

The impact of Co-active Life Coaching on female university students with obesity

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Abstract

The purpose of this qualitative study was to explore the impact of Co-active life coaching on obese female university students. Five obese (BMI $\geq 30\text{kg/m}^2$), female university students received an average of nine weekly, 35-minute, one-on-one sessions with a certified coach. Semi-structured, in-depth interviews before and after participating in the coaching intervention were conducted, and inductive content analysis was utilized. Strategies to enhance data trustworthiness were incorporated throughout. Participants initially reported: struggling with barriers and experiencing pressure from family to lose weight; negative relationships with themselves; feeling self-conscious and remorse for their size and lifestyle choices. At the conclusion of the study period, participants attributed enhanced self-acceptance; living healthier lifestyles; and making themselves a priority to their coaching experience. They appreciated being treated as the expert in their lives. Life coaching has potential as a method for supporting obese individuals in improving their relationships with themselves, and may serve as a catalyst in facilitating weight-loss.

Keywords: obesity, life coaching, psycho-social support, self-acceptance

Overview

Obesity is an epidemic with significant consequences for global public health (James, 2008; World Health Organization, 1997). Currently, there are more than 400 million obese adults worldwide, at least 5.5 million of whom reside in Canada (Statistics Canada, 2005; World Health Organization, 2006). One American study reported that, from 1991-1998, obesity prevalence increased most rapidly in individuals between 18 and 29 years of age, and those with some post-secondary education (Mokdad et al., 1999). Nearly 40% of Canadians between the ages of 20-24 presently attend post-secondary school (Hango & de Broucker, 2007). Accordingly, it is worrisome that among those Canadians with some post-secondary education almost 25% are obese (Statistics Canada, 2006).

The years spent attending university serve as an opportunity for young adults to exercise autonomy in making behaviour-related decisions (Miller, Staten, Rayens, & Noland, 2005). Self-management skills that are required to establish healthy behavioural habits continue to develop during this transitional period (Buckworth, 2001), placing university students at particular risk for a variety of lifestyle-related health issues, including overweight and obesity. Given the high

prevalence of obesity among students, coupled with the fact that university-educated individuals often become opinion leaders who influence social and cultural norms, it is important to address this group's well-being (Leslie et al., 1999; Stewart-Brown et al., 2000).

The physical complications of obesity are well-documented (e.g., Burton, 1985; Must et al., 1999; Pi-Sunyer, 1991). However, research examining the psychological functioning of obese individuals has yielded largely inconclusive results. None-the-less, research and anecdotal evidence assert that because North American socio-cultural influences (e.g., the media) promote unreasonable body size standards for most individuals, overweight and obese individuals experience a psychological impact (Irwin & Tucker, 2006; Fabricatore & Wadden, 2003). Fabricatore and Wadden proposed that the psychosocial consequences of obesity are particularly poignant among females, and Erikson and colleagues (2000) indicated that among girls as young as eight years of age, increased body mass index (BMI) and symptoms of depression are correlated positively. Among adult women, obesity has been linked with increased risk of major depression as well as suicide attempts and suicide ideation (Carpenter, Hasin, Allison, & Faith, 2000). Obesity is also often associated with reduced quality of life (Fontaine & Bartlett, 1998; Jia & Lubetkin, 2005; Schwimmer, Burwinkle, & Varni, 2003). Despite the increasing prevalence of obesity, the stigma experienced by obese individuals may be increasing (Puhl & Brownell, 2001). The results of one American study indicated that university students viewed obese individuals as less favorable mates than, for example, cocaine users, former psychiatric patients, and shoplifters (Vener, Krupka, & Gerard, 1982). Obesity discrimination may also result in reduced educational and employment attainment, especially among females (Jain; Pingitore, Dugoni, Tindale, & Spring, 1994). Thus, it is clear that obesity is associated with both physical and psychological problems. Consequently, in addition to supports to help individuals reduce their physical obesity, supports to assist with the psychological impact of being obese are needed. One such support may be life coaching.

Life coaching is a relatively recent approach to enhancing the well-being of individuals. Inspired by the executive or business-coaching sector, life coaching offers a behavioural intervention through which trained *coaches* mentor their clients toward achieving their goals. An annotated bibliography compiled by Newnham-Kanas, Gorczynski, Irwin, and Morrow (2009) revealed that various schools of life coaching have been utilized effectively in ameliorating such health issues as asthma, poor cardiovascular health, depression, diabetes, and emotional distress. The bibliography further indicated that life coaching has been used successfully in improving self-determination and self-efficacy. Thus, life coaching is receiving increased attention as an innovative method for health promotion (Newnham-Kanas, et al. 2009). Co-active coaching is one specific form of life coaching and research on its efficacy as an obesity intervention is growing (Newnham-Kanas, et al, 2008; van Zandvoort, Irwin & Morrow, 2008).

It must be acknowledged that certain elements of the Co-active coaching method (e.g., client empowerment, focus on moving the client towards learning and/or action, active listening etc.) are comparable to other approaches that encourage behaviour change through talking. For example, Egan's Skilled Helper Model (1997), Self Regulation Theory (Kanfer, 1970), Self Determination Theory (Ryan & Deci, 1985; 2000), and Motivational Interviewing (Miller & Rollnick, 2002) each have attributes similar to those included within the coaching model. However, no other method with an identical combination of cornerstones, principles, and skills has been identified.

The Co-active coaching method was founded on practice and experience, yet it is grounded in at least three well-established theories of behaviour change (Irwin & Morrow, 2005). Many of the constructs contained within Social Cognitive Theory (SCT; Bandura, 1986), the Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975), and the Theory of Planned Behaviour (TPB; Ajzen, 1988) are integral components of coaching (Irwin & Morrow). For a complete description of the relevance of these theories to the Co-active coaching technique, refer to Irwin and Morrow (2005). Because many coaching schools and systems exist, it is important to note that the current study utilized the Co-active coaching process as developed by Whitworth et al. (2007); from this point forward the generic term *coaching* will be used to refer to this specific method.

The purpose of this qualitative study was to explore the impact of coaching on obese female university students.

Methods

Participants and Recruitment

Five English-speaking full-time female undergraduate students (aged 17 - 24) with a BMI ≥ 30 were recruited via posters around campus and an ad in the school newspaper. Participant eligibility, process for inclusion, and profile descriptions are provided elsewhere (van Zandvoort et al., 2008). Ethical approval was received from the host University's Office of Research Ethics.

Procedure

Once participant eligibility was confirmed, individual introductory meetings were scheduled with the lead researcher (MvZ). During this meeting, the researcher explained the nature of the intervention study and confirmed the participant's BMI via height and weight measurements. At the conclusion of the introductory meeting, the researcher interviewed each participant using a semi-structured interview guide. The purpose of the interview was to gain an understanding about each participant's experience of being obese. The six primary questions designed to address this purpose were: *What is it like being you? What does your weight represent? What would you have to say yes and no to, to make your ideal weight come true? What is the story you tell yourself about your weight? How would you describe your overall well-being? What is your relationship with yourself?* To ensure the integrity of the information obtained, the researcher used *member checking* (Guba & Lincoln, 1989), or paraphrasing, throughout the interview to ensure the accurate interpretation of the participants' comments. To limit the influence of social desirability (Zerbe & Paulhas, 1987), the researcher—who did not reveal the interview information to the coaches during the study—conducted the interviews. Honesty demands whereby participants were informed of the importance and necessity that they answer all interview questions honestly, were also used to encourage accurate reporting (Bates, 1992). Participants were also told that their comments would not be revealed to their coaches, but would be presented as simply coming from participants in this study.

Two Certified Professional Co-active Coaches (CPCCs) (JI and DM), who completed their training and certification through the Coaches' Training Institute, served as the study coaches. In addition to their work in coaching, the CPCCs were university professors with research expertise related to obesity and physical activity. The CPCCs were not involved in the researcher's meetings with participants or in data collection and analysis. Only the participants' introductory meetings with their coach were in-person; the remaining sessions were conducted over the telephone. During the first encounter, the coach answered any of the client's remaining questions, explained the nature of coaching, collaborated with the client to create the working alliance for

their coach-client relationship, and determined the client's primary agenda. After this session, the researcher contacted each participant to schedule the remaining weekly 30-minute sessions with the CPCCs. The average number of total coaching sessions received was 9 (range 5-10), and missed sessions were re-scheduled when possible. For each coaching session, the participant called the coach and identified what she wanted to focus on. The coaching method is rooted in the primary belief that, as the *experts* in their own lives, clients have the answers to their questions (Whitworth et al., 2007). Accordingly, coaches do not provide their clients with answers, but rather apply a variety of coaching techniques in service of helping their clients explore what they want to achieve and/or what actions should be taken in pursuit of their goals. According to Newnham-Kanas and colleagues (2008), among these techniques are:

...designing a supportive alliance with the client, asking powerful questions that require the client to think deeply, champion the client's efforts, re-frame and reflect back sentiments shared by the client, acknowledge who the client is being throughout their process, challenge the client to reach for their goals, and hold accountabilities for the client.

The topics that were discussed and the techniques used by the coaches within each session varied dependent upon each individual client's needs (van Zandvoort et al., 2008). For a comprehensive description of the coaching techniques, please refer to Whitworth et al. (2007).

Following the completion of their coaching program, participants engaged in a second in-person, in-depth semi-structured interview with the lead researcher. Prior to beginning the interview, the researcher again communicated that there were no right or wrong answers to the interview questions, and the importance of the participants' accurate reporting. During the final interview, open-ended questions aimed at exploring whether the experience of being obese had changed for any of the participants, and providing the researcher with insight into the participants' experiences of being coached, were asked. The six primary questions asked during the post-intervention interviews were: *What is it like being you now compared to the beginning of the intervention? What have you learned from your coaching experience? What has changed since the beginning of the intervention? What actions have you taken? How do you see what you have learned impacting you in the near future? What other feedback do you have with regard to the coaching process?* Each participant was interviewed approximately 60 minutes.

Data Analysis and Interpretation

The participant interviews were audio recorded and transcribed verbatim. The information collected at the pre- and post-coaching interviews was analyzed using inductive content analysis (Patton, 1987). The lead researcher and a research assistant independently analyzed the transcripts, thereby gaining a comprehensive understanding of the information shared by participants and identifying pertinent themes in the responses. Next, the researcher and research assistant met to compare the identified themes, and determine which ones most accurately captured the participants' experiences of being obese and of being coached. Nvivo software was used to code the transcripts and aid in the analysis and identification of common themes. Confirmability of the identified themes (as described by Guba & Lincoln, 1989) was achieved through this triangulated review process, thereby controlling researcher bias and promoting the accurate assessment of the qualitative data.

Findings

Pre-Coaching Interviews

The main themes that emerged from participants' responses were that they: 1) struggled with a number of barriers to losing weight; 2) experienced pressure from family members to lose weight; 3) felt their weight negatively impacted their relationship with themselves; 4) felt remorse for gaining weight and making unhealthy lifestyle choices; and 5) were self-conscious about their weight.

1) *Barriers to losing weight.* Participants emphasized their key challenges to losing weight as: being too busy or tired to exercise consistently; feeling uncomfortable exercising at the gym; and feeling frustration with their lack of weight-loss progress. One participant stated, "I'd go [to the gym] when I could, but I didn't make it...part of my daily or weekly schedule...I kind of went when I could and I couldn't always make it...." Another participant echoed:

I do actually make it to the gym once a week maybe and then...I don't know, afterwards and the next day I'm like "ok I'm going to go, I'm going to go", and then I'm just like "oh I'm too tired" and then I won't [go].

When speaking about exercise, three participants expressed their discomfort in exercising at a gym. One said, "I need to find a fat people gym or an old people gym. I just go to the [name of gym] during the day because that's when all the retirement home people come and then I don't feel so bad...." Another participant answered similarly, stating, "...when I go to the gym, I feel like...some people are so buff and I look stupid when I go...." Three participants also expressed frustration with the absence of noticeable results from previous attempts to lose weight. One participant said, "...I worry that [losing weight] will be the one struggle that I will have for my life...." While another expressed, "...I'm really trying to get [the weight] off. I'm eating better, but it's not coming off -it's not getting off as fast as I hoped it would."

All five participants expressed an awareness of the lifestyle choices they would have to make to reach a healthier weight. When asked what they would have to say *yes* to and *no* to achieve their ideal weight, one participant responded:

I would have to say yes to changing my habits, I would definitely have to start packing my lunch and preparing my food at home....I would have to...say no to watching TV all the time, and say yes to going to the gym.

Another participant emphasized the importance of planning, saying that she would have to do "...more planning of what I eat for the day and making sure I have time to go to the gym several times a week...."

2) *Familial pressure to lose weight.* Three participants described experiencing pressure from family members to lose weight. For one participant this began early in her childhood. She said:

...when I was in grade 6, my grandpa was like "oh you should go to Weight Watchers". It was always...a stress in the back of my mind and even though my dad was like, "no no no, don't worry"... my grandpa said that and it impacted me.

For two participants, their mother's own weight-struggle appeared to be the underlying source of pressure to lose weight. One stated, "...my mom keeps trying to put a lot of pressure [on me]. She's overweight too and she tries to make me feel like I let her down by putting [the weight] all on...." Another explained:

...my mom had weight problems, so she's always nagging me about...you know, "I should be watching what I eat". Or "Are you sure you want to eat that?" "Why don't you go to the gym?" "Did you go to the gym today?"...And just...always nagging me about that stuff and it's never in a positive way.

Two participants who had experienced family pressure to lose weight spoke of their conviction to lose weight for themselves, as opposed to satisfying the demands of those around them. One participant stated, "...it has to be...myself telling me to do it, and not somebody else saying, 'you should do this'." Another participant, who had not experienced familial pressure to lose weight, expressed a similar point of view, explaining, "I think that sometimes...you don't think it's for other people, but it is, and now I realize that the other people don't matter, it's about me and about my life and I want to be healthy as a person."

3) *Relationship with self.* While the majority of participants acknowledged having many positive personal attributes during the pre-intervention interview, four participants stressed having a reduced view of themselves as a result of their weight. One participant said, "I feel like I do good in my life. I try to help others as much as I can...I try to help the individuals I support at work. I just feel like I'm a caring person overall." However, she later expressed, "I feel like I'm a confident person..., but my weight makes me feel unconfident." Another participant made a similar comment, stating, "It makes me feel like less than I am because of my weight." For three participants, losing weight was viewed as a way to enhance their life experience. One participant explained, "...I feel like...I have a good understanding of myself and spirit... I feel ...I would be better if I lost weight...like that would be the third aspect of it, and everything would all come together". Another stated, "I feel like if I were like slim *and* I did well in my work I'd...[be] more popular...or [have] more opportunities."

4) *Remorse about their weight and lifestyle choices.* Four participants indicated feeling bad about reaching their current weight and making unhealthy lifestyle choices. One participant stated, "...when I was younger I told myself that if I ever got overweight I'd...I don't know...I was always, 'no way, no way' -I don't know how it happened so I feel badly about that." Another participant indicated, "I just beat myself up for what I eat, when I don't exercise, when I don't do things that I should have done that I know are good for me...." Similarly, a third participant stated, "...it makes me angry because I always say I'm going to go to the gym...and then I don't go, then I feel really guilty that I don't go because I know I should have gone...."

5) *Self-conscious about weight.* All five participants indicated that they avoid social activities as a result of feeling self-conscious about their weight. When asked about how she sees herself, one participant responded, "...there's things I'd like to do but I don't do because of my weight, like I'd really like to go dancing...and I don't do that because of my weight." Another echoed this experience, stating, "...I'm not as outgoing as I would like to be. I turn down a lot of social things because I feel uncomfortable about myself, and I like going to bars sometimes, but I also don't because I feel very self-conscious...." When asked how her weight has impacted her life, one participant indicated, "I think I have...fewer friends than I would have otherwise...." For three participants, self-consciousness was tied to feeling judged by those around them. When probed

about her appeal of avoiding activities to not draw attention to herself, one participant responded, "...I'm conscious of how people view me sometimes [and] that's why I'm kind of paranoid of how people look at me. So if I'm not drawing attention to myself people aren't criticizing me..." Another stated, "...I always feel like everyone is like judging me, regardless of if they are or not..."

Post-Coaching Interviews

During the post-intervention interviews the resultant themes could be separated into two main groups: relationship with self; and feedback about the coaching experience. The main themes regarding participants' relationship with themselves were that they: 1) had an enhanced self-acceptance; 2) were living a healthier lifestyle; and 3) were now making themselves a priority. The main themes apparent regarding the participants' experiences in being coached were that they: 4) appreciated being treated as the expert in their lives; and 5) would have preferred to be coached in-person.

1) Improved self-acceptance. By the end of the intervention, all five participants reported having an enhanced self-view. One participant described:

I mean even just looking at myself in the mirror and saying, "I like what I see" was very difficult [in the beginning]. I had a hell of a time doing that.... [My coach] and I worked on different things that would help me to either remember it or say it a couple of times a day. And...I guess the more I did it, the easier it got.

Another participant said, "...it's just... realizing that even if somebody doesn't like me for who I am, that doesn't matter because I like who I am." One participant reported no longer feeling like she needed to change to please those around her. She said, "...throughout the whole day I won't feel bad about myself, I won't feel that I have to change anything, I just *am* and I'm happy, and it's good." For most participants, their improved self-acceptance resulted in improved optimism about future opportunities and enhanced social participation. One participant explained:

In the beginning of the study I didn't think that I could ever get into Dental or Medical school and now I feel like there is a good chance that if I do the DAT and MCAT again there is a good chance that I could get in somewhere. I have more confidence in what I can do in life.

Yet another participant said:

...when I went to certain things I was always like, "oh I don't want to do that" or I didn't like to go to parties.... I feel more confident. I feel like I can go hang out with [the] types of people that I want to. I can go to the bars...I feel like I have confidence.

2) Living a healthier lifestyle. All five participants indicated that they were making consistent efforts to live healthier lifestyles. Four participants reported being more physically active. One participant said, "...I'm actually going to the gym now, whereas before I had a membership and I was just like 'Yeah, I'll go tomorrow'." Another stated:

...it ended up being that I actually enjoyed, like, going to the gym, and...after I leave I feel so good....I sort of...made excuses why I couldn't go, like, "Well I need to go home

instead”, or like “I’m too tired today”, and so I definitely...make sure that I’m there twice a week now....

One participant, who had not included physical activity into her lifestyle, was “hoping to incorporate exercise in [my next school] term, when I am a little bit less busy.” She spoke about her concentrated effort to eat more healthily. She said, “...I’m eating better, I’m taking better care of myself and I’m feeling better.” She later elaborated:

I have been taking an hour a night to...put all that food together, to make sure that I have vegetables. I will make myself a sandwich, something that is tasty that I will like, so that I will actually eat it the next day. It’s been working really well actually.

3) *Making self a priority.* During the study period, all five participants had taken steps towards making themselves a priority in their own lives. One participant said, “... I think that it is good that I am finally putting myself first...” Another participant described making an effort to find time for herself amidst her busy academic and extra-curricular schedule. She said, “[I’m] focusing on doing things for myself not just everything else that I do, but making time and making myself a priority too.”

4) *Client as expert.* Three participants expressed their appreciation for, and the impact of, being viewed as the expert in their life by their coach. When asked what she liked most about her coaching experience, one participant said:

Most would be...when I gave an answer like “I don’t know”...[my coach] didn’t just [say] “ok next thing”....[My coach] really like tried to pull it out of me and I think that’s the only way that I learned the stuff that I did.

Another participant stated, “...when I was talking to [my coach], [the coach] didn’t so much point out things that I didn’t know, but it was just bringing things that I did know to my attention.” For these participants, being in control of choosing the agenda for each coaching session further reinforced that they had the expertise they needed in their lives. While she indicated that choosing an agenda topic for each session was sometimes a struggle, one participant acknowledged the appropriateness that this be her responsibility, saying, “...obviously I have to think of the issues, because it’s coaching for *me*...”

5) *Preference for in-person coaching.* All five participants indicated that it would be advantageous if all coaching sessions were in-person, as opposed to over the phone. One participant explained:

Part of me, as much as I like the phone calls, I am more of a personal person... Like even though the phone was flexible sometimes...I would rather go talk to someone. Especially about that kind of [personal] stuff. I feel like it could have been better person-to-person rather than over a phone call.

Another participant echoed, “...I guess it was just a little weird doing it over the phone and not meeting in person.” By contrast, one participant felt that she was able to be more open because she was being coached over the phone, but acknowledged that this approach came with challenges. She said:

...sometimes it was difficult with what was going on in [my] house. That was a problem and that has nothing to do with coaching. But for me, sometimes there [were] things going on in my house that I couldn't change, and so they were distracting.

During the post-interviews, participants were also encouraged to share with the researcher anything else about their coaching experience and involvement in the study that was not discussed in direct response to the interview questions. All five participants expressed gratitude for having the opportunity to participate in the intervention.

For two participants, being vulnerable with their coach was a challenging, yet rewarding experience. One person stated:

It was scary at first, because I'd been so used to my shell and it's something I've held tight. It's a security blanket kind of. It's always there, but it was freeing to kind of let someone in behind it.

Another participant credited her coaching experience with being the catalyst for finding answers she had inside herself. She said:

...these strategies that I'm using to effectively communicate or trust people. I would have never thought of on my own...I mean these were answers I had inside myself, but they would have never surfaced...even though these are my solutions...[my coach] helped me realize them....

One participant spoke of the learning that came as a result of her coaching experience. She explained:

The biggest thing that I have learned is to keep going past the bumps in the road because normally in my diet if I ate something bad, I would eat bad for the rest of the day. And I would be like, "whatever, I've lost it." And the biggest thing I learned is to just keep going and to try. You know you made one mistake, but just keep going and you will do better next time. The next meal is a different chance.

Another participant spoke of the attributes of coaching that differentiate it from other *help by talking* professions. She said:

I've been to...a psychiatrist before and it's very different... I've been to a social worker before, and [coaching is] more positive... when I'm going to talk to [my coach],... you think of it more positively. Like "oh, this will be a good time to talk", and you feel good about it. Where ... I remember going to a psychiatrist or a social worker ... "oh I don't want to go" - you have to deal with...repressed feelings. Where this is more positive, it's about...now, and...it was just a really positive experience.

Four participants spoke of the challenges faced in participating in all aspects of this study, and in following through with the commitments they made to themselves during the coaching process. For two participants, finding time amidst their busy academic and extra-curricular schedules posed the greatest challenge. One participant explained:

It's just hard finding time when you are in school. And for a lot of people to give up that time and know that they have to come in like every week and get a weigh-in and have a phone call for half an hour,...some people just don't do it.

For the other two participants who identified challenges, they, at times, found it difficult to actively talk about, and deal with, issues in their lives. One participant stated, "...sometimes it's easier to ignore issues than deal with them...So...one of the challenges [was] to deal with the issues..., and not ignore it."

Two participants expressed that having a coach who was unbiased, and unattached to their lives contributed to making coaching an effective process. One participant said:

I liked that it was really easy just to open up to [my coach]...I think it was easier for me to talk to [my coach] because [the coach] was a stranger to my life, so she was just kind of looking in and knew what I told her rather than seeing me day to day interacting with people. Plus then it's another way for me to explain the problems that are going on in my life and she doesn't already know them and [has not] formed her own opinions.

Overall, participants expressed that they were grateful to have had a coach with whom to talk. Most participants expressed that they had learned a great deal about themselves, and were feeling an enhanced optimism about their futures.

Discussion

The current study's aim was to explore the impact of Co-active life coaching on obese female university students. Prior to their involvement in the coaching program, participants in this study reported: struggling with barriers and experiencing pressure from family to lose weight; negative relationships with themselves; and feeling self-conscious and remorse for their size and lifestyle choices. Participant feedback at the end of the coaching experience suggests that coaching has potential as an innovative method for providing support to individuals struggling with obesity.

A definitive conclusion has not been reached as to whether obesity is associated with negative psychological consequences (Fabricatore & Wadden, 2003). However, among females a positive relationship has been demonstrated between obesity and risk of depression, suicide attempts, and suicide ideation (Carpenter, Hasin, Allison, & Faith, 2000; Erikson and colleagues, 2000). Obese individuals experience frequent stigmatization and discrimination as a result of their body size (e.g., Fabricatore & Wadden; Myers and Rosen, 1999; Puhl & Brownell, 2001). According to a study conducted by Myers and Rosen, obesity stigmatization "affects nearly every aspect of [obese individuals'] lives" (p.221) and is linked negatively to psychological adjustment, self-esteem, and body image. The researchers acknowledge, however, that conclusions regarding the direction of causation between obesity stigmatization and reduced mental health remain speculative. Many theories exist as to whether psychological factors are the cause or consequence of obesity (Fabricatore & Wadden). Individuals with depression have been shown to be at increased risk of obesity (Noppa & Hallstorm, 1981), and studies have further indicated that between 10% and 30% of people with obesity suffer from binge eating disorder (Spitzer et al., 1993; Stunkard et al., 1996). Psychological stress has been linked to increased negative lifestyle choices (e.g. unhealthy dietary intake, reduced physical activity participation) that promote obesity (Ng & Jeffery, 2003). Accordingly, it is not yet possible to conclude whether

psychological factors are the cause or effect of obesity, and therefore it is critical that obese individuals experience psychological support, as this could serve as a catalyst for weight-loss.

Psychological support is recommended as an important supplement to weight-loss programs to reduce the stress that may worsen, or come as a result of behavioural changes (Fabricatore & Wadden, 2003). The psychological health of university students is of particular concern. For example, a study by Stewart-Brown et al. (2000) demonstrated that more students struggle with their emotional health than suffer from physical ailments. An individual's ability to cope healthily with life's stressors is an important factor in determining weight-loss and weight-loss maintenance success (Strychar, 2004). Among obese individuals, a pattern of overeating is often established when food is used as an emotional crutch (Kayman, Bruvold, & Stern, 1990; Fabricatore & Wadden). Providing obese people with psychological supports may help to disengage this routine as a result of having someone with whom to discuss stressors and emotions. It may also increase the sustainability of positive changes made to physical activity and nutrition behaviours (Fabricatore & Wadden). In keeping with this, participants in the current study expressed their appreciation for having the opportunity to speak regularly with a coach about issues that were relevant and significant in their lives, and credited coaching with their adoption of healthy lifestyle behaviours. They also spoke of having greater self-acceptance and making themselves a priority at the end of their coaching experience. Previous studies have demonstrated coaching's efficacy in reducing waist circumference among obese individuals (Newnham-Kanas et al., 2008; van Zandvoort et al., 2008). Together, these results suggest that coaching has potential as an innovative support technique for university students struggling with obesity; in fact, this recent research suggests that coaching may facilitate weight-loss.

Behavioural interventions include strategies that provide psychological support and facilitate maintained weight management, as they help individuals to make and maintain the physical activity and nutritional changes that facilitate weight loss (The National Health and Medical Research Council, 2003). Coaching is an example of a behavioural intervention, and includes tools such as self-monitoring, acknowledgement, and goal setting (Whitworth et al., 2007), all of which have been demonstrated to be effective additions to obesity interventions (Shaw et al., 2007). Qualitatively, participants in the current study, as well as those who participated in a study by Newnham-Kanas et al. (2008), reported that, after the coaching intervention, they had not only begun to live healthier lifestyles regarding physical activity and nutrition choices, but they also experienced greater self-acceptance. Motivation to change is strongly influenced by individuals' relationships with themselves (Bachkirova, 2004). That is, the more positive one's self-view, the more likely a healthy change is to occur. The results of the present study demonstrate that coaching helps individuals to recognize and reinforce their positive attributes, while helping to minimize negative self-talk (Bachkirova, 2004). This internal shift is a personal and individual experience, and while quantitative methods are appropriate for examining coaching's efficacy as an obesity intervention, coaching's personal and psychological impact is most accurately evaluated from the client's own perspective through qualitative means.

This grounded theory, qualitative study sought to understand coaching's impact on obese female, university students from an *emic*, or insider's perspective. The design of effective and comprehensive (i.e. physical and psychological) obesity interventions requires an in-depth understanding of the environment in which the programs will be applied (Gittelsohn et al., 1999). Taking the *emic* perspective into consideration encourages community buy-in, promoting the program's growth and continued use (Macaulay et al., 1999). While extensive research on childhood and adult obesity has been conducted, health-related research on the university student population is lacking (Gordon, 1995; Stewart-Brown et al., 2000). In the current study,

performing inductive content analysis on the interview transcripts provided the researchers with an opportunity to gather information about the individual and university context in which coaching was implemented. Insight was thereby gained into determinants of the participants' obesity, and personal beliefs and environmental factors that facilitated and/or inhibited the intervention's success were identified before and after the coaching intervention (Gittelsohn et al.). Feedback from the participants' perspective suggests that coaching was impactful in providing psychological support to university students with obesity. Recommendations for improving the intervention (i.e. participants' preference for in-person coaching) will be used to further enhance the contextual appropriateness of the coaching program for its future application as a support for individuals with obesity in the university setting.

A limitation of the current study is its small sample size ($n = 5$). This, combined with the qualitative nature of the study's design, limits the generalizability of this study's findings. Individuals who volunteer for obesity research programs may be more motivated to improve their physical and psychological well-being than the general population (Wadden, Brownell, & Foster, 2002), and therefore it cannot be assumed that the participants in the current study are representative of the entire obese university student population. Despite this limitation, it is important to note that participants, at the conclusion of this study, reported having enhanced self-acceptance, were making strides towards living a healthier lifestyle with regards to physical activity participation and nutritional choices, and were making themselves a priority in their lives. In future, more research with larger numbers of participants (and, if feasible the use of a control group) is needed.

References

- Ajzen, I. (1988). *Attitudes, personality, and behaviour*. Chicago: Dorsey Press.
- Bachkirova, T. (2004). Dealing with issues of the self-concept and self-improvement strategies in coaching and mentoring. *International Journal of Evidence Based Coaching and Mentoring*, 2(2), 29-40.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. New Jersey: Prentice-Hall, Inc.
- 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), 88-102.
- Buckworth, J. (2001). Exercise adherence in college students: Issues and preliminary results. *QUEST*, 53, 335-345.
- Burton, B.T., Foster, W.R., Hirsch, J., & Vanltallie, T.B. (1985). Health implications of obesity: NIH consensus development conference. *International Journal of Obesity and Related Metabolic Disorders*, 9, 155-169.
- Carpenter, K. M., Hasin, D. S., Allison, D. B., & Faith, M. S. (2000). Relationships between obesity and DSM-IV major depressive disorder, suicide ideation, and suicide attempts: Result from a general population study. *American Journal of Public Health*, 90(2), 251-257.
- Egan, G. (1997). *The Skilled Helper: A Problem-Management Approach to Helping* (6th ed.). Pacific Grove: Brooks/Cole Publishing Company.
- Erikson, S. J., Robinson, T. N., Haydel, K. F., & Killen, J. D. (2000). Are overweight children unhappy? Body mass index, depressive symptoms, and overweight concerns in elementary school children. *Archives of Pediatrics & Adolescent Medicine*, 154, 931-935.

- Fabricatore, A. N., & Wadden, T. A. (2003). Psychological functioning of obese individuals. *Diabetes Spectrum, 16*(4), 245-252.
- Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, intention and behaviour : An introduction to theory and research*. Reading, MA : Addison-Wesley.
- Fontaine, K.R., & Bartlett, S.J. (1998). Estimating health-related quality of life in obese individuals. *Disease Management and Health Outcomes, 3*, 61-70.
- Gittelsohn, J., Evans, M., Story, M., Davis, S.M., Metcalfe, L., Helitzer, D.L., et al. (1999). Multisite formative assessment for the Pathways study to prevent obesity in American Indian schoolchildren. *American Journal of Clinical Nutrition, 69*(suppl.), 767-772. Cliffler, NJ: Prentice-Hill.
- Gordon, K. A. (1995). College health in the national blueprint for a healthy campus 2000. *Journal of American College Health, 43*, 273-275.
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. London: Sage.
- Hango, D., & de Broucker, P. (2007). *Postsecondary Enrolment Trends to 2031: Three Scenarios*. Culture, Tourism and the Centre for Education Statistics: Statistics Canada (Catalogue no. 81-595-MIE — No. 058).
- Hill, J. O., & Peters, J. R. (1998). Environmental contributions to the obesity epidemic. *Science, 280*, 1371-1374.
- Irwin, J. D., & Morrow, D. (2005). Health promotion theory in practice: An analysis of Co-active coaching. *International Journal of Evidence Based Coaching and Mentoring, 3*(1), 29-38.
- Irwin, J. D., & Tucker, P. (2005). Through another looking glass: Gender, social issues, and the media impact on body image. In E. Singleton & A. Varpalotai (Eds.), *Stones in the Sneaker: Active Theory for Secondary School Physical and Health Educators*. London, On: The Althouse Press.
- James, W.P.T. (2008). *The epidemiology of obesity: the size of the problem*. *Journal of Internal Medicine, 263*, 336-352.
- Jain, A. (2004). What works for obesity? A summary of the research behind obesity interventions. *BMJ Clinical Evidence, 1*-57.
- Jia, H., & Lubetkin, E. I. (2005). The impact of obesity on health-related quality-of-life in the general adult US population. *Journal of Public Health, 27*(2), 156-164.
- Kanfer, F. H. (1970). *Self-regulation: Research, issues, and speculation*. In *Behavior modification in clinical psychology* (C. Neuringer, & J.L. Michael, Eds.) New York: Appleton-Century-Crofts.
- Kayman, S., Bruvold, W., & Stern, J.S. (1990). Maintenance and relapse after weight loss in women: behavioral aspects. *American Journal of Clinical Nutrition, 52*, 800-807.
- Lau D. C. W., Douketis J. D., Morrison K. M., Hramiak I. M., Sharma A.M., et al. (2007). 2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children. *Canadian Medical Association Journal; 176*(Suppl. 8): 1-13.
- Leslie, E., Owen, N., Salmon, J., Bauman, A., Sallis, J. F., & Kai Lo, S. (1999). Insufficiently active Australian college students: Perceived personal, social, and environmental influences. *Preventive Medicine, 28*, 20-27.
- Macaulay, A.C. Commanda, L.E., Freeman, W.L., Gibson, N., McCabe, M.L., Robbins, C.M., et al. (1999). Participatory research maximises community and lay involvement. *British Medical Journal, 319*, 774-778.
- Miller, W. R., & Rollnick, S. (2002). *Motivational Interviewing: Preparing People for Change* (2nd ed.). New York, NY: The Guilford Press.
- Miller, K., Staten, R. R., Rayens, M. K., & Noland, M. (2005). Levels and

- Characteristics of physical activity among a college student cohort. *American Journal of Health Education*, 36(4), 215-220.
- Mokdad, A.H., Scrdula, M.K., Dietz, W.H., Bowman, B.A., Marks, J.S., & Koplan, J.P. (1999). The Spread of the Obesity Epidemic in the United States, 1991-1998. . *The Journal of the American Medical Association*, 282(16), 1519-1522.
- Must, A., Spadano, J., Coakley, E.H., Field, A.E., Colditz, G., & William H.D. (1999). The Disease Burden Associated with Overweight and Obesity. *The Journal of the American Medical Association*, 282(16), 1523-1529.
- Myers, A., & Rosen, J.C. (1999). Obesity stigmatization and coping: Relation to mental health symptoms, body image, and self-esteem. *International Journal of Obesity*, 23, 221-230.
- National Health and Medical Research Council. (2003). *Clinical Guidelines for the management of overweight and obesity in adults*. Accessed on May , 2008, from <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/obesityguidelines-guidelines-adults.htm>.
- Newnham-Kanas, C. E., Gorczynski, P., Irwin, J. D., & Morrow, D. (2009). Annotated Bibliography of Life Coaching and Health Research, *International Journal of Evidence Based Coaching and Mentoring*, 7(1), 39 – 103.
- Newnham-Kanas, C. E., Irwin, J. D., & Morrow, D. (2008). Co-Active Life Coaching as a Treatment for People with Obesity, *International Journal of Evidence Based Coaching and Mentoring*, Vol. 6, No.2, 1 - 12.
- Ng, D.M., & Jerrery, R.W. (2003). Relationships Between Perceived Stress and Health Behaviors in a Sample of Working Adults. *Health Psychology*, 22(6), 638 – 642.
- Noppa, H., & Hallstorm, T. (1981). Weight gain in adulthood in relation to socioeconomic factors, mental illness and personality traits: A prospective study of middle-aged women. *Journal of Psychosomatic Research*, 25(2), 83-89.
- Patton, M. (1987). *How to Use Qualitative Methods in Evaluation*. Sage: London.
- Pingitore, R. Dugoni, B. L., Tindale R. S., & Spring, B. (1994). Bias against overweight job applicants in a simulated employment interview. *Journal of Applied Psychology*, 79(6), 909-917.
- Pi-Sunyer, F. X. (1991). Health implications of obesity. *American Journal of Clinical Nutrition*, 53, 1595S-1603S.
- Puhl, R., & Brownell, K.D. (2001). Bias, discrimination, and obesity. *Obesity Research*, 9(12), 788-805.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Schwimmer, J. R., Burwinkle, T. M., & Varni, J. W. (2003). Health-related quality of life of severely obese children and adolescents. *The Journal of the American Medical Association*, 289(11), 1813-1819.
- Shaw, K., O'Rourke, P., Del Mar C., & Kenardy, J. (2007). Psychological interventions for overweight or obesity (review). *Cochrane Database of Systematic Reviews*. Issue 2. Art No.:CD003818. DOI 10.1002/14651858.CD003818.pub2.
- Spitzer, R. L., Yanovski, S. Z., Wadden, T. A., Marcus, M. D., Stunkard, A. J., Devlin, M., et al. (1993). Binge eating disorder: Its further validation in a multisite study. *International Journal of Eating Disorders*, 13, 137–153.
- Statistics Canada. (2005). *Nutrition: Findings from the Canadian Community Health Survey – Adult Obesity in Canada: Measured height and weight* (Catalogue no. 82-620-MWE2005001). Ottawa, Ontario, Canada: Tjepkema, M.

- Statistics Canada. (August, 2006a). *Health Reports* (Catalogue no. 82-003-XPE, 17(3)). Ottawa, Ontario, Canada: Health Statistics Division.
- Stewart –Brown, S., Evans, J., Patterson, J., Petersen, S., Doll, H., Balding, J., et al. (2000). The health of students in higher education: An important and neglected public health problem. *Journal of Public Health Medicine*, 22 (4), 492-499.
- Strychar, I. (2004). Fighting obesity: A call to arms. *Canadian Journal of Public Health* 95(1), 12-14.
- Stunkard, A.J., Berkowitz R., Wadden T., Tanrikut C., Reiss E., & Young, L. (1996). Binge eating disorder and the night eating syndrome. *International Journal of obesity and Related Metabolic Disorders*, 20, 1-6. J
- Teachman, B. A., & Brownell, K. D. (2001). Implicit anti-fat bias among health professionals: Is anyone immune?. *International Journal of Obesity*, 25, 1521-1531.
- van Zandvoort, M., Irwin, J.D., & Morrow, L.D. (2008). Co-active Coaching as an Intervention for Obesity among Female University Students, *International Coaching Psychology, Review*, Vol. 3 No. 3, 191 – 206.
- Vener, A.M., Krupka, L.R., & Gerard, R.J. (1982). Overweight/Obese Patients: an Overview. *The Practitioner*, 226, 1102-1109.
- Wadden, T. A., Brownell, K. D., & Foster, G. D. (2002). Obesity: Responding to the global epidemic. *Journal of Consulting and Clinical Psychology*, 70, 510-525.
- Whitworth, L., Kimsey-House, K., Kimsey-House, H., Sandahl, P. (2007). *Co-Active Coaching: New Skills for Coaching People Toward Success in Work and Life* (2nd ed.). California: Davies-Black Publishing.
- World Health Organization (1997). *Executive Summary - Obesity: Preventing and Managing the Global Epidemic, Report of a WHO Consultation on Obesity*. Accessed on May 26, 2008, from www.who.int/entity/nutrition/publications/obesity_executive_summary.pdf
- World Health Organization (September, 2006). *Obesity and Overweight*. Accessed on February 4, 2007, from <http://www.who.int/mediacentre/factsheets/fs311/en/print.html>.
- Zerbe, W. J. and Panlhus, D. L. (1987). Socially desirable responding in organizational behavior: A reconception. *Academy of Management Review*, 12(2), 250- 264.

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