentially preventable by promoting behaviours most associated with healthy body weight – physical activity (PA) and healthy dietary intake (Health Canada, 2006, 2012; Statistics Canada [StatCan], 2018). According to StatCan (2019), too many Canadians in all age groups are insufficiently physically active, with 84% of adults (aged 18-79 years), 61% of youth (aged 5-17 years), and 38% of children (aged 3-4 years) not achieving the recommended activity levels for their age groups. Furthermore, Canadians consume calorie-rich and nutrient-poor foods in excess; the country has the second highest annual sales of ultra-processed foods (e.g., cereals, sweet or savoury snacks, and fast foods; Moubarac, Batal, Louzada, Steele, & Monteiro, 2017; Ogilvie & Eggleton, 2016). Unfortunately, these ultra-processed foods represent almost half of Canadians' daily calories (Health Canada, 2006; Moubarac et al., 2017; PHAC, 2011).

The current research focuses on impacting health behaviours in parents, and subsequently, within the family unit. Parents have a strong influence on the PA, dietary intake, and overall weight status of their children. Not only is parental overweight/obesity weight status predictive of their children's weight status (Bahreynian et al., 2017), but their parenting and the home environment are also overlapping contributors influencing their children's likelihood for overweight/obesity (Faith et al., 2012; Golan & Crow, 2004; Haire-Joshu et al., 2008; Lioret et al., 2012). Not surprisingly, previous research underscores the importance of health promotion obesity-related initiatives that include a focus on the parent, rather than on the child only (Wolfenden et al., 2012; Faith et al., 2012; Jansen, Mulken, & Jansen, 2011).

One evidence-based intervention approach associated with reductions in obesity-related outcomes among adults is Co-Active Life Coaching (CALC; Kimsey-House, Kimsey-House, Sandahl, & Whitworth, 2018). CALC is a theoretical, client-centered communication approach aimed at helping people identify and reach their goals (for a full explanation of CALC, see Kimsey-House et al., 2018). Researchers have reported positive outcomes from CALC interventions aimed at reducing adulthood obesity, such as reduced waist circumference (Newnham-Kanas, Irwin, Morrow, & Battram, 2011a; Pearson, Irwin, Morrow, Battram, & Melling, 2013a), lower body mass index (BMI; Goddard & Morrow, 2015; Pearson et al., 2013a), enhanced self-esteem (Goddard & Morrow, 2015; Newnham-Kanas et al., 2011a), and improved functional health status (Mantler, Irwin, & Morrow, 2010; Newnham-Kanas et al., 2011a).

Gathering both emic (insiders'; e.g., those receiving the intervention) and etic (outsiders'; e.g., those delivering the intervention) points of view is vital to the successful design and implementation of health promotion programs (Gittelsohn et al., 1999). Thus, studying coaches' views on coaching-related practices could provide a rich understanding about working with parents with overweight/obesity. Equally important for understanding the coach-client experience is exploring the experiences of parents receiving the coaching intervention. Although the importance of understanding various stakeholders' (e.g., coaches, interventionists) ideas on how behaviour change should be implemented and sustained has been noted (Dahl, By Rise, Kulseng, & Steinsbekk, 2014), research investigating both interventionist and client perspectives in the area of obesity prevention and treatment is sparse. Most research regarding populations with overweight/obesity provides insights pertaining to participant experiences only (Dwyer, Needham,

Simpson, & Heeney, 2008; Mantler, Irwin, Morrow, Hall, & Mandich, 2015; Sherwood et al., 2015), with few studies incorporating coach perspectives (Newnham-Kanas, Morrow, & Irwin, 2011b). Newnham-Kanas and colleagues (2011b) interviewed the Certified Professional Co-Active Coach (CPCC) in their study to gain insights on their work with a population of women with overweight/obesity. The coach felt that having a deep sense of empathy and creating a safe space were the most important tools needed when working with this population due to the stigma they face, and the struggle they experience when addressing their health behaviours (Newnham-Kanas et al., 2011b). The researchers posited that exploring perspectives from CPCCs working with a particular population (i.e., in this case those with obesity) would allow for information sharing among coaches, thereby potentially increasing their effectiveness in working with clients to meet their goals (Newnham-Kanas et al., 2011b).

Understanding both client *and* coach perspectives can contribute to an appreciation of how both parties experienced coaching with the goal of informing coaches on best practices when working with particular populations, such as those with obesity). Therefore, the purpose of the current research was to determine the coaching-related experiences of clients (i.e., parents) and coaches who participated in a 3-month obesity intervention in London, Ontario, Canada.

Methodology

Study design and procedures

For the larger study (Karmali et al., 2019), coaches were recruited through the researchers' network via email and telephone, and participants were recruited through parent-specific print and online advertisements. As this descriptive study integrated one-on-one interviews with clients and coaches, as part of a larger 3-month randomized controlled trial (RCT) focused on coaching and/or education to help reduce obesity-related behaviours, the full recruitment and methodological details have been described elsewhere (Karmali et al., 2019). A brief procedural description relative to the current study is described below. This research was approved by the host institution's Health Sciences' Research Ethics Board (ID #109219).

To participate, parents ($n = 25$) had to have overweight/obesity (BMI of 25 kg/m² or greater; measured by researcher), a child between the ages of 2.5-10 years old, access to a computer to complete study-related activities, and speak English. Parents (hereafter referred to as clients) were randomly matched with a CPCC and received nine coaching sessions, 20-30 minutes in length, over three months. Coaches were required to be fully certified in CALC, given that this was the coaching method employed for this research. Coaching sessions were unscripted and focused on the agenda of the client's choosing. Coaches were asked to employ CALC tools; however, choice of specific tools was left to the coach's discretion.

To explore their experiences with the coaching intervention both during and upon its completion, interviews were conducted with clients at their in-person follow-ups with the lead researcher at mid-intervention (i.e., 6-weeks into the intervention), and immediately post-intervention (i.e., 3-months). Interviews were conducted at the host university or at the client's home (per their choosing).

All coaches who delivered the intervention ($n = 12$) were sent two email invitations to partake in one individual, semi-structured, telephone interview with the lead researcher, to gain insights into their experiences coaching in the study. Coach interviews were conducted at immediate post-intervention only. To respect confidentiality between coach-client pairs, coaches were asked to provide insights regarding their coaching experiences only and nothing specific about the clients.

To limit social desirability, 'honesty demands' (Bates, 1992) were employed during all coach and client interviews (i.e., they were informed that there were no right or wrong answers, nor were

specific answers being sought). The lead researcher and/or a research assistant took notes to assist with summarizing key points and enhance data trustworthiness (as per Guba & Lincoln, 1989).

Tools

The research team derived two interview guides (one each for clients and coaches) comprised of semi-structured questions from previous research studies focusing on obesity reduction in various populations (e.g., Newnham-Kanas et al., 2011a; Pearson, Irwin, Burke, & Shapiro, 2013b; van Zandvoort, Irwin, & Morrow, 2009), and their collective expertise. Clients were asked to share anything they wished about their experiences in the program. Interview questions varied between the two time points. During their interviews, coaches were asked about their experiences with the program, tools they used, insights about working with this population, and advice for other coaches in this field. Table 1 includes questions relevant to the experiences of coaches and clients in this study.

Analysis

All coach and client interviews were audio-recorded and transcribed verbatim. Transcriptions were analyzed both deductively (i.e., by question) and inductively (i.e., themes came from question responses and were not pre-determined) by two researchers who independently reviewed responses, identified themes, discussed any discrepancies, and determined the most reflective title for each theme (Patton, 2015). To uphold data trustworthiness, the researchers adhered to quality assurance steps during data collection and analysis (Guba & Lincoln, 1989): (a) credibility—reflecting back between interview questions to ensure responses were accurately understood; (b) confirmability—inductive content analysis was completed independently by two researchers, as described above; (c) dependability – researchers reviewed, condensed, and deliberated findings to prevent bias; and (d) transferability—study methods, procedures, and analyses were documented, allowing others to determine whether or not findings are transferable to other settings. Although quotations may be relevant to more than one theme, they are presented in the section in which the quote best fits.

Table 1: Semi-Structured Interview Questions

<p><i>Coach Interview Questions</i></p> <ol style="list-style-type: none"> 1. What was it like for you to coach in this study? 2. What surprised you about working with these individuals? 3. What were the tools/techniques you used most often? 4. How did you know, as the coach, that the client got what they were looking for? 5. What insights did you gain coaching individuals/parents struggling with obesity? 6. What advice do you have when working with this clientele? 7. What would you do differently if doing this study again? 8. What else do you feel we should know about your experience?
<p><i>Client Interview Questions (Mid-Intervention)</i></p> <ol style="list-style-type: none"> 1. Please give us feedback on this program, positive or negative, about your experiences so far. 2. Please elaborate on what has assisted with behaviour change and what has not.
<p><i>Client Interview Questions (Post-Intervention)</i></p> <ol style="list-style-type: none"> 1. Please give us feedback on this program, positive or negative, about your experiences so far. 2. Please elaborate on what has assisted with behaviour change and what has not. 3. What did you like best about the program? 4. What parts of the program did you find most helpful, and why? 5. What did you not like about the program? 6. What would you say is the most important thing you learned from being in the program? 7. If we were to provide this program again, what recommendations would you have for any changes we should make? 8. What else do you want us to know about your experience with the program and how it has influenced you, your child, and your family?
<p><i>Probes for all questions</i></p> <ol style="list-style-type: none"> 1. Please say more about that. 2. What else would you like us to know about that?

Findings

Qualitative interviews with both clients and coaches resulted in a great number of corroborative statements (Nwords 6300+) for all themes ($n = 13$) and subthemes ($n = 10$), far more than reasonably could be included in this manuscript. Thus, the quotations provided in the 'Findings' tables are not comprehensive but more illustrative of the data collected. Illustrative representations of client and coach themes can be found in Figures 1 and 2. Please note that the specific CALC tools noted throughout Tables 5, 7, and 8 are described in Table 6.

Figure 1 - Client Themes at Mid- and Post-Intervention Follow-ups

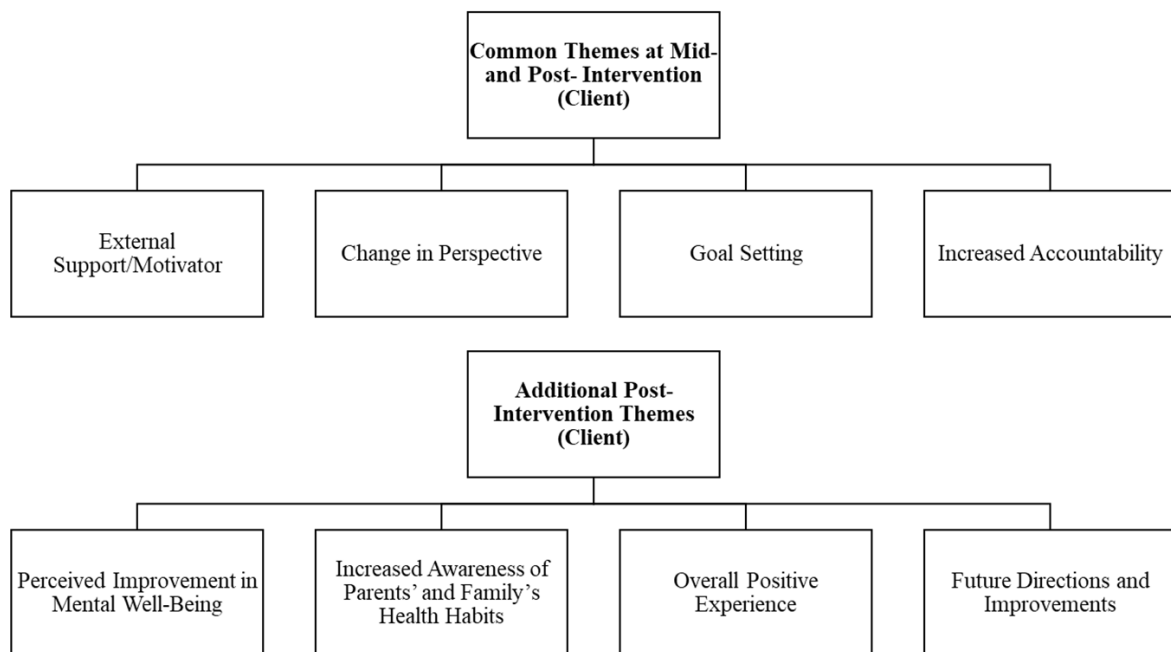
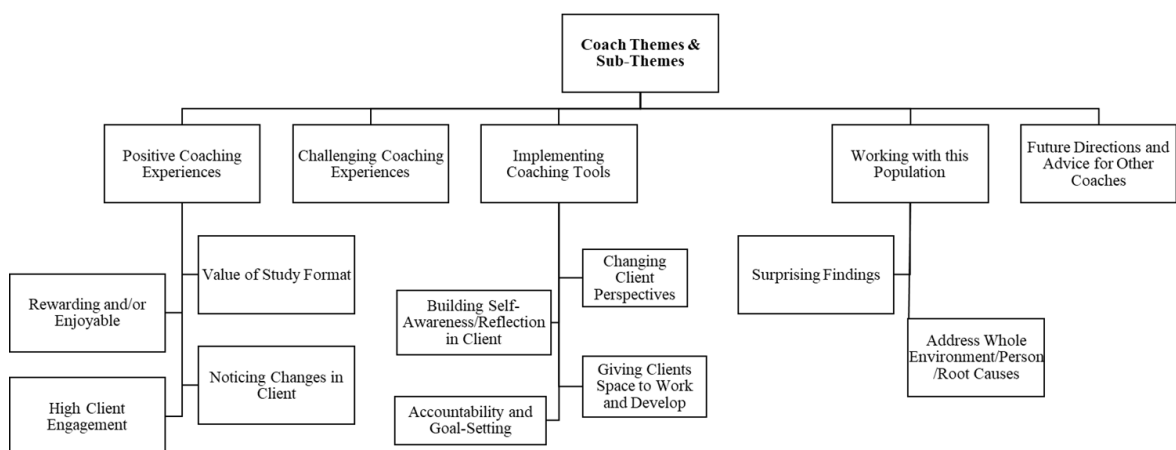


Figure 2 - Coach Themes and Sub-Themes



Clients

The sample of clients receiving coaching was homogenous ($n = 25$; $n = 24$ female; $n = 22$ Caucasian). Interviews were conducted with clients who completed their in-person assessments; due to attrition, not all follow-ups could be completed. Client interviews ranged from 6-18 minutes (at mid-intervention; $n = 17$), and 13-52 minutes (at post-intervention; $n = 16$). Data saturation was reached, meaning that there were no new ideas that emerged during the final few interviews (Fusch & Ness, 2015). The following four themes were identified at both mid- and post-intervention time points with regard to clients' experiences with coaching: (a) external support/motivator; (b) change in perspective; (c) goal setting; and (d) increased accountability. At post-intervention, the following additional four themes emerged: (a) perceived improvement in mental well-being; (b) increased awareness of parents' and their family's health habits; (c) overall positive experience; and (d) future directions and improvements. Client themes and sub-themes are italicized under the proceeding headings and explained in further detail below.

Client experiences with coaching at mid-intervention

Most clients described how their experiences with coaching had positively impacted their lives (Table 2). For example, they described how coaches acted as an *external supporter/motivator* by providing them with unbiased guidance and acting as champions for them and their achievements. It was explained that having this support motivated them to continue to make changes in their perspectives and behaviours. Many clients described that coaches helped them to improve how they felt about themselves by encouraging them to reframe their self-talk and challenging them to *change their perspectives*. Clients expressed that in changing the way they viewed themselves and their situations they began to realize the importance of prioritizing themselves, and resultantly started engaging in self-care (e.g., PA, making time for hobbies). Clients reported that coaches also assisted them with *goal setting* by helping them create progressive and manageable goals for themselves, such that they would start with small challenges and add on as they were accomplished. For instance, clients described that coaches encouraged client-identified goals of keeping a food diary or incorporate PA into their daily lives, and reassured clients that small changes were achievements to celebrate. Having an external person to whom they could be *accountable* and who was invested in and checking on them, reportedly motivated clients to achieve their goals. In addition, clients shared that when they faced setbacks in the process of trying to meet their goals, their coaches restructured the setback as something they could work through to move forward.

Table 2: Corroborative Quotations for Coaching Experiences; Mid-Intervention (Clients)

<i>External support/motivator</i>
<ul style="list-style-type: none"> • “[My coach] got me to actually do a longer food journal ... more details and say like, how I'm feeling when I eat. ... She kind of challenged me on some of the things that I did. ... She's been really helpful.”
<i>Change in perspective</i>
<ul style="list-style-type: none"> • “... Especially with the saboteur ... There are things that I do to sabotage myself that I'm not even aware of. It's not that conscious stream through my head of negative thoughts ... So, she was able to point that out and help me sort of work through how to stop doing that.”
<i>Goal Setting</i>
<ul style="list-style-type: none"> • “A lot of the time... I'm talking about ... how stressful my schedule has been, ... [my coach will] say, ‘Okay, so what are you going to do to diminish or help cope with that stress, and what have you done in the past, and what's working for you, and what's not?’ ... It always in some way relates back to my main motivation.”
<i>Accountability</i>
<ul style="list-style-type: none"> • “Just knowing that you're out there, somewhere, even helps. ... ‘Cause any kind of accountability helps me. ... If I'm only accountable to myself, I just say ‘Pff.’ ... I let myself off the hook easily. ... If I don't feel any outside pressure.” • “Knowing that I'm going to...talk to her again, so she's gonna [ask], ‘So, what did you do?’ ... It's nice having that accountability. ... Which is totally different than ... if I was just looking at the PowerPoints.

Client experiences with coaching at immediate post-intervention

Similar themes emerged from client interviews at mid- and post-intervention follow-ups. At post-intervention, clients reiterated the positive impact of coaching on their lives in that they appreciated having external support, changing their perspectives, assistance with goal setting, and a source of increased accountability. It was emphasized clients felt coaches were trusted people they could consult when they were feeling despondent or needed reassurance. Clients again explained they began prioritizing themselves more than they had previously and realized the importance of doing so. They also recognized the impact of addressing and resolving excuses that may have prevented them from engaging in healthy behaviours. Clients admitted that the concept of coaching felt foreign and uncomfortable at first; however, they enjoyed having someone outside of their usual social and familial circles to talk with about their lives. Having coaches who encouraged clients to celebrate their successes was something they found supportive and motivating.

Table 3: Corroborative Quotations for Coaching Experiences; Immediate Post-Intervention (Clients)

<p><i>External support</i></p> <ul style="list-style-type: none"> • “Having the personal coach [was most helpful]. ... Having someone to talk to about goals and someone that could help me through a couple of difficult situations, and [be] someone to turn to. ... It [was] unbiased, so it wasn't like turning to a family of friend who might be more biased.
<p><i>Change in perspective</i></p> <ul style="list-style-type: none"> • “And for me, I kind of realized that these 10 pounds, it's not gonna make or break me, either way. My husband and I, we just had our 11th anniversary. And I look back on that, and I'm like, I'm 15 pounds heavier than my wedding weight... Like, it's not that bad.” • “Something that my coach used to say, she's like ‘baby steps, you don't have to, you know just be this new person, just take tiny baby steps.’ And that's the same thing with exercising and nutrition, it's just if I take the little steps they lead to better activities, in general.”
<p><i>Increased accountability</i></p> <ul style="list-style-type: none"> • “Each time [my coach and I] talked, we finished with some goals that I was gonna work towards, between the sessions, and so... knowing that I had someone to talk to, or... was gonna have to answer to, it helped me to stick with the goal.”
<p><i>Perceived improvement in mental well-being</i></p> <ul style="list-style-type: none"> • “[My coach and I] discussed the issues surrounding why I was eating the way I was eating and where that stemmed from, and what are some ideas to cope with that and way to work around that.” • “The coach was very good at being able to, like, help work through some stuff. I had some stressful stuff... that had nothing to do with food or nutrition. That he helped with, as well.”
<p><i>Increased awareness</i></p> <ul style="list-style-type: none"> • “The most important thing I learned [from coaching] ... is probably more about myself than anything... I long ago stopped making the choice to use food to fuel my body. And I was using it for other things [such as comfort], so I wasn't looking at food as what it was actually intended to do for us. And I wasn't consciously making those decisions. ...
<p><i>Overall positive experience</i></p> <ul style="list-style-type: none"> • “[My coach and I] talked about my creative side and I just felt like it was unleashed during the conversations with her. It was just like she gave me permission to let it out and, and now I just feel light and free and like I can do anything.”
<p><i>Future directions or improvements</i></p> <ul style="list-style-type: none"> • “I think that [coaching] could have been longer... it seemed like we were just starting to get to like a great point. ... I think [keep] the nine sessions but longer definitely. ... I feel like [I'm] just starting to get like that ripple effect [from coaching] right now.”

Upon program completion, four additional themes were identified from client interviews. In working with their coaches to identify and work through sources of their less healthy behaviours, clients reported that they *perceived improvements in their mental well-being* compared to before the program (i.e., more positive feelings and functioning). Clients explained that their coaches encouraged them to reflect on events or habits from their past to identify how certain unhealthy behaviours may have developed. Then, coaches assisted clients with addressing and resolving feelings associated with root causes of their behaviours, to help clients move forward. Clients expressed while this process was uncomfortable, working through emotions allowed them to improve their mental health overall. Through coaching, a majority of clients reported *increasing awareness* of their own and their family's habits, and of the interrelated nature of the relationship between mental and physical health. Many clients became aware of the role of food in their lives; some felt they engaged in emotional eating, and others felt their social interactions centered on food and meals. Clients shared that coaching allowed them to address issues in all aspects of their lives, not only nutrition and PA, and managing these issues allowed them to make improvements in their health behaviours and those of their families. Throughout their sessions, all clients felt that

coaches were unbiased and understanding, which made clients feel comfortable when working on their emotions and behaviours.

Overall, clients felt that they had an *overall positive experience* with coaching. Clients perceived that coaches provided them with support, motivation, and encouragement that they were not receiving elsewhere, and helped clients improve their mindsets. It was reported that coaches were able to help the client view themselves as a whole, instead of focusing solely on PA or nutrition behaviours. Clients expressed that coaching was not something they would have sought for themselves but were happy they received it. They felt the sessions were convenient (given they were telephone-based) and enjoyed being able to complete the program from their homes. With regard to *future directions or improvements*, some clients suggested making coaching sessions longer and incorporating a face-to-face option. These clients described that, at first, telephone sessions felt awkward given that they could not see their coaches' expressions or body language. Quotations illustrative of client coaching experiences at immediate post-intervention can be found in Table 3.

Coaches

Of the 12 potential coaches: (a) eight coaches agreed to be interviewed; (b) one was unavailable; and (c) three did not respond. Coaches' experience in the field of CALC ranged from 6-15 years. The interviews with coaches ranged from 30-51 minutes. Five themes and 10 sub-themes emerged, which outlined coaches' views regarding their participation in this study: (a) positive coaching experiences (rewarding and/or enjoyable; value of study format; high client engagement; noticing changes in client); (b) challenging coaching experiences; (c) implementing coaching tools (building self-awareness/reflection in client; changing client perspectives; accountability and goal setting; giving clients space to work and develop); (d) working with this population (surprising findings; address whole environment/person/root causes); and (e) future directions and advice for other coaches. Data saturation was also reached during coach interviews.

Positive coaching experiences

Coaches reported mostly *positive coaching experiences* and described their involvement with their clients as rewarding and enjoyable (Table 4). Coaches explained that they felt they were making an impact in their clients' lives and they looked forward to their sessions and using their coaching tools. Some stated that this experience reaffirmed their passion for coaching. Coaches felt telephone calls were an appropriate medium for communication and that the 20-30-minute sessions allowed them to target clients' behaviours sooner than they would have in their traditional 60-minute sessions. Coaches perceived that, when discussing sensitive issues such as obesity, the telephone acted as a shield for their clients, which coaches reported as beneficial for clients. With overweight/obesity being visually-identifiable conditions, coaches commented on the *value of the study format*. That is, the over-the-phone format enhanced the feeling of a safe, non-judgmental space that allowed the clients the comfort needed to be vulnerable and work through these sensitive topics.

Coaches who worked with *highly engaged clients* (as perceived by the coach) described feeling professionally impactful through their involvement in this study. They viewed clients as willing to trust the coaching process and explore their feelings and behaviours at a deep level, which made them feel helpful and valuable. Coaches also explained feeling valued when they *noticed changes in their clients* — they observed clients taking more control of coaching sessions, and of situations in their lives. They talked about clients' shifts in energy levels from the start to end of the study, such as a steady increase in enthusiasm, excitement, and self-confidence among clients over time. Coaches also perceived that clients had started to value themselves and had a higher perception of self-worth than they had at the start of their time together.

Table 4: Corroborative Quotations for Positive Coaching Experiences (Coaches)

<p><i>Rewarding and/or Enjoyable Experience</i></p> <ul style="list-style-type: none"> • “I felt very useful... as a coach, because... they... were open to learning and exploring the whole process... I felt useful.” • “Working in this way with the 20-30 minute sessions. ...I just really saw the power in that again and how, people can shift super fast.”
<p><i>Value of study format</i></p> <ul style="list-style-type: none"> • “Most of the time I do [my coaching over] the phone. And I find, too, even with a situation like this it might have been easier just for them to talk on the phone. ... sometimes it’s easier to talk on the phone about weight, about ourselves, when we’re not in front of that person. Feeling like we’re being judged.”
<p><i>High client engagement</i></p> <ul style="list-style-type: none"> • “I found it easy [to coach in this study], based on the fact that it was on the client’s agenda, what the client wanted... On the client’s timeline, really. It’s [obesity] a big topic so it’s not like we’re hitting on a specific area or situation.”

Challenging coaching experiences

Experiences with client engagement varied among coaches, and that level of engagement was described as impacting the coaches’ experiences. A few coaches who felt their clients were not open to coaching described their sessions as *challenging*. For instance a coach stated, “[The client] would bounce back to wanting a solution for her weight problem, in other words... ‘what are the tips, what do I do?’... So getting [them] to understand that [they have] a solution and it’s much deeper than that.” They felt that their less engaged clients were hesitant to share some aspects of their lives with them, rendering the coach unable to guide the client into deeper explorations of their experiences and learning. These coaches perceived their clients as seeking a ‘quick-fix’ solution to their nutrition and PA behaviours, and some were hoping for advice as opposed to engaging in self-reflective problem solving with the support of their coach. Some coaches perceived their clients to be distracted at times during their sessions (e.g., when children were in the room), which they felt reduced the client’s engagement in the sessions and overall coaching experience. Although coaches would request the client find a private space where they could be alone during the sessions, clients did not always comply. Scheduling conflicts and missed appointments were also barriers that coaches faced. Coaches felt that because the researchers, rather than the clients, were financially responsible for coaching sessions, some clients seemed less likely to fully engage than if they had a personal financial investment in the intervention.

Experiences implementing coaching tools/techniques. Coaches were asked to describe the tools and techniques they used most often in this study (listed below and with illustrative quotations in Table 5).

Table 5: Corroborative Quotations for Experiences Implementing Coaching Tools/Techniques (Coaches)

<p><i>Building self-awareness and self-reflection in client</i></p> <ul style="list-style-type: none"> • “[Asking her] ‘On a scale of one to ten, how happy are you with your personal relationship with your partner?’ ... So I would use that and then and I would bring that up at different times, about different areas of her life, and from that I would then delve in with ‘what would make it a higher number?’”
<p><i>Changing client’s perspective</i></p> <ul style="list-style-type: none"> • “And so when you put your client, in kind of in the shoes of her daughter like... if your [child] had this problem, what would you suggest to her? And the client would say ‘oh I would suggest A, B and C’ ... and I said ‘...how about for yourself looking in that same perspective?’”
<p><i>Creating accountability and goal setting skills in client</i></p> <ul style="list-style-type: none"> • “Between every session they would have accountability, and what’s interesting is that a lot it would come from them. ... so it was connected to the conversation like a natural evolution.”
<p><i>Giving client space to work and develop</i></p> <ul style="list-style-type: none"> • “I think the power of coaching is in the relationship so it’s really about setting it up at the beginning, so that it is a safe and trusted place. And then, how you interact [with the client so] that they feel heard, and that you really care. ... I think I was just... compassionate.”

Although sessions were tailored to each client, coaches described using similar, commonly used CALC tools, as presented in Table 6. While the coaches noted which tools they used, they did not provide detailed descriptions of these tools as the coaches and researchers were trained in the same form of coaching and thus, was unnecessary. Therefore, the accompanying description of each tool noted in Table 6 has been obtained from Kimsey-House and colleagues (2018).

Table 6: Co-Active Coaching Tools Used Most Frequently in this Study by Coaches

Tool	Description
Identifying 'Saboteur'	Encouraging clients to explore patterns, triggers, and feelings and/or people that were preventing them from making changes or causing them to feel negatively about themselves.
Identifying 'Captain'	Inner feeling/voice that encourages client, and helps them overcome self-defeating limitations
Balance Coaching	Help client develop new perspectives; create a plan of action grounded in commitment to what is most meaningful in client's life.
Fulfillment Coaching	Help client discover their values, identify self-defeating influences, and facilitate opportunities for them to create lives that center around what makes them feel most alive.
Process Coaching	Focuses on internal experience and what is happening in the moment. Help clients work through emotionally charged issues. Meeting the client wherever they are emotionally, even when experiencing emotional 'turbulence.' Encouraging client to identify emotions associated with an issue.
Wheel of Life	Clients are asked to identify their values, and rank them based on perceived importance, then level of satisfaction at that moment in time
Accountability	Identifying someone or some way to or for clients to be overt in their change goals
Creating safe space for client	Communicating with the client that they were co-creators in the sessions, the client could share any feelings that may arise, and coaches would pass no judgment.
Open-ended questions	Cannot be answered with yes/no. Invite elaboration and deep thinking regarding an issue
Genuinely curious	Questions that evoke personal exploration. Using curiosity creates a partnership with client, as opposed to coach being the expert in that both coach and client are exploring feelings/issues and designing solutions
Client is Naturally Creative, Resourceful, and Whole	People are capable of finding their own answers, choosing and taking action, and capable of recovering from adversity and learning from those experiences. Coach helps guide client into realizing they have their own answers.

Source: Tools defined by Kimsey-House, Kimsey-House, Sandahl, & Whitworth (2018).

Coaches in this study reported using tools including but not limited to: (a) active listening and reflecting back; (b) encouraging clients to keep daily self-reflection journals; (c) open-ended questions; (d) identifying saboteurs and captains; (e) being genuinely curious; (f) the wheel of life; (g) process, balance, and fulfillment coaching; (h) focusing on the whole life of the clients not merely on PA or nutrition; and, (i) holding the client as naturally creative, resourceful, and whole. Coaches explained that these techniques assisted with *building self-awareness and self-reflection* skills in their clients, and encouraged them to reflect on a deeper level to help them understand what was contributing to them engaging (or not engaging) in certain behaviours, and/or what feelings contributed to their actions. According to the coaches, assisting the client with identifying their saboteurs and captains allowed clients to reflect on their self-talk, and explore their 'inner voice,' and the impact it had on their decisions to engage in certain behaviours. By being curious about the client and using open-ended questions, coaches explained that they assisted clients with developing self-reflection and self-awareness techniques thereby enabling them to better understand what was holding them back, and how to address it. Furthermore, coaches described they used balance coaching to *change their clients' perspectives*. For instance, they reported challenging their clients by urging them to change destructive perspectives toward themselves and their habits. Coaches perceived that shifting perspectives helped clients redirect their thoughts to be more positive, reminding them there was no 'right way' to change their habits, and trying to associate feelings with actions. Coaches explained that they and their clients also explored the root causes of less healthy behaviours, which included stress, anxiety, using food as a comfort or distraction, or feeling undervalued. The coaches stressed that it was imperative to help clients assess what was causing their engagement in less healthy behaviours and preventing them from changing.

Some coaches implemented the 'wheel of life' tool, which they explained was used to help clients to determine areas in their lives they wanted to focus their improvement efforts on. Others used fulfillment and process coaching to further encourage clients reflect on their values, their roles in relationships, how their actions made them feel, and what they would like to improve in their lives. Interestingly, coaches described that they also challenged clients to treat themselves the way they treat their child(ren). For instance, some parents were reportedly very focused on encouraging

healthy habits in their child(ren), even though they did not seem to have that same investment in themselves.

Through having clients identify their own agendas for their sessions and their lives, coaches helped clients with realistic *goal setting* and following through on those goals. Specifically, coaches explained that their clients were primarily responsible for identifying their goals and together, they refined them to be manageable and with set timelines. Coaches then reflected that they used *accountabilities* to help their clients fulfill each commitment they made and, in addition to inquiring about progress during sessions, they would often challenge clients to push themselves further toward their larger goals. Some coaches also noticed that through the achievement of their goals, and in taking control of their decisions, clients seemed to feel empowered to maintain the changes they were making. The coaches observed that many clients began standing up for themselves (to other family members) and implementing changes.

In addition to assisting with goal setting and empowering clients, coaches emphasized the importance of creating a safe *space for clients to work and develop*. They explained that this safe space must be apparent at the beginning of coaching sessions in order to develop trust with the client. Coaches stated that this working agreement or designed alliance was the foundation of the coaching relationship and allowed and encouraged clients to explore their feelings. When coaches showed compassion and understanding, they perceived clients as being more likely to share their thoughts and feelings.

Insights gained from working with this population

When asked to share their insights about *working with this population* of parents with overweight or obesity, many coaches described what surprised them, and underscored the importance of addressing each client as a whole person, rather than one behaviour or condition (Table 7).

Table 7: Corroborative Quotations for Insights Gained from Working with This Population (Coaches)

<p><i>Surprising findings</i></p> <ul style="list-style-type: none">• “So being an anonymous... match [between coach and client in this study], there was the ability for [clients] to show up and just go deep anyways and trust the process [which was surprising]. ... [W]hen you create the right space for that vulnerability and deepness and willingness to share... it's ... a refreshing surprise really to see that.”• “[What surprised me was] where we had to go to get started. ... I know what the study's all about and I was there to be with them with that part, that aspect... but all three [clients] were overwhelmed with life. ... Well my focus was self-esteem, building up the client so that they were able to be proactive. And all three of them embraced that eventually, but at different times over the coaching period.”
<p><i>Address whole environment/person/root causes of unhealthy behaviours</i></p> <ul style="list-style-type: none">• “I think my client knew how she was being but didn't ever have to voice it or confess it. So just having those open conversations and kind of opening that closet door to some of her 'grungies'... really helped her kind of realize it's not so bad or maybe she's not so bad... [Be]cause she did have some anxiety issues. ...And then that would always come back to food in some way shape or form.”• “[Clients] are coming in already feeling super vulnerable, and that the obesity isn't them, they're not obesity, obesity is something... that they are dealing with. They're they are a whole person more than that.”

Coaches shared their *surprising findings*, for instance the success of their coaching relationships — which they viewed as helpful for facilitating improvements in their clients' attitudes and behaviours — and the willingness of most clients to engage in coaching, despite being randomly assigned to coaching, and randomly paired with a coach. They explained that clients seemed open to hearing different perspectives and trying different approaches for working on their health behaviours. Coaches were also surprised that many clients prioritized their children more than themselves. In addition, it was unexpected by coaches that most clients did not want the focus of their sessions to be on weight, healthy eating, or PA. Coaches described that they felt it was effective to *address the client as a whole, their environment, and root causes of their behaviours*. They explained that clients were more interested in reducing less healthy behaviours and developing healthy lifestyles overall. Sometimes, this involved focusing on aspects of their lives (seemingly) unrelated to healthy habits, such as self-esteem, relationships, and connectedness. Once these larger issues were addressed, coaches reported that they were then able to concentrate on their clients' more specific

health-related behaviours. Many coaches explained that they felt changes in their clients' health-related behaviours did not occur until their final few sessions, after stressors and barriers were addressed.

Future directions and advice for other coaches

When asked for *future directions* and *advice* to give to other coaches who work with parents with overweight/obesity (Table 8), many coaches advised the most important tool is active listening – listening with compassion and without judgment. They stated that it was important to allow these clients to explore all aspects of their lives, instead of solely focusing on PA and nutrition, in order to understand best where to make changes. Coaches reiterated the importance of designing a collaborative alliance with clients from the outset of the sessions, in that creating this safe space sets the tone for the entire coach-client experience. Additionally, coaches stated that clients need to be met at the stage that they are at, and not pressured or forced to move at a faster pace. They advised other coaches that the clients need assistance with accepting themselves where they are at and should be provided support to do so. Furthermore, coaches stated that the clients have their own solutions, and that they mostly need assistance with redirection of thoughts, and identification of saboteurs in their lives.

In terms of what coaches would do differently if participating in this study again, some coaches expressed wanting an increased number of sessions, longer in duration (i.e., one-hour sessions), while others were content with the current study design. Some coaches would have liked a 'matching system' to ensure that they and their client(s) were compatible. A few coaches suggested conducting sessions over video-calling platforms. Coaches explained that if doing this study again, they would ask clients what their motivations were for joining the study in order to gain a better understanding of where the client was at before progressing deeper into their sessions. Two coaches also suggested that the researchers could have provided more information to clients about the coaching approach, at the outset, to ensure that clients had a clearer idea of what their sessions would be comprised of prior to being assigned to their coach. Lastly, some coaches stated that they would make their expectations of the client and session goals (i.e., limit distractions during coaching, provide more notice when canceling sessions) better known from the beginning of the study to avoid their clients' missed appointments and distracting environments.

Table 8: Corroborative Quotations for Advice for Other Coaches and Future Directions (Coaches)

<p>"[A] less experienced coach might be sort of rushing to deal with and cover the weight loss part and get there... I just had to trust myself as coach, trust my client... really being patient and then when the time is right you, in good time, get to where you need to get to."</p> <ul style="list-style-type: none">• "I guess my bottom line advice would be know what the study is all about. But meet the client where they are ... And my gut says if I had just focused on food, food prep or shopping or whatever, the exponential takeaway would not be there."• "Just listen. ... One of our coaching pillars is everybody is naturally creative, resourceful and whole... they know their own needs and wants, they have their own answers you just have to listen to them and then kind of redirect it back to them."

Discussion

This study qualitatively examined the perspectives and experiences of parents with overweight/obesity, and the coaches who worked with these parents, in a 3-month coaching intervention. Clients described meaningful, life-changing experiences that included and transcended obesity-related behaviour changes. From our findings, it was reported that as a group, coaches felt a sense of satisfaction working in this study, and they were pleased and even surprised that most of their clients appeared engaged with the coaching. The most utilized tools shared by the coaches are some of the foundational skills of CALC (Kimsey-House et al., 2018), and ones that other CPCCs have reported as effective for eliciting behaviour change in individuals with overweight/obesity (Newnham-Kanas et al., 2011b). Thus, the findings about which tools seemed most useful are consistent with previous research as discussed below.

The importance of working with clients where they were at and designing a collaborative alliance between coach and client were reportedly pivotal in the current study, as has been found previously. Similar to findings shared by both clients and coaches in the current study, O'Brien and Palmer (2010) examined experiences of clients and coaches from a variety of disciplines (i.e., executive, business, life) and found both coaches and clients felt key elements for an effective coaching relationship included: trust; self-awareness; co-creation of the coaching relationship; openness; adapting to the client; and listening. Stober and Grant (2006) contend that "the foundation of effective coaching is the successful formation of a *collaborative* relationship" (p. 360).

Through their involvement in the current study, clients reported that they felt supported and listened to, which seems consistent with coaches' reflections that active listening was the most important tool they used. The importance of active listening has been highlighted in previous research, in which health coaches identified being an engaged listener as the most substantial tool in their practice (Huffman, 2010). Use of active listening in this study likely contributed to coaches learning the importance of viewing populations with overweight/obesity as more than their behaviour or condition, and addressing them in their greater or whole life context. Even though addressing a client's whole life is a primary tenet of the co-active approach (Kimsey-House et al., 2018), from their sessions, coaches were surprised to learn that clients wanted to focus on other aspects of their lives (e.g., stress management) that appeared to be unrelated to health behaviours; addressing these larger issues reportedly resulted in positive behaviour change in clients. Clients stated that being able to address different aspects of their lives (e.g., stress, family, children), unrelated to PA and nutrition, allowed them to focus their minds and deal with greater stressors, which in turn led to addressing health behaviours. Focusing on one's relationship with his/herself is an important precursor to behaviour change, as has been reported in previous health-related CALC studies (Fried & Irwin, 2016; Mantler et al., 2010; Newnham-Kanas et al., 2011a). Researchers have noted that the necessary catalysts for behaviour change in individuals with obesity include: (a) supporting them with changing their thinking, attitudes, and relationships; (b) a positive self-view; and (c) internal motivation (Kausman & Bruere, 2006). Therefore, providing individuals with obesity with opportunities to learn about themselves and their weight, and empower them in finding their own solutions (as per the tenets of CALC; Coaches Training Institute [CTI], 2019) may result in positive behaviour changes (Kausman & Bruere, 2006; van Zandvoort, Irwin, & Morrow, 2008).

Clients reported their coaching experience was helpful and valuable, and coaches felt valued and perceived their clients to be moving toward more positive health behaviours. These positive experiences for both coach and client resulted in high levels of enjoyment and engagement for both parties. Newnham-Kanas, Morrow, and Irwin (2012), reported similar findings when they evaluated what coaches enjoy about coaching. The coaches ($n = 351$) conveyed that observing meaningful changes in their clients' lives, creating a collaborative relationship with clients, and using their coaching skill set all contributed to their enjoyment and commitment to their coaching practices (Newnham-Kanas et al., 2012). It has been suggested that commitment to coaching, and believing it is of value to clients, enhances the coaching relationship and may result in the success of coaching as an effective intervention for individuals with overweight/obesity (Newnham-Kanas et al., 2011b; 2012; Pearson et al., 2012; van Zandvoort et al., 2008; van Zandvoort, Irwin, & Morrow, 2009).

It is possible that the higher capacity to implement and maintain healthy changes that clients experienced through coaching was a result of improvements in their self-efficacy. That is, previous researchers have found that shaping the choices, goals, emotional reactions, effort, and coping of an individual results in greater self-efficacy, which is a predictor for behaviour change (Ammentorp, Thomsen, & Kofoed, 2013; Bandura, 1977). Having an external supporter/coach to aid clients in addressing underlying causes for their behaviours and increasing awareness of their values likely contributed to these self-efficacy components. Through coaching, clients reported prioritizing themselves and experiencing a sense of improved mental well-being than before the intervention began. Prior to the program, some clients reported that their routines largely revolved around their family's schedules; however, through coaching they learned how to prioritize their self-care. Similarly,

in their study assessing the impact of CALC on adults with obesity, Newnham-Kanas and colleagues (2011b) found participants identified support as critical to their success in managing their weight, and that the supportive relationship with their coach provided them with security and encouragement.

As outlined by some coaches and clients alike, it was suggested that future studies could include more frequent or longer (i.e., one-hour) coaching sessions, and/or the option for face-to-face interaction (e.g., video-calling). The principles and dynamics between face-to-face and telephone coaching have been deemed similar, with telephone coaching found to be both more convenient and as effective as face-to-face coach-client interactions (Berry, Ashby, Gnilka, & Matheny, 2011; Bohlin, Hagman, Klaesson, & Danielsson, 2017). Although the time frame of 20-30 minute coaching sessions used in the current study was selected because of its effectiveness in other health-related coaching interventions (Fried & Irwin, 2016; Goddard & Morrow, 2015), the desire for longer sessions with face-to-face options noted by a few clients and coaches should be considered moving forward to enhance the external validity of the work. Interestingly, although not mentioned by any clients, coaches felt conducting sessions over the telephone allowed clients to feel safe and at-ease to work through sensitive topics. Although not clear, it is possible that coaches held beliefs about their clients' self-presentation concerns that were not actually present for the clients. Arora and colleagues (2019) noted that biases associated with obesity can be unconscious, including among those providing support and care.

Interestingly, in some cases, what coaches viewed as challenges, clients reported as positive experiences. Specifically, where coaches felt challenged and frustrated when clients had their children in the same room as where coaching sessions occurred, clients felt that being able to conduct their sessions at home, with their children nearby, was a strength of the program because it was flexible and comfortable. Coaches found scheduling conflicts to disrupt the flow of their sessions whereas some clients reported that being able to reschedule sessions stretched the program out over a longer span of time, thereby allowing clients more effectively to integrate their behaviour changes into well-established habits. These differences in perspectives may be due to discrepancies in expectations in coaches compared to clients and may be the reason some coaches advised other coaches to make their expectations clear prior to beginning their sessions. Coaches recommended providing clients with a more in-depth understanding of what coaching entails and employing a matching system to ensure coach-client pairs are compatible; both of these suggestions seem viable ones to consider in future, type-alike studies. Other researchers have recommended similar strategies, such as allowing participants to choose their treatment allocation (Pearson et al., 2012). Perhaps these challenges could be minimized via more thorough communication among researchers and coaches during their designed alliance/relationship process prior to any intervention. The two groups – coaches and researchers – could brainstorm ideas and methods to circumvent these challenges through stronger designed alliances; full explanations of the purpose of coaching; and the need for full commitment to coaching calls.

Limitations

A limitation of the current study is its homogenous sample of parents with obesity which limits the transferability of the findings. This finding is consistent with previous research; a systematic review examining the involvement of fathers in pediatric obesity treatment and prevention programs with parental involvement outlined that, out of 213 RCTs, only 6% of participants were fathers (Morgan et al., 2017). Furthermore, while certified coaches from one approach were utilized to help ensure uniformity of the coaching intervention, and these coaches were asked to use only their CPCC tools, there was no coaching fidelity measure utilized to ensure that the intervention was, in fact, a reflection of what the coaching approach was intended to be. In addition, as coaches were not asked to keep a detailed log of tools and techniques they utilized in their sessions, recall bias may have occurred. The repertoire of tools within CALC is plentiful, which could be considered a limitation of the approach, as each participant receives a different combination of tools based on

the coach's selection. However, CPCCs have been trained in each of CALC's tools, as well as in recognizing when to use them in order to best tailor the approach to each participant. Therefore, the researchers maintain that the utilization of a standardized coaching method, CALC, was effective because it allowed for participants to receive similar models and techniques of coaching, reducing variability of experiences. Finally, it must be noted that self-selection bias may have influenced the high motivations found in the study samples. Individuals with obesity who volunteer for health-related programs might be more committed to changing their lifestyles than those who do not choose to join such a program (Wadden, Brownell, & Foster, 2002).

Strengths

Gaining insights from both stakeholders (i.e., client and coach) will allow researchers and professionals in the field to use these findings to design more effective programs in the eyes of both coaches and clients. Rigorous techniques and methods were employed for gathering and analyzing qualitative data, including: (a) utilizing methods for data trustworthiness; (b) outlining negative cases (i.e., feedback that may not describe positive experiences and may be critical information for program improvement); and, (c) data source and investigator triangulation (i.e., comparing different perspectives of individuals in a program; using multiple analysts to reduce bias; Patton, 1999).

Conclusion

The importance of this research centers on contributing to the field of obesogenic-focused coaching and providing coaches with concrete suggestions and protocols with which to frame their coaching sessions with this population. This feedback might contribute to a more positive coach-client experience.

This study, using CALC, resulted in positive experiences for both coach and client. Coaches felt an increased sense of professional self-worth, while clients felt they had an external supporter who allowed them to explore opportunities that resulted in behaviour change in a safe environment and process. We would assert that the perspectives and experiences described by the clients and coaches in the current study corroborate, qualitatively, the viable impact and potential of CALC on important health behaviour changes. Based on these findings, coaching, using CALC, was perceived as an effective method to support and promote positive health-related changes in clients. The importance of focusing on and encouraging parents with obesity to improve their own behaviours also resulted in them reporting in improvements in the behaviours of their families. Thus, by focusing on themselves, clients were able to create a more positive health environment for them and their families. Finally and importantly, through participation in this study, coaches reported reaffirming their enjoyment and value as a coach, a factor of primary importance in working effectively with clients on health behaviour issues.

References

- Arora, M., Barquera, S., Farpour Lambert, N.J. and et al, (2019) 'Stigma and obesity: The crux of the matter', *The Lancet Public Health*, 4(11), pp.549-550. DOI: [10.1016/S2468-2667\(19\)30186-0](https://doi.org/10.1016/S2468-2667(19)30186-0).
- Ammentorp, J., Thomsen, J. and Kofoed, P. (2013) 'Adolescents with poorly controlled type 1 diabetes can benefit from coaching: A case report and discussion', *Journal of Clinical Psychology in Medical Settings*, 20, pp.343-350. DOI: [10.1007/s10880-013-9374-z](https://doi.org/10.1007/s10880-013-9374-z).
- Bahreynian, M., Qorbani, M., Khaniabadi, B.M. and et al, (2017) 'Association between obesity and parental weight status in children and adolescents', *Journal of Clinical Research in Pediatric Endocrinology*, 9(2), pp.111-117. DOI: [10.4274/jcrpe.3790](https://doi.org/10.4274/jcrpe.3790).
- Bandura, A. (1977) 'Self-efficacy: Toward a unifying theory of behavioural change', *Psychological Review*, 84, pp.191-215. DOI: [10.1037/0033-295X.84.2.191](https://doi.org/10.1037/0033-295X.84.2.191).

- Bates, B. (1992) 'The effect of demands for honesty on the efficacy of the Carleton Skills-Training Program', *International Journal of Clinical and Experimental Hypnosis*, 40(2), pp.88-102. DOI: 10.1080/00207149208409650.
- Berry, R.M., Ashby, J.S., Gnilka, P.B. and Matheny, K.B. (2011) 'A comparison of face-to-face and distance coaching practices: Coaches' perceptions of the role of the working alliance in problem resolution', *Consulting Psychology Journal: Practice and Research*, 63(4), pp.243-253. DOI: 10.1037/a0026735.
- Bohlin, A., Hagman, E., Klaesson, S. and Danielsson, P. (2017) 'Childhood obesity treatment: telephone coaching is as good as usual care in maintaining weight loss – a randomized controlled trial', *Clinical Obesity*, 7(4), pp.199-205. DOI: 10.1111/cob.12194.
- Coaches Training Institute (2019) *Why CTI? What is Co-Active?*. Available at: <http://www.coactive.com/why-cti/what-is-co-active>.
- Dahl, U., By Rise, M., Kulseng, B. and Steinsbekk, A. (2014) 'Personnel and participant experiences of a residential weight-loss program. A qualitative study', *PLoS ONE*, 9(6), pp.2-8. DOI: 10.1371/journal.pone.0100226.
- De Kroon, M.L.A., Renders, C.M., Van Wouwe, J.P. and et al, (2010) 'The Terneuzen birth cohort: BMI changes between 2 and 6 years correlate strongest with adult overweight', *PLoS ONE*, 5(2), pp.1-8. DOI: 10.1371/journal.pone.0009155.
- Dwyer, J., Needham, L., Simpson, J.R. and Heeney, E.S. (2008) 'Parents report intrapersonal, interpersonal, and environmental barriers to supporting healthy eating and physical activity among their preschoolers', *Applied Physiology, Nutrition, and Metabolism*, 33(2), pp.338-346. DOI: 10.1139/H07-195.
- Faith, M.S., Van Horn, L., Appel, L.J. and et al, (2012) 'Evaluating parents and adult caregivers as "agents of change" for treating obese children: Evidence for parent behavior change strategies and research gaps', *American Heart Association*, 125(9), pp.1186-1207. DOI: 10.1161/CIR.0b013e31824607ee.
- Fried, R.R. and Irwin, J.D. (2016) 'Calmly coping: A motivational interviewing via co-active life coaching (MI-VIA-CALC) pilot intervention for university students with perceived levels of high stress', *International Journal of Evidence Based Coaching and Mentoring*, 14(1), pp.16-33. Available at: <https://radar.brookes.ac.uk/radar/items/6e73b6c5-29f6-49bb-9503-dc4e3f483bbf/1/>.
- Fusch, P.I. and Ness, L.R. (2015) 'Are we there yet? Data saturation in qualitative research', *The Qualitative Report*, 20(9), pp.1408-1416. Available at: <https://nsuworks.nova.edu/tqr/vol20/iss9/3/>.
- Geserick, M., Vogel, M., Gausche, R. and et al, (2018) 'Acceleration of BMI in early childhood and risk of sustained obesity', *New England Journal of Medicine*, 379, pp.1303-1312. DOI: 10.1056/NEJMoa1803527.
- Gittelsohn, J., Evans, M., Story, M. and et al, (1999) 'Multisite formative assessment for the Pathways study to prevent obesity in American Indian schoolchildren', *American Journal of Clinical Nutrition*, 69(4), pp.767S-772S. DOI: 10.1093/ajcn/69.4.767S.
- Goddard, A.M. and Morrow, D. (2015) 'Assessing the impact of motivational-interviewing via co-active life coaching on engagement in physical activity', *International Journal of Evidence Based Coaching and Mentoring*, 13(2), pp.101-122. Available at: <https://radar.brookes.ac.uk/radar/items/b772d3c2-3761-452b-ba49-461709f8f277/1/>.
- Golan, M. and Crow, S. (2004) 'Parents are key players in the prevention and treatment of weight-related problems', *Nutrition Reviews*, 62(1), pp.39-50. DOI: 10.1111/j.1753-4887.2004.tb00005.x.
- Guba, E.G. and Lincoln, Y.S. (1989) *Fourth generation evaluation*. London: Sage.
- Haire-Joshu, D., Elliott, M.B., Caito, N.M. and et al, (2008) 'High 5 for Kids: The impact of a home visiting program on fruit and vegetable intake of parents and their preschool children', *Preventive Medicine*, 47(1), pp.77-82. DOI: 10.1016/j.pmed.2008.03.016.
- Health Canada (2006) *Canadian Community Health Survey, Cycle 2.2, Nutrition (2004): A Guide to Accessing and Interpreting the Data*. Available at: <https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance/health-nutrition-surveys/canadian-community-health-survey-cchs/canadian-community-health-survey-cycle-2-2-nutrition-2004-guide-accessing-interpreting-data-health-canada-2006.html>.
- Health Canada (2012) *Do Canadian Children Meet Their Nutrient Requirements Through Food Intake Alone?*. Available at: <https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance/health-nutrition-surveys/canadian-community-health-survey-cchs/canadian-children-meet-their-nutrient-requirements-through-food-intake-alone-health-canada-2012.html>.
- Huffman, M.H. (2010) 'Health coaching: A fresh approach for improving health outcomes and reducing costs', *American Association of Occupational Health Nurses*, 58(6), pp.245-250. DOI: 10.3928/08910162-20100526-02.
- Jansen, E., Mulkens, S. and Jansen, A. (2011) 'Tackling childhood overweight: Treating parents exclusively is effective', *International Journal of Obesity*, 35, pp.501-509. DOI: 10.1038/ijo.2011.16.
- Karmali, S., Ng, V., Battram, D. and et al, (2019) 'Coaching and/or education intervention for parents with overweight/obesity and their children: Study protocol of a single-centre randomized controlled trial', *BMC Public Health*, 19(345), pp.1-12. DOI: 10.1186/s12889-019-6640-5.
- Kausman, R.R. and Bruere, T.T. (2006) 'If not dieting, now what?', *Australian Family Physician*, 35(8), pp.572-575.
- Kimsey-House, H., Kimsey-House, K., Sandahl, P. and Whitworth, L. (2018) *Co-Active Coaching: The proven framework for transformative conversations at work and in life* (4th edn.). Boston: Nicholas Brealey Publishing.

- Lioret, S., Campbell, K.J., Crawford, D. and et al, (2012) 'A parent focused child obesity prevention intervention improves some mother obesity risk behaviors: The Melbourne infant program', *International Journal of Behavioral Nutrition and Physical Activity*, 9(1). DOI: 10.1186/1479-5868-9-100.
- Mantler, T., Irwin, J.D. and 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), pp.49-63. Available at: <https://radar.brookes.ac.uk/radar/items/5f5c2e37-0221-4654-9a88-09ede11e2281/1/>.
- Mantler, T., Irwin, J.D., Morrow, D. and et al, (2015) 'Assessing motivational interviewing via co-active life coaching on selected smoking cessation outcomes', *Addiction Research and Theory*, 23(2), pp.131-142. DOI: 10.3109/16066359.2014.946410.
- Morgan, P.J., Young, M.D., Lloyd, A.B. and et al, (2017) 'Involvement of fathers in pediatric obesity treatment and prevention trials: A systematic review', *Pediatrics*, 139(2). DOI: 10.1542/peds.2016-2635.
- Moubarac, J.C., Batal, M., Louzada, M.L. and et al, (2017) 'Consumption of ultra-processed foods predicts diet quality in Canada', *Appetite*, 108, pp.512-520. DOI: 10.1016/j.appet.2016.11.006.
- Newnham-Kanas, C., Irwin, J.D. and Morrow, D. (2008) 'Co-active life coaching as a treatment for adults with obesity', *International Journal of Evidence Based Coaching and Mentoring*, 6(2), pp.1-12. Available at: <https://radar.brookes.ac.uk/radar/items/75e6fc8a-2cb1-4874-b59a-a089205bd699/1/>.
- Newnham-Kanas, C., Irwin, J.D., Morrow, D. and Battram, D. (2011a) 'The quantitative assessment of motivational interviewing using co-active life coaching skills as an intervention for adults struggling with obesity', *International Coaching Psychology Review*, 6(2), pp.211-228.
- Newnham-Kanas, C., Morrow, D. and Irwin, J.D. (2011b) 'Participants' perceived utility of motivational interviewing using co-active life coaching skills on their struggle with obesity', *Coaching: An International Journal of Theory, Research and Practice*, 4(2), pp.104-122. DOI: 10.1080/17521882.2011.598176.
- Newnham-Kanas, C., Morrow, D. and Irwin, J.D. (2012) 'Certified professional co-active coaches: Why they enjoy coaching', *International Journal of Evidence Based Coaching and Mentoring*, 10(1), pp.48-56. Available at: <https://radar.brookes.ac.uk/radar/items/df785ede-4121-40e5-841e-6df43d2e08f1/1/>.
- O'Brion, A. and Palmer, S. (2010) 'Exploring key aspects in the formation of coaching relationships: Initial indicators from the perspective of the coachee and the coach', *Coaching: An International Journal of Theory, Research and Practice*, 3(2), pp.124-143. DOI: 10.1080/17521882.2010.502902.
- Ogilvie, K.K. and Eggleton, A. (2016) *Obesity in Canada. A whole-of-society approach for a healthier Canada*. Ottawa, Canada: The Standing Senate Committee on Social Affairs, Science and Technology. Available at: https://sencanada.ca/content/sen/committee/421/SOCI/Reports/2016-02-25_Revised_report_Obesity_in_Canada_e.pdf.
- Patton, M.Q. (1999) 'Enhancing the quality and credibility of qualitative analysis', *Health Services Research*, 34(5), pp.1189-1208. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089059/>.
- Patton, M.Q. (2015) *Qualitative Research & Evaluation Methods* (4th edn.). London: Sage.
- Pearson, E.S., Irwin, J.D., Burke, S.M. and Shapiro, S. (2013b) 'Parental perspectives of a 4-week family-based lifestyle intervention for children with obesity', *Global Journal of Health Science*, 5(2), pp.111-122. DOI: 10.5539/gjhs.v5n2p111.
- Pearson, E.S., Irwin, J.D., Morrow, D. and et al, (2013a) 'The CHANGE program: Comparing an interactive vs. prescriptive approach to self-management among university students with obesity', *Canadian Journal of Diabetes*, 37, pp.4-11. DOI: 10.1016/j.cjcd.2012.12.002.
- Pearson, E.S., Irwin, J.D., Morrow, D. and Hall, C.R. (2012) 'The CHANGE program: Comparing an interactive versus prescriptive obesity intervention on university students' self-esteem and quality of life', *Applied Psychology: Health and Well-Being*, 4(3), pp.369-389. DOI: 10.1111/j.1758-0854.2012.01080.x.
- Public Health Agency of Canada (2011) *Curbing Childhood Obesity: A Federal, Provincial and Territorial Framework for Action to Promote Healthy Weights*. Available at: <https://www.canada.ca/content/dam/phac-aspc/migration/phac-aspc/hp-ps/hl-mvs/framework-cadre/pdf/ccofw-eng.pdf>.
- Sherwood, N.E., JaKa, M.M., Crain, L.A. and et al, (2015) 'Pediatric primary care-based obesity prevention for parents of preschool children: A pilot study', *Childhood Obesity*, 11(6), pp.674-682. DOI: 10.1089/chi.2015.0009.
- Statistics Canada (2018) *Canadian Community Health Survey: Fruit and vegetable dietary practices of person, category*.
- Statistics Canada (2019) *Household population meeting/not meeting the Canadian physical activity guidelines*.
- Stober, D.R. and Grant, A.M. (eds.) (2006) *Evidence based coaching handbook: Putting best practices to work for your clients*. Hoboken, NJ: John Wiley.
- van Zandvoort, M., Irwin, J.D. and Morrow, D. (2008) 'Co-active coaching as an intervention for obesity among female university students', *International Coaching Psychology Review*, 3(3), pp.191-206.
- van Zandvoort, M., Irwin, J.D. and 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), pp.104-118. Available at: <https://radar.brookes.ac.uk/radar/items/c6ca8273-9b84-46c2-9318-835eec789851/1/>.

Ventura, A.K. and Birch, L.L. (2008) 'Does parenting affect children's eating and weight status?', *International Journal of Behavioral Nutrition and Physical Activity*, 5(15). DOI: [10.1186/1479](https://doi.org/10.1186/1479).

Wadden, T.A., Brownell, K.D. and Foster, G.D. (2002) 'Obesity: Responding to the global epidemic', *Journal of Consulting and Clinical Psychology*, 70(3), pp.510-525. DOI: [10.1037//0022-006x.70.3.510](https://doi.org/10.1037//0022-006x.70.3.510).

Wolfenden, L., Bell, C., Wiggers, J. and et al, (2012) 'Engaging parents in child obesity prevention: Support preferences of parents', *Journal of Paediatrics and Child Health*, 48(2). DOI: [10.1111/j.1440-1754.2010.01776.x](https://doi.org/10.1111/j.1440-1754.2010.01776.x).