



Practising Physical Activity Following Weight-Loss Surgery: The Significance of Joy, Satisfaction, and Well-Being

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Abstract

While health care professionals advise those who have undergone weight loss surgery (WLS) to increase their levels of physical activity, research suggests that often this is not achieved. This paper explores the experiences of ten Norwegian women as they engaged in physical activity several years after weight loss surgery (WLS). In contrast to the existing literature, which explores physical activity post-WLS largely in terms of quantitative data and measurable outcomes, the present study sought to explore women's lived experiences of physical activity, including the meanings they ascribed to different forms of activity and how such meanings changed over time. The research participants, all of whom had undergone WLS more than five years earlier, described (during individual interviews) the meanings they attached to becoming physically active, as well as the different activities and movement practices they engaged in, from interval training to mountain hiking and yoga. For all the women, maintaining and increasing their level of physical activity was challenging. On the one hand, engaging in exercise after weight loss improved their sense of joy and well-being and expanded their opportunities to move and act. On the other hand, during physical activity they needed to be constantly alert to symptoms of post-surgical side-effects, including variable energy levels, digestive problems and acute illness episodes. As the women explored their new capacities, it seemed to be important for them to explore various forms of physical activity in order to find the form of exercise which best suited them or which they most enjoyed. In some cases, they constructed new meanings around activities which, prior to surgery, had seemed onerous and bereft of pleasure. We argue that such insights will benefit health professionals who provide advice on physical activity at different post-surgical stages, sometimes to persons seriously concerned about regaining weight.

Now I can walk in the mountains without feeling dead by the time I reach the top. It feels wonderful.

The above comment from Linda, a Norwegian woman who underwent gastric bypass surgery more than five years before participating in our study, provides the starting point for this paper. As a result of her surgery, Linda experienced a radical change in the meaning she made of walking in the mountains when compared with her previous lived situation.

Linda's changed experience highlights how the meaning of physical activity can shift significantly following weight loss surgery (WLS). While previous research in this area has tended to focus on the quantification of measurable aspects of physical activity (for example, intensity and capacity), our research sought to explore women's lived experiences of physical activity. We believe that the insights gained from such research will be of value to health professionals providing advice on physical activity at different post-surgical stages, often to clients seriously concerned about regaining weight.

The literature on WLS places an emphasis on physical activity in ensuring successful long-term outcomes. With its biomedical perspective and quantitative research methods, this literature emphasizes levels of physical activity in which weight loss is the ultimate goal. Increased levels of physical activity are regarded as paramount in achieving sufficient weight loss, preventing weight regain, and improving functional health outcomes (Herring et al., 2016; King & Bond, 2013; Mechanick et al., 2013). However, a review of the literature reveals that the vast majority of those who undergo WLS do not make significant behavioural changes in respect of their level of physical activity (PA) (Bergh et al., 2017; King et al., 2015; Reid et al., 2015). As summarized by King and colleagues:

Results from studies with objective assessment of PA provide evidence that the vast majority of adults who undergo bariatric surgery have low levels of PA prior to surgery, and contrary to self-report, do not make substantial changes to their PA behaviour following surgery. (King et al., 2015, p. 1144)

Other researchers have identified different categories of participants according to their pre- and post-operative activity level. Bond et al. (2010), for example, reported that one third of the participants in their study had progressed from inactive to active, while 5 percent had shifted from active to inactive. However, registering changes in levels of physical activity in itself tells us little about the *meaning* of such activities from the perspective of those engaging in them. How individuals experience various physical activities and construct meaning around them seems central to an understanding of long-term experiences following WLS.

This paper sets out to illustrate that insights derived from qualitative research help us gain a sense of why some individuals become more physically active than others after WLS, and what kinds of physical activity they choose to engage in. More specifically, we explore the meanings of different kinds of physical activities and movement practices as experienced by women more than five years after undergoing weight loss surgery.

Theoretical Framework

An underlying theoretical premise of this study is that meaning is embodied. In line with Merleau-Ponty's ontological phenomenology, we regard experience as bodily based and subject to ongoing change. As bodily beings in the world, individuals aspire to make meaning of their experiences in various settings and situations, including those involving physical activity and movement (Merleau-Ponty, 1945/2002, p. 170). Johnson (2007) argues that it is through bodily experiences that meaning becomes possible and takes the form it does:

Meaning is embodied. It arises through embodied organism-environment interactions in which significant patterns are marked within the flow of experience. Meaning emerges as we engage the pervasive qualities of situations and note distinctions that make sense of our experience and carry it forward. The meaning of something is its connections to past, present, and future experiences, actual or possible. (Johnson, 2007, p. 273)

Experientially based meaning-making – irrespective of when and where we (as bodily subjects) are situated – is a fundamental presupposition of this study. As we see it, how individuals make meaning in concrete situations and settings is an ongoing bodily based and emotionally loaded experiential process in which past, present and future intertwine. Leder (1990, p. 136) moreover maintains that “we always experience our surroundings through a particular mood”. The meaning an individual makes of situations and activities in which she is engaged also depends on her emotional state: whether she is happy or sad, enthusiastic or frustrated. At the same time, emotions are dynamic and subject to change; they are repressed and/or expressed through ongoing involvement with our surroundings. Emotions are individual and relational, coloured by cultural norms as well as bodily needs and desires (Ahmed, 2010; Leder, 1990).

By exploring *meanings* of physical activity for women more than five years after their WLS, we seek to illuminate how changes in emotions and mood intertwine with various movement practices as the women continue to make sense of a changed and changing body.

Participants

This paper forms part of a broader research project, approved by Norway's Research Ethics Committee of Medicine, exploring Norwegian women's long-term experiences of WLS. Ten participants were recruited through a support group and an organization providing help and guidance to individuals undergoing obesity treatment of various kinds, including WLS. Participants were required to be over the age of 18, to have undergone WLS more than five years earlier, and to have provided informed consent. However, they did not need to have participated in formal rehabilitation or activity programmes to be part of our study.

Given the study's open-ended focus on participants' long-term experiences of WLS, including their post-surgery bodily changes, participants with a varied range of experiences were included. Participants' ages ranged from 28 to 50 and their demographic background varied considerably in terms of marital status, education, and occupation. Some had undergone surgery in publicly funded health facilities while others had been treated in private clinics.

Method

A key inspiration for our exploration of women's lived experience of physical activity has been van Manen's hermeneutic-phenomenological method, which views the description and interpretation of participants' lived experience as interrelated. Here, the researcher seeks "to discern a deeper meaning of the subject matter" (van Manen, 1990/1997, p. 62).

By comparing and contrasting women's experiences of physical activity, we sought to uncover thematic aspects of their accounts (van Manen, 1990/1997, pp. 82-92). During conversational interviews (van Manen, 1990/1997, p. 66) conducted by the first author on an individual basis, each participant was encouraged to elaborate on her experiences of physical activity at the present time compared with prior to surgery, and to reflect on how such experiences had changed. Participants were also asked whether, and how, side-effects and complications following gastric bypass surgery had influenced their level of physical activity, and how food and eating had subsequently acquired meaning in their lives. In line with van Manen's recommendations, the interviewer attempted to keep follow-up questions as concrete as possible. She encouraged participants to think of specific situations or episodes: for example, when describing how their experiences of physical activity had changed following progressive post-operative weight loss. This approach yielded detailed accounts of the women's lived experiences of physical activities, including changes in the activities engaged in.

Awareness of thematic aspects was present already at this stage, particularly in relation to certain phrases used by participants and especially revealing episodes they described. Linda elaborated on how her previous experience of feeling "like death" during mountain hikes had undergone a radical transformation, enabling her to experience this physical activity with enthusiasm and joy. There was nevertheless the continuing threat of episodes of illness: "the blood sugar thing", in Linda's case. The interviewer was able to explore the ways in which the experience of physical activity might intertwine with fear of illness episodes, especially those related to food and eating. To gain a sense of what these possible intertwinements were about, she analyzed the transcripts line by line, searching for expressed meanings, phrases and metaphors that could illuminate various forms of interconnection.

The second and third authors played a key role in the final round of data analysis, comparing and contrasting various possible intertwinements and interpreting the emotional aspects of the women's accounts, understood as intimately related to their sense of agency. Based on this collaborative interpretation of the interview data, four themes were identified. These are explored in the next section.

Findings

Lived Experiences of Being Physically Active Women

All the women emphasized that they were fitter and more active than they had been prior to WLS. All now engaged in some form of activity, whether mountain walking, skiing, cycling, jogging, or exercising at fitness centres. As Linda put it:

I have become more active, I feel in much better shape.... And there are so many arenas that I master now. So I feel much happier From being very inactive, I am now very active. I am usually active every day.

Linda connected increased activity and fitness after weight loss with her changed experience of walking in the mountains; an activity that had formerly involved exhaustion and suffering now brought her a sense of joy and well-being. She now interacted with the mountains and perceived the surrounding nature in a very different way; feeling immersed in nature, she could now enjoy the scenery. This was valuable for how she felt more generally about physical activity. She also connected activity with a feeling of mastery, which seemed to be emotionally uplifting. Her growing level of physical activity, and the joy associated with living a more active life, had important implications for her role as a mother:

Now I can play football with the kids, and run. Before the surgery, I had never been able to run. I started running one and a half years ago. I have always resisted it. But, of course, I did not have a body capable of running previously.

Other participants, too, told of their ability to take part in their children's lives in new ways following weight loss. Being able to play and be active together offered new possibilities for shared experiences as a family. They could expand their parenting role by participating in the same kinds of activities as their children. In Norway, where children's physical activity is intimately connected with "successful" parenting, it is likely that these previously large women perceived being active physically as "doing the right thing" – for themselves as well as their children.

The women, all of whom seemed to have longed to be more physically active, took great pride in their efforts and the goals they achieved. They were happy and pleased with themselves, aware of how their identities had grown in tandem with their physical activity. It was now possible to live as that desirable model: the physically active woman and mother. They set themselves new goals; in Linda's case, reaching the mountain top she had always dreamed of walking on. In the event, she progressed even further: "... my goal this year was to walk on one mountain top, but I've managed to reach five mountain tops."

Accomplishing new goals and enjoying moving around more freely seemed to open up endless possibilities. As Anna put it:

Now I can do anything. I've climbed two mountains this summer. Yes, two mountains. I couldn't do that previously [prior to the surgery]. ... So I'm much more active than before I ran the KK-race this spring. I could never have done that previously. So I've been exercising a lot.

For Anna, “being able to do anything” meant that she could run in various races, competing with women of the same age without feeling self-consciously different due to being obese. Among the new possibilities that had opened up for her was the courage to compete with others. When signing up for a race, she knew her body and trusted in its strength. Given her long experience of living with a heavy body and all the obstacles related to excessive weight, Anna now had a sense of being invincible.

Obligations and Fear Intertwined with Fight against Old Eating Habits

Elements of obligation and fear were also evident in the women's accounts: they emphasized that they *had to* stay active in order to keep weight regain at bay. By staying active, they strove to feel secure, both in terms of prevailing expert advice on weight control and in respect of their experiential knowledge of what was helping them take care of themselves and avoid weight regain. Food was still problematic, as Marit explained:

And I might end up where I used to be, with emotional eating and feeling sorry for myself and things like that. That might happen. And it still happens once in a while. For me it does. Then I might graze all day long, even though I can get ill when eating like that, feel sick and out of sorts I guess food will always be somewhat problematic for me. But I have to eat to survive, I cannot stop eating, but I always have to fight against it and not eat the small piece of chocolate or the extra piece of food. You can compare it to an alcoholic, a previous alcoholic.

Being active helped the women switch their focus away from food. However, the ways in which they related physical activity to their emotional state varied. Some used highly intense exercise as a strategy to avoid any relapse into problematic eating patterns. As Sigrid put it:

I notice ... a great difference in my psyche. And then also... in my use and abuse of food, right. I know that for me it is alpha and omega to go to the fitness centre and exercise.

Others sought to work on their relationship with food through outdoor activity. Birgitte, for example, elaborated on how she enjoyed being outdoors with her animals or engaging in downhill skiing:

I usually run, I enjoy being outdoors in the woods, and I have dogs, and I do manage to be more active with my dogs, taking long walks and running. I'm not fond of being in a fitness centre or stuff like that.... And now I can ski downhill again like I used to do as a girl. And horse riding. It's incredible what I am able to do again So it also becomes a kind of recreation: being outdoors, reflecting on things when you are active. And you calm down in a better and completely different way, and then food is not as important, if you see what I mean. Then food is reduced to food. You do need some food to live. But you don't feel the urge to comfort eat. Eh ... and that is very, very important for me. So I don't have the same urge to use and abuse food. But, of course, there are days when I feel down and really bad and wish I could eat and eat. But I'm not able to do that anymore.

For Birgitte, these regular activities were associated with joy and a sense of harmony. Her focus on food as a means of dealing with various emotions was toned down. Instead, finding pleasure in outdoor activities became more important to her at an emotional level.

Physical Activity as Risky

Although participants found physical activity a way of coping with emotional eating and associated it with pleasure and greater freedom of movement, they were also aware of its potential risks. For example, those who struggled with hypoglycaemia – a side-effect of gastric bypass surgery – were aware of the very real possibility of becoming *acutely ill* during intense physical activity. Their first hypoglycaemic episodes had caught these women unawares, for none had been informed beforehand about this possible side-effect. Overwhelmed by dizziness and uncontrollable shaking throughout their body, the women had been forced to lie down. Anna described her first episode of hypoglycaemia, which had occurred about two years after her surgery:

It was during winter a few years ago. I recall it very well, very well.... It just came over me suddenly, or so it seemed. I was on my way to work, but had to dig the snow away from my car, which took some effort. When I opened the door to get out of the car, it seemed as if I had no energy at all. I couldn't lift my arm, and I started to shake and ... and I got very scared, thinking “What is this?” At that time, I did not know what it was. I felt completely depleted of energy.

When Anna started to exercise on a regular basis, engaging in interval training and strength building at the rehabilitation programme, she experienced further episodes of hypoglycaemia. In fact, the attacks occurred with increasing frequency and intensity. During dietary sessions, she was advised to reduce her intake of sugar and calories to prevent further weight regain. But she found that complying with the nutritionists' advice only made things worse when it came to hypoglycaemia:

Because then I had hypoglycaemia several times a week, when I tried to reduce sugar in my diet. That at least was my experience with my body then ... that when I stopped eating sugar I had more episodes of hypoglycaemia. So when I started to exercise on a regular basis – intense exercise, eight times a week for three months – I had more episodes of hypoglycaemia.

This discrepancy between Anna's experiences and the advice she was given by health professionals made her focus intensely on her diet as well as her bodily experiences. Ever alert, she endeavoured to analyse her episodes of hypoglycaemia in order to find ways to forestall them.

Participants experienced acute episodes of illness even during low-intensity activities such as walking. For Linda, it took time and effort to come to terms with the reality of having to live with the daily threat of acute illness, especially in situations involving physical activity. Her initial few experiences of hypoglycaemia involved extreme shivering, sweating and rapid heart-beat, causing her to fear that something was seriously wrong, although she had no idea what it might be:

I had a really down period. I thought I'd been overwhelmed by anxiety, but it was actually those blood sugar things that overwhelmed me. But I was terrified because I didn't know what it was. I could walk the whole day with my heart beating furiously I think this lasted two or three months. But I managed to go to work, and I talked with my boss so that I could go home if things became very problematic; but I never did, except once. At first, I tried to change the way I thought about it, to stop it. But eventually I found my own strategies to prevent it.

One strategy Linda adopted was to always carry a slice of bread with her when she went walking, for rapid consumption if she felt a hypoglycaemic attack coming on. This enabled her to continue walking as before. Still, to be on the safe side, her husband joined her on these trips:

Because I cannot walk alone ... I need to walk with someone that I trust. And also because of the risk of illness. I always carry some food and

something to drink with me to avoid illness. Of course, everybody brings something to drink, but for me it's also essential to bring food on those trips. I bring food no matter ... I tuck it in my bra (ha, ha!). It's just a small slice of bread, but I bring it with me. Or else I bring nuts in my pocket.

Linda was grateful that her husband was so understanding. His willingness to walk with her enabled her to feel safe in the event of an acute attack of illness. Her sense of safety was also reinforced by the food she brought with her.

Yoga as a Means of Being Active Despite Fatigue and Lack of Energy

While some participants enjoyed jogging or walking in the mountains, adjusting their diet to avoid episodes of acute illness, others explored yoga as a way of being active. Tone, who had struggled with fatigue and lack of energy for long periods of time, found yoga a way of enjoying being active. As such, it was very different from the interval training she had endured as part of a rehabilitation programme. She had withdrawn from this "carbo training" (as she also called it) halfway through the programme, feeling that she lacked the energy to keep up with the other group members:

Yoga works very nicely I have never really enjoyed exercising, so for me it's been important to find something I enjoy doing. Also to make me feel that I have surplus energy again By practising Yoga I can exercise in peace and quiet. There's nobody telling me to push harder.

For Tone, doing yoga was a pleasurable activity, one that provided space for sensing herself as calm and present while moving. Yoga represented a new possibility to enjoy, rather than endure, physical activity. Movement, calmness and presence seemed to give her access to her bodily self:

That you can rather focus on staying tuned and present, stretching your muscles, of course, and being agile. Feel that you have a connection between your body and your life outside your body Because when you're obese, you feel kind of alienated, that your body is not me, you see? It (the body) becomes a shelter that you hide behind.

Yoga enabled the women to tune into themselves in new ways, stimulating insights into interconnections between body and surrounding world. Being physically active opened up the possibility of new experiences. Birgitte put it as follows:

I really enjoyed experiencing that. ... I enjoyed a sense of inner peace. This focus on my breath

among other things – that did me a lot of good with regards to calming down, yes, and gathering oneself a bit is what I experienced during yoga ...

Birgitte, who contrasted her yoga experiences with her previous ones involving high intensity training, saw the most significant difference as inhering in the way yoga was taught, practised and experienced:

Whereas now I was able to be in charge of my own body, and that's a huge difference. So I found that I could do the exercises I wanted, but I got to choose myself whether I wanted to try or not, and that I think is important So it has to do with gaining control over your own body. That is important. I was able to be in charge of my body.

Yoga represented a path to reconnecting with self, and getting to know oneself as a changed and changing body after major weight loss. Its slow pace, attendant silence and patient teachers helped make yoga very different from various forms of high intensity training. Practising yoga was experienced as a pleasurable way of moving as a body; the women expressed feeling well, strong and satisfied.

Comprehensive Understanding

The themes show how participants' lived experience of physical activity involves a sense of themselves as being capable women, along with joy, well-being, and awareness of expanding opportunities to move and act. The ability to realize a long-held dream ("reaching the mountain top") brought them a deep sense of satisfaction and encouraged a sense of being able to do almost anything. Their lived experience of physical activity was, however, also intertwined with bodily changes following surgery and with eating habits and attitudes to food. Such factors shaped their choices about how they engaged in physical activity and which forms of exercise they chose. Acute illness represented an ongoing threat in their post-surgical lives. When engaging in physical activity, they were constantly alert to bodily symptoms and signals regarding their energy levels in order to prevent acute illness episodes. Participants chose physical activities which not only accorded with their energy regulating needs, but were experienced as enjoyable and rewarding. Whether walking the dogs in the woods or practising yoga, physical activity opened up new possibilities for self-exploration and enjoyment.

Theoretical Interpretation of Findings

By exploring various ways of being physical active, the women discovered themselves anew. Their sense of agency changed; they found themselves able to act in new ways and more capable of acting and interacting

than they had been prior to WLS. This sense of changed agency seemed to be experienced at the pre-reflective level as the ability to perform various activities with a sense of "I can" (Merleau-Ponty, 1945/2002). This sense was expressed and felt through emotionally laden terms such as feeling proud of oneself, feeling wonderful, and feeling happy, recalling the affective dimension of the women's perception of themselves as bodily beings. As such, their experiences relate to Zeiler's notion of *eu-appearance*. Building on Leder's ideas regarding bodily thematization, Zeiler suggests that, even though eu-static bodily appearances – or bodily eu-appearances – may take different forms, in every case the subject regards the body as at ease, well and in good condition, with mind and body in harmony. In eu-static bodily appearance there is no sense of threatened or disrupted intentionality, no discomfort or alienation. Indeed, as argued by Zeiler, bodily eu-appearance implies the opposite, namely comfort and harmony (Zeiler, 2010, p. 339).

However, the threat of illness continued to loom over the women and had to be taken into consideration during physical activity in order to avoid episodes of acute illness. Accordingly, they explored activities associated with pleasure and well-being – activities in which they more readily enjoyed the here and now. This enabled them to pay less attention to their limitations, including problematic aspects of their respective bodies. As the women's attitudes toward their bodies changed, so did their perceptions of their bodies during physical activity. During yoga sessions, for example, some participants experienced a significant change in their mood and bodily perceptions. Yoga was experienced as a means of staying focused on oneself in a meaningful manner. It also represented a contrast to previous experiences of participating in interval training as part of rehabilitation. While practising yoga, the women could explore various forms of movement without having to worry about calories or "effect" in terms of training outcomes or results. They could also dwell on their own bodily perceptions, experiencing a growing sense of harmony, and sensing with satisfaction that they were in charge of their own movements.

As Merleau-Ponty emphasizes, movement and emotions are closely related. An explicit focus on parts of one's own body during movement involves reflection on one's emotions in these situations, whether those relate to how one performs movements or to how various movements make one feel. For the women in our study, practising yoga seemed to invoke feelings of self-discovery, being fully at one with one's own body, self-connectedness, harmony and achievement. There was a diminished sense of the body as simply an object to be changed in standardized ways. The physical activity in itself was no longer a means to achieve effective results by burning calories and building muscles. Instead, the focus was on developing a heightened sensitivity to bodily movements

and on feeling in harmony with oneself during movement. Engaging in yoga appeared to help strengthen the women's sensitivity to the meaning of physical activity while reducing the emphasis on weight loss and bodily change.

This is in line with Dolezal's (2012) discussion of yoga, which she sees as building body awareness rather than promoting a normalized and slim body ideal. Regardless of their body shape, yoga practitioners focus on being present in the here and now, performing various movements and postures while breathing calmly in and out as rhythmic beings in the world. Practitioners focus on movements in harmony with the body so that a deeply meaningful sense of inner connection is achieved:

The body's uniqueness is not compared to some ideal; there is no such thing as too fat, too short or too tall in yoga. Beyond certain alignment principles in the poses, the body's appearance in an aesthetic sense is irrelevant. In fact, there is no attractive or ideal body Unlike other physical practices and sports, yoga is not about comparisons and competition; *everybody* can practice yoga. And through this practice, transformation and healing take place. (Dolezal, 2012, pp. 91-92)

For the women in our study who practised yoga, their sense of *I cannot* was gradually replaced by one of *I can*. There was a therapeutic dimension to this activity which helped strengthen their agency and encouraged a change of focus. Now only marginally aware of their body shape and size, the women focused on performing movements and feeling in harmony with themselves. Movements could be performed free of awareness of specific body parts that in other circumstances might be judged as requiring change. The women's sense of flow increased. Gallagher terms this experience of the body's absence in action and perception the "absently available body":

When the lived body is in tune with the environment, when events are ordered smoothly, when the body is engaged in a task that holds the attention of consciousness, then the body remains in a mute shadowy existence and is lived through in a non-conscious experience. (Gallagher, quoted in Dolezal, 2015, p. 27)

For Gallagher, the flow-like experience that occurs when the body recedes from awareness in both action and perception is dependent on the successful functioning of the *body schema* along with the *body image*. Flow can be disrupted in various ways, for example in situations involving intense exercise, stress, and acute or chronic pain. Gallagher terms these *limit situations*, noting that during them the body can appear "thing-like or object-like" (Gallagher, 2005, p. 28).

Such limit situations were also part of our participants' post-surgical lives. Episodes of acute illness during physical activity could result in some women adjusting their diet; Anna, for example, learned that she could control such episodes by adding more sugar to her diet. Although instructed by health professionals to reduce her intake of sugar, she found that doing the opposite was at times necessary. By explicitly focusing on her body and bodily symptoms, she gradually learned how to adjust her diet. This explicit bodily thematization involved focusing on the *inner* body as well as on the intensity of various activities during group sessions. Drawing once again on Gallagher's notion of limit situations, one could argue that, during physical activity, Anna explored her bodily limits, using exercise as a source of insight to help her make sense of any visceral changes. The process of reflecting on various limit situations involving food and physical activity also seemed to trigger participants' body consciousness, stimulating an ongoing process of body-based know-how.

In her autobiographical-phenomenological paper, "From Dys/Function to Flow", Rebecca Lloyd elaborates on how she learnt to move in new ways following a car accident. As part of her recovery process, she learnt how to cycle again, a process that demanded heightened sensitivity to certain parts of her body (Lloyd, 2015, p. 32). Initially, she found the relearning process tedious. But gradually she began to experience a sense of *flow*, and this gave her new hope for the future. Her restored ability to exercise in ways that made her feel free and alive provided hope for a new existence. In other words, the existential dimension intertwined with her growing ability to move in meaningful ways in her environment.

Although none of the women in our study needed to learn from scratch as Lloyd had done, all were involved in learning to move in ways that were either partly or completely new. This also meant finding meaningful ways of acting in the world. Linda's new-found freedom to walk in the mountains and enjoy the scenery rather than battling fatigue to reach the top exemplified the change in meaning she experienced in relation to physical activity. While rigorous exercise such as hiking in the mountains had once served to remind the women of their shortcomings and limited mobility, it now enabled them to feel alive and deeply connected to the world. In their lighter and fitter bodies, they could enjoy place and time, feeling at one with nature in the here and now, and ready to plan new projects. Their sense of agency had simultaneously become more proactive and optimistic, giving rise to a sense of being able to do almost anything. Such feelings point to the bodily based meaning of agency and reinforce the view that engaging in intense physical activity such as mountain hiking cannot be reduced to a matter of motivation or strength of will. As was emphasized by Merleau-Ponty (1945/2002), no matter how much we may want to, we

cannot climb a mountain if body limitations prevent us from doing so. His point here is that we need to account for bodily possibilities in our ability to project ourselves into our lifeworld. This helps contextualize how losing dramatic amounts of weight and gaining new bodily skills changed our participants' sense of agency, enabling them to make new meanings of the experience.

At the same time, our findings show how obligations and fear intertwined with the women's sense of agency in ways that encouraged them to be more active than they had been prior to surgery. By staying active, they aimed to feel secure, whether in relation to the expert advice they received on how to avoid weight regain or in terms of their own experiential knowledge of what was helping them to do this. Physical activity became a way of preventing loss of control; it was essential to the women's efforts to sustain a stable weight and maintain healthy eating practices. Through their own experiences, the women learned that being active helped them avoid situations liable to trigger "emotional eating" and diverted their attention away from food. For some, engagement in intense exercise was seen as an alternative to food; a strategy to avoid relapse into problematic eating patterns. For others, it meant exploring meaningful activities which prompted feelings of possibility. Gaining a sense of *I can* inspired these participants to continue being active on a regular basis. Whether walking the dog, playing with their children, practising yoga, or engaging in high intensity training, the women experienced a reduction in problematic emotions related to food and eating. Other moods and emotions now took centre stage.

Concluding Comments

Our findings point to the need for women who have undergone WLS to be encouraged to explore a variety of physical activities so that they can discover themselves in new ways and strengthen their agency. The intimate relationship between food, eating and the experience of physical activity revealed by the participants in our study underlines the challenges involved in categorizing post-surgical patients. Such patients are often categorized as "successful" primarily on the basis of simple increases in their level of physical activity. However, this fails to take into account the complex and subtle ways in which post-operative patients tend to explore various exercise options, how and why they ascribe new meaning to particular forms of movement, and how they adjust to side-effects and bodily changes following surgery.

A phenomenological approach has enabled us to discern interrelated dimensions and complexities in women's lived experience of achieving long-term enhanced activity following gastric bypass surgery. It is hoped that these insights will contribute to the ongoing debate regarding what counts as "effective" for such patients in terms of levels of physical activity. Our study points to the importance of acknowledging the meaning of the activity as experienced by the person herself. This seems to be a necessary starting point when trying to understand why some patients become physically active in the long run while others do not. It may also help explain why an individual's specific choice of physical activity may be crucial for her ongoing well-being.

Referencing Format

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References

- Ahmed, S. (2010). *The promise of happiness*. Durham, NC & London, UK: Duke University Press.
- Bergh, I., Kvalem, I. L., Mala, T., Hansen, B. H., & Sniehotta, F. F. (2017). Predictors of physical activity after gastric bypass – A prospective study. *Obesity Surgery*, 27(8), 2050–2057. doi: 10.1007/s11695-017-2593-x
- Bond, D. S., Jakicic, J. M., Unick, J. L., Vithianathan, S., Pohl, D., Roye, G. D., Ryder, B. A., Sax, H. C., & Wing, R. R. (2010). Pre- to postoperative physical activity changes in bariatric surgery patients: Self-report vs. objective measures. *Obesity*, 18(12), 2395–2397. doi: 10.1038/oby.2010.88
- Dolezal, L. (2012). Yoga for women? The problem of beautiful bodies. In L. S. Swan (Ed.), *Yoga – Philosophy for everyone: Bending mind and body* (pp. 84–93). Chichester, UK: Wiley-Blackwell.
- Dolezal, L. (2015). *The body and shame: Phenomenology, feminism, and the socially shaped body*. Lanham, MD: Lexington Books.
- Gallagher, S. (2005). *How the body shapes the mind*. Oxford, UK: Clarendon Press.
- Herring, L. Y., Stevinson, C., Davies, M. J., Biddle, S. J., Sutton, C., Bowrey, D., & Carter, P. (2016). Changes in physical activity behaviour and physical function after bariatric surgery: A systematic review and meta-analysis. *Obesity Reviews*, 17(3), 250–261. doi: 10.1111/obr.12361
- Johnson, M. (2007). *The meaning of the body: Aesthetics of human understandings*. Chicago, IL: The University of Chicago Press.
- King, W. C., & Bond, D. S. (2013). The importance of preoperative and postoperative physical activity counselling in bariatric surgery. *Exercise and Sport Sciences Reviews*, 41(1), pp. 26–35. doi: 10.1097/JES.0b013e31826444e0
- King, W. C., Chan, J.-Y., Bond, D. S., Belle, S. H., Courcoulas, A. P., Patterson, E. J., Mitchell, J. E., Inabnet, W. B., Dakin, G. F., Flum, D. R., Cook, B., & Wolfe, B. M. (2015). Objective assessment of changes in physical activity and sedentary behaviour: Pre- through 3 years post-bariatric surgery. *Obesity*, 23(6), 1143–1150. doi: 10.1002/oby.21106
- Leder, D. (1990). *The absent body*. Chicago, IL: The University of Chicago Press.
- Lloyd, R. J. (2015). From dys/function to flow: Inception, perception and dancing beyond life's constraints. *The Humanistic Psychologist*, 43(1), 24–39. doi: 10.1080/08873267.2014.952416
- Madura, J. A., & DiBaise, J. K. (2012). Quick fix or long-term cure? Pros and cons of bariatric surgery. *F1000 Prime Reports*, 4(19), 9pp. doi: 10.3410/M4-19
- Mechanick, J. I., Youdim, A., Jones, D. B., Garvey, W. T., Hurley, D. L., McMahon, M. M., Heinberg, L. J., Kushner, R., Adams, T. D., Shikora, S., Dixon, J. B., & Brethauer, S. (2013). Clinical practice guidelines for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient—2013 update. *Obesity*, 21(S1), S1–27. doi: 10.1002/oby.20461
- Merleau-Ponty, M. (2002). *Phenomenology of perception* (C. Smith, Trans). New York, NY: Routledge. (Original work published 1945)
- Reid, R. E. R., Carver, T. E., Andersen, K. M., Court, O., & Andersen, R. E. (2015). Physical activity and sedentary behaviour in bariatric patients long-term post-surgery. *Obesity Surgery*, 25(6), 1073–1077. doi: 10.1007/s11695-015-1624-8
- Van Manen, M. (1997). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). London, ON: Althouse Press. (Original work published 1990)
- Zeiler, K. (2010). A phenomenological analysis of bodily self-awareness in the experience of pain and pleasure: On dys-appearance and eu-appearance. *Medicine, Health Care and Philosophy*, 13(4), 333–342. doi: 10.1007/s11019-010-9237-4