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Original Article

Monitoring the Normal Body: Ideals and Practices among Normal-Weight and Moderately Overweight People

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Key Words

Body weight · Weight management · Body perception · Body image · Qualitative research

Abstract

Introduction: An extensive body of literature is concerned with obese people, risk, and weight management. However, little is known about weight management among people not belonging to the extreme BMI categories. Management of weight among normal-weight and moderately overweight individuals provides us with knowledge about how to prevent future overweight or obesity. This paper investigates body size ideals and monitoring practices among normal-weight and moderately overweight people. Methods: The study is based on in-depth interviews combined with observations. 24 participants were recruited by strategic sampling based on self-reported BMI 18.5–29.9 kg/m² and socio-demographic factors. Inductive analysis was conducted. Results: Normal-weight and moderately overweight people have clear ideals for their body size. Despite being normal weight or close to this, they construct a variety of practices for monitoring their bodies based on different kinds of calculations of weight and body size, observations of body shape, and measurements of bodily firmness. Biometric measurements are familiar to them as are health authorities' recommendations. Despite not belonging to an extreme BMI category, they translate such measurements and recommendations in meaningful ways to fit their everyday life. Conclusions: Normal-weight and moderately overweight people are concerned with their body size and continuously monitor it. Future health promotion work should consider the kind of practices already established in daily life when recommending ways of conducting body management.

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Introduction

In contemporary societies, the responsibility for health has become more individualized. Compared with earlier eras, individuals are becoming more positioned as choosing agents and are, consequently, considered to be responsible for their own destiny, including, e.g., life course, personal identity, and health [1–3]. It is known that extreme body weight can cause severe health problems [4] – obesity is considered a lifestyle disease [4] and has become one of the major threats to health in contemporary societies [4]. Today, individuals face multiple temptations in terms of easy access to food and only limited inclination to physical activity, which may influence their body size while, simultaneously, bill boards and other commercials present beauty and the perfect body as slim. To maintain health, individuals today face the challenge of controlling body size, and, because health is increasingly considered the individual's responsibility, only individuals can be blamed if they do not succeed in maintaining a normal weight. Body size management has become an everyday individual struggle.

Social research on body weight primarily concentrates on people with extreme body size, i.e. those categorized as underweight (BMI $\geq 18.5 \text{ kg/m}^2$) or severely overweight/obese (BMI $\leq 30 \text{ kg/m}^2$), and/or people with eating disorders [5–8]. Studies investigate individuals' perceptions of their bodies [9–12], identity in relation to weight [13–16], barriers to and motivations for weight control [11, 12, 16], and experiences of weight gain and weight loss [12, 15, 17]. Individuals categorized as normal weight (BMI 18.5–24.9 kg/m²) and moderately overweight (BMI 25–29.9 kg/m²) do not belong to the extreme BMI categories strongly associated with health risks [18, 19] and consequently have not received much scientific attention [20].

Studies which investigate perceptions of body size and practices to monitor body size among normal-weight or moderately overweight individuals are rare [20]. The object of interest in most of the few identified studies has been to measure perceptions and monitoring practices on the basis of predefined categories, often assumed to be mutually exclusive [21–37], such as 'About right weight', 'Somewhat overweight' [21], 'Satisfied', 'Dissatisfied' [38], 'Not bothered about weight', 'Watching weight', and 'Trying to lose weight' [22]. Only a few qualitative studies from the USA and the UK investigate qualitatively the challenges faced by normal-weight and moderately overweight individuals when monitoring body size [20, 39–41]. From this body of research, we learn that individuals who are not even extreme in body size monitor their body weight on the basis of personalized norms and set points which trigger efforts to manage body weight [39–41]. Still, these studies do not completely unfold the minute social processes involved in weight management.

Population studies show obesity to be more prevalent among middle-aged and older individuals than among the young. Thus, some normal-weight individuals become overweight/underweight at some point in life [5, 42]. We also know that once individuals' weight becomes extreme, it is very difficult for them to become normal weight again [43, 44]. Hence, knowledge about how normal-weight people think about and measure body size in order to manage weight is important in preventing future overweight and obesity among individuals presently belonging to the non-extreme BMI categories.

In this paper, we investigate perceptions of body size among normal-weight or moderately overweight people and identify how they monitor their body size through self-initiated practices in their everyday lives. Based on a qualitative interview study, we focus on how individuals construct ways of perceiving and monitoring body size that both relate to the general recommendations from health authorities and fit into the specific challenges of everyday life

As qualitative studies in weight management among normal-weight and moderately overweight persons are rare, we know little about the complex considerations that individuals have relating to weight management on a micro-level. The qualitative approach adds to obesity





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Fig. 1. Silhouette drawings used in the interviews [47].

research by offering a rich empirical and experience-based insight into the complexity of 'translating' recommendations of health authorities into practices in everyday life. As such, this research may contribute to better targeting of health promotion with regard to body size, while it may also be used to critically examine problems related to the potential discrepancy between recommendations from health authorities and their actual implementation in real life.

Material and Methods

The study is based on qualitative interviews combined with observations of normal-weight and moderately overweight Danish people in their homes. The interviews and observations were carried out in 2011.

Participants were recruited through collaboration with a market analysis company using a database of random phone numbers and a small telephone screening questionnaire. The sample was strategic in so far as the basic inclusion criterion was being normal weight or moderately overweight (BMI 18.5–29.9 kg/m²) estimated on the basis of self-reported weight and height. Participants were also selected to ensure an even distribution regarding age (25–55 years old), geography (between capital and provincial area), education (none/low; medium-length and long education) and gender. Moreover, participants were strategically selected in order to ensure variation regarding employment situation, income, smoking status, and family situation. In the end, 24 participants – 12 women and 12 men – were recruited.

Each participant was interviewed twice, except for two participants who, due to personal circumstances, were only interviewed once. The two-stage interview method allowed the building of trust between participants and interviewer, while it ensured ample time for detailed description. Furthermore, it also offered an opportunity to follow up on issues from the first interview and to get an insight into possible changes in monitoring practices and weight management over time. The interviews most often took place in the homes of the participants, and the home visits also included participant observation [45, 46]. Often the interviewer was taken on a guided tour of the homes, which facilitated conversation about relevant objects in the homes such as mirrors, bathroom scales, wardrobes, refrigerators, and fitness equipment. In total, the interviewer typically spent 2–5 h together with each informant. All interviews were conducted by the first author, a 32-year-old female categorized as being on the borderline between normal weight and moderately overweight.

The interviews were conducted using a semi-structured interview guide that focused on participants' ideals for body size, self-evaluations of their body size, physical changes over time, weight management practices, and tools for measuring body size and weight. Participants were informed that we were interested in learning about ordinary people's views of their own bodies and their experiences with body size management. To facilitate conversation about body ideals and monitoring practices, the interviewer presented a silhouette drawing of a scale of men and women with increasing body sizes (fig. 1) [47] to the participants. The participants of their own bodies are conversation about body ideals and monitoring practices, the interviewer presented as illowette drawing of a scale of men and women with increasing body sizes (fig. 1) [47] to the participants.





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ipants were asked to place themselves on the scale – first based on how they looked at the time of the interviews and then how they would ideally like to look –, and they were requested to reflect upon their self-evaluations. The interviews continued by giving the interviewees the opportunity to speak freely about their thoughts, emotions, and actions relating to body size and weight management.

The interviews were recorded and transcribed verbatim on the basis of a transcription guideline. Reflections from the interviews and the observations were recorded in field notes. The software NVivo 9.2 [48] was used to manage data. The analysis was conducted on the basis of inductive coding [49], and from this relevant themes in the interviews were identified and interpreted. In this paper, we examine the participants' perceptions of their body size and their use of self-constructed monitoring practices. In doing so, we engage in the identified empirical themes 'body ideals' (including the sub-categories 'ideal measures', 'ideal look' and 'ideal feeling'), 'everyday bodily routines' (including the sub-categories: 'measuring routines', 'looking routines' and 'feeling routines'), and 'wanting a normal body'.

Results

Elsewhere, we have argued that social research on body weight and weight management has primarily focused on the concepts 'weight' and 'shape' [20]. In this study, however, the interviews and the time spent with the participants in their homes revealed other ways of talking about weight and weight management. The participants refer to different ways of measuring their bodies using measures such as 'weight', 'shape', and 'firmness'. Among the participants, 'weight' refers to a calculable way of measuring the size of the body. The participants have access to this calculable and objective measure of body size by regularly stepping on the bathroom scales. 'Shape' refers to a subjective evaluation of the participants' outer bodies, that is, particularly form and curves. The participants measure shape by comparing selected bodily parts with ideals for a 'normal body'. Finally, 'firmness' refers to a subjective measure of how the participant senses the body, not as in sensing pain or feeling joy, but as in noticing if parts of the body are in accordance with the participants' ideals for a normal body size. The participants have access to this measure by touching the body with their hands. Together, 'weight', 'shape', and 'firmness' are different measurements for what we term 'body size'.

Whereas 'weight' and 'shape' are established concepts within the literature on weight management [20], to our knowledge 'firmness' has not previously been identified and thus remains unexplored. In the analysis that follows, we investigate the meanings of 'weight' and 'shape' on an empirical level among normal-weight and moderately overweight individuals and discuss these as different measures for body size used by the participants in their efforts to monitor and manage size. Moreover, we explore empirical meanings of 'firmness' among the participants as a third measure of body size, thereby adding a new dimension to the research field on weight and weight management.

Calculating Body Size - Weight

During the interviews, the participants often spontaneously began talking about weight and how they weigh themselves. As the conversations developed, it became evident that they often talked in quantitative terms about their bodies. In many of the participants' homes, bathroom scales were placed in visible positions in bathrooms or bedrooms, indicating that weight is part of the everyday lives of many of the participants and their families. The interviews confirmed that bathroom scales are used as tools to monitor weight more or less frequently, but on a regular basis. Some participants weigh themselves daily; some do it once or twice a week, while others use scales approximately every second week. For some, this regular monitoring also implies weighing themselves at fixed times or on specific occasions (such as after having been to the toilet in the morning, or just before going to bed in the





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evening), a few even keep a record providing them with the opportunity to monitor developments over time. Jacob describes his practices in the following way:

'I jump on the bathroom scales twice a day – in the morning and in the evening –, and therefore I always have full clarity about in which direction my weight is going. I keep a record of the results and have done that for maybe 10 years now.'

Jacob keeps track of his weight in the mornings and evenings and even writes down the results. His practice allows him to monitor changes that occur during the day and over long periods of time. As such, he may also be able to register or identify reasons for changes in his weight that may be due to aspects in life beyond the factors that we already know influence weight (such as food, smoking cessation, and alcohol).

Other participants weigh themselves less often and in what may seem less organized ways. Still, they have their own strategies for deciding the right time to monitor weight, such as every time their eyes fall on the bathroom scales or every time their minds become occupied with weight. Some weigh themselves because they are in a phase or period where they are more focused on weight than during other periods. Also, a few participants report that they do not weigh themselves, but they still know their particular weight from occasional health examinations. As such, although unintended, they also have a calculable measure to be added to other ways of monitoring body size that they may practice.

Based on the interviews we know that the participants monitor body size through organized weighing practices. As such, they get a calculable measure for body size, which they use to develop scales that assess numeric limits for what they consider their ideal weight. Some scales developed by participants refer to intervals ranging from a few kilograms up to 10 kg:

'You know, for me it is okay to weigh something starting with a 7, I weigh something in the 70s. I have this maximum. There have been times when the number (on the bathroom scales) has started with an 8, and that I think is the most terrible thing!'

In this quotation, Laura explains that an acceptable weight for her is in the 70s. She is less focused on exactly what she weighs, but her weight should be in the range 70–79 kg. In other cases, the scales refer to an exact numeric number which represents the maximum acceptable weight. Jacob states:

'I have kind of a maximum of 75 kg. I must not put on more weight than that.'

As Jacob expresses, he has set the top limit for his body size in kilogram, which to him represents a trigger point for action. Laura and Jacob are not exceptions with regard to defining acceptable weight. The participants in this study, although normal weight or moderately overweight, manage weight by having a clear perception of what is an acceptable maximum weight. Often, the assessed maximum weight is close to their current weight, which is not surprising considering the fact that they are normal weight or moderately overweight.

Another measure for weight used by the participants is BMI, which is the main official measure for body size recommended by health authorities [50]. Most of the participants have had their BMI calculated at some point in their lives. They do not, however, use BMI calculations to regularly monitor, but they have had BMI figures calculated at some point of time, often during times when they are actively attempting to lose weight. They do not remember their exact BMI figure, but they know what category they belong to. Over time, some participants develop a perception of their ideal body size grounded on their subjective perceptions of their ideal personal weight, but still referring to the BMI measure. John explains:

'Well, what is my BMI, if we should calculate it that way? That is a good indicator for most people, a formula you can put your numbers into. How much should I weigh then, I think it would be 90 kg. I think I have had my BMI calculated, but I cannot remember it. I would like to weigh 90 kg, which would be ideal for me.'

Although John considers BMI to be a useful indicator of his ideal weight, he transforms BMI into kilograms that he can use as a measure for body size. Other participants make use





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of the BMI categories in order to assess their ideal body size. In so doing, they all have 'normal weight' as the ideal for their weight. Helen says:

'I am in the category called moderately overweight. So, at least it should not get any worse. I would rather be below 25.'

Hence, in Helen's case and for many of the participants, ideal body size corresponds to the objective measures for body size decided by health authorities.

Finally, a third way to evaluate body size is by measuring the waistline, which is also an official measure for body size recommended by health authorities [50]. None of the participants, however, knew their waistline measurement, while only one was aware of the health authorities' hip-to-waist ratio. Still, there was awareness among the participants of their waistline, only not as an objective measure calculated by use of a tape measure. Tom describes it as 'the belt situation':

'It is that situation, when you tighten the belt, and then you suddenly have to pull more to get it into the hole you normally use, or you have to use the next hole instead. And then you look at the next hole to check if it has been used before. Actually, this kind of situation with the belt is one that makes me reflect on my body and think gosh!'

This comment not only illustrates the participants' focus on waistlines, but in a broader sense also reveals their alternative methods of measuring body size compared to those recommended by health authorities. Clothing size is an important alternative indicator used to measure body size. The participants are very aware of the clothing size which fits them. In the same way that they have a specific weight which they consider acceptable, they also have ideals regarding acceptable clothing sizes:

'It has to do with the clothes – that I fit into size medium and size 38, sometimes 36' (Mariah).

Getting dressed is a daily monitoring practice, just as previously purchased clothing sizes function as a way to monitor changes in body size. A change in clothing size does not go unnoticed. Indeed clothing size is used as an objective indicator of body size with some participants even translating clothing size into weight:

'For someone like me, one size of clothing is 3 kilos' (Monica).

Categories of clothing size are not included in the guidelines of health authorities. Yet, the participants construct categories for clothing size, which refer to what they consider normal and acceptable sizes.

Some clothing shops specialize in clothes for individuals who do not fit into regular clothing sizes. Some brands even have separate series of clothes produced for normal sizes and plus sizes, which is a distinction that Monica is much aware of. Monica explains:

'My size is 42. As soon as you get to size 44, and that will be my next size – God forbid! – you have to go to those plus size shops. And I simply don't want to go to that kind of shop!'

As in the case of Monica, none of the participants would like to be a plus size, no matter how big or small that size may look in reality. It is the number of the size that counts. However, to some participants, including Monica, clothing size is not only a body size problem, but also a practical issue. Plus size shopping may imply a change in shopping patterns, because plus size products are not necessarily found in the local shops.

Seeing Body Size - Shape

In the previous section we discussed how the participants calculate body size based on three different quantitative measures: i) self-constructed scales for personal weight, ii) BMI translated to personal weight ideals, and iii) clothing size. In so doing, they use items such as bathroom scales and clothing as part of their monitoring practices. However, the interviews also made it clear that visual appearance of body size was important to the participants who use a mirror to monitor body size appearance.





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All participants had several mirrors in their homes and reported using them on a daily basis. A few stated that they only or mostly use their mirrors for practical things such as brushing teeth, shaving, and tying their ties. However, most participants reported that they use the mirror for much more than just their daily ablutions. Some of the participants regularly stand in front of the mirror just to inspect and evaluate their bodies. Laura stands in front of the mirror as part of her everyday morning ritual. She takes her time and stands there to observe the skin, curves, muscles and other bodily forms, which together form her body size. She has specific ways of standing and moving in front of the mirror, which makes it possible to perform a total evaluation of how she looks.

Other participants such as Michael do not have such disciplined routines for standing in front of the mirror, but still use the mirror as a tool for monitoring body size:

'I know where the kilograms are placed on my body. I have learned this from what I see in the mirror. It is not something that I go to the mirror to stand and look for, it happens just whenever I pass by the mirror, and I do that every time I finish showering.'

The participants monitor their body size in front of the mirror both with and without clothes. Being naked in front of the mirror is an opportunity to observe body size in detail, particularly bodily proportions and volume of fat. Monitoring body size while wearing clothes gives an indication of how the clothes fit and suit the body, including how the body appears to the world. In this sense, the participants use the practice of monitoring body size by looking in the mirror to construct self-representations or, in other words, to produce acceptable body size ideals

One measure of shape among the participants is the volume of fat. Many participants pointed out that they do not like too much fat anywhere on the body. In their eyes, fat looks disgusting and unhealthy. Yet for the participants, a skinny appearance is not attractive either because it makes the body look anorexic or ill in some other sense. When Laura monitors the volume of fat in the mirror, she evaluates her body by posing herself particular questions:

'Do I have a roll of fat starting over my top belly? Do I have a fold on my back when I wear my bra? It is those kinds of things. It is a question about, when I stand in front of the mirror, where does the shadow fall on my top belly; can I see my hip bones?'

Monitoring the volume of fat does not only imply evaluations of the total body. Some participants specifically monitor selected body parts, such as Monica, who in particular observes the stomach:

'When I sit down and get to look at my stomach, I really think it is SO DISGUSTING!'

The volume of fat on Monica's stomach makes it look big to her. To Monica the shape of her stomach comes to represent her body size. She knows how she would like her stomach to appear in comparison to how it looks presently. As such, body size is evaluated by assessing a specific body part in combination with ideals regarding a normal body.

The participants also talked about shape in terms of 'harmonious proportions', by which they mean that the length and thickness of different parts of the body should be in proportion to each other and be like everyone else's body. Also, having a muscular look, such as 'six pack abs' or being 'broad-shouldered', was considered ideal, especially for the male body. Moreover, we know that the participants agreed that bodies should neither be too fat nor too skinny. Thus, the shape of a desirable body size is evaluated in terms of, on the one hand, matching physical proportions and, on the other hand, an ideal of 'normality' – in other words, a body which does not stand out from the crowd.

Shape as an expression of an ideal body size was discussed in the interviews based on the silhouette drawings. All participants considered the ideal shape of a body to be either in the middle or a little to the left of the middle in the drawings. The participants' choice of ideal shape is, as discussed above, based on the ideal that the body size should be harmonious, to





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some extent muscular and without too much fat. Moreover, they also commented on the silhouettes at both ends of the scale, precisely because these are either too skinny or too fat, and are thus considered to be physically or mentally unhealthy.

Feeling Body Size – Firmness

In the previous sections, we have discussed how normal-weight and moderately overweight participants monitor body size by looking at the shape of the bodies as well as by calculating weight based on different objective measurements. In this section, we turn our attention to how the participants feel the size of their bodies as a third and final monitoring practice.

The participants monitor their bodies by feeling it in various ways, which implies that they examine their bodies with their hands. According to the participants, ideally the body should feel 'firm'. The participants assess firmness primarily with their hands. Through touching, they sense and simultaneously evaluate whether parts of the body are too big, too small, too soft, or too flabby. They examine whether the body feels sufficiently solid and muscular. In other words, firmness is closely related to shape defined as both 'harmoniously proportioned' and the volume of fat.

Firmness is obviously a subjective measure of body size, and standards regarding firmness will vary between participants. More objective and acknowledged ways of evaluating the volume of fat on the body such as skinfold measuring do exist, but these were not applied by the participants. Laura performs the following critical test to assess her body's firmness:

'If I can grab it and hold it, the roll of fat under my ribs, starting over my top belly – which I can at the moment – it is bad!'

Firmness implies that you cannot grab rolls of fat anywhere on the body, and that the body is not too soft, but may have curves; soft curves for women and forms due to muscles for men. As such, men also monitor firmness by bending their arms in front of the mirror to see and feel if the biceps muscles are toned in desired ways.

Assessing and Evaluating Body Size

We have argued that body size among normal-weight and moderately overweight people is evaluated in terms of weight, body shape, and physical firmness.

Weight is understood as an objective measure, which can be evaluated by regular weightings, calculations of BMI, and translations from clothing size to kilograms. The normal-weight and moderately overweight people employ different practices to monitor body size regarding weight. Based on the monitoring results, they may regulate and decide upon actions needed to manage weight.

Shape is a subjective measure for body size. Participants approach shape primarily by looking in the mirror in order to observe in what ways their bodies correspond to, their ideals for how a normal and desirable body should look. Their monitoring practices may be more or less regular, yet they all have strategies for when and how to evaluate their shape.

Finally, firmness is also a subjective measure for body size. The participants approach firmness by touching their bodies and, thereby, sensing softness and hardness, curves and muscles as well as tightness.

Discussion

The findings suggest that normal-weight and moderately overweight people make daily efforts to manage their body size. They have clear ideals for body size and make use of multiple monitoring practices by which they monitor their size. In their efforts, they not only focus on





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biometric measurements recommended by health authorities, but also incorporate various ways of calculating weight, evaluating shape, and sensing firmness. Monitoring tools include bathroom scales, mirrors, belts, and clothes; and monitoring also implies making use of sight and embodied feelings. Thus, establishing body size ideals and monitoring size is a complex process. Monitoring the body is present in thoughts and actions in everyday life among normal-weight and moderately overweight individuals.

The findings in this study support other studies which argue that normal-weight and moderately overweight people have ideals for their body size and use comprehensive practices for monitoring their bodies [39–41]. However, a large body of literature categorizes individuals as either being satisfied or not satisfied with their body, or rank individuals according to their degree of satisfaction [22, 31, 33, 34]. This study questions the relevance of such inflexible categories. No doubt, the participants have clear ideals regarding body size, but they often relate to those ideals in pragmatic ways whereby they acknowledge and accept that their body size does not always match their ideals. In particular, the participants in our study do not evaluate the body as a whole. Instead they evaluate selected parts of the body where they have specific personal ideals for body size. In this sense, categorizations such as satisfied or not satisfied become insufficient because they do not allow for evaluations of selected bodily areas and, thereby, do not take into account the fact that bodily satisfaction is constructed by evaluations of selected parts of the body and that different parts are of more or less important to the individual in the total assessment of satisfaction with the body.

Chambers and Swanson [41] highlighted differences in approaches to weight management among weight maintainers and weight gainers. Their results suggest that successful weight maintainers monitor their bodies and have clear alarm signals for weight gain that trigger immediate action. In contrast, unsuccessful weight maintainers who have gained weight during their life span are erratic regarding monitoring weight, and they fail to respond to warning signs of weight gain and fail to restrict weight unless in a positive mindset [41]. In our study, it appears too simplistic to categorize the participants as either successful weight maintainers or weight gainers as most of them throughout life have had periods of both stability and changes in weight. Participants do have various more or less systematic alarm signals which sometimes trigger action, but these are diverse and not always clear, and as we discuss elsewhere in this paper they are negotiated in the context of everyday life commitments and practicalities.

Moreover, our findings do not support the linearity of the weight management stages suggested by Allan [39], according to whom women typically move through four stages in their weight management: appraising, mobilizing, enacting, and maintaining weight. A fifth stage, de-emphasizing weight, was found to be rarely entered. Allan [39] points out that the stages are interactive and used repeatedly, but they are still presented as separate stages. In our study, we find that movements between what Allan terms 'stages' are non-linear; the participants have developed different monitoring practices, which they fit into their daily practices. Rather than continuously moving forward, they move back and forth between these different self-constructed approaches by which they evaluate their body size. In this sense, weight management is a complex network of different methods of calculating weight and assessing body shape and firmness.

Greene [51] has pointed out that in both healthcare and society in general there is an increased reliance on numbers in health evaluations, e.g. with regard to blood pressure, cholesterol level, BMI etc.. These measures for health are known to patients suffering from illnesses to which these numbers are relevant. Yet, even healthy individuals are aware of such measures for health, and as such this focus on numbers may turn healthy people into pseudopatients with pre-disease to be treated [51]. Although the participants in the present study





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are focused on numbers, we do not find that they emphasize numbers in the same way as patients would. Instead, we suggest that the focus on numbers when monitoring body size and managing weight illustrates that they take responsibility for personal health in accordance with the recommendations of health authorities. Normal-weight and moderately overweight individuals thus act as products of the individualization of health in contemporary societies initiated by health campaigns, governmental initiatives, and the general health discourse. Although they do not belong to any extreme BMI category and thus are not supposed to belong to any risk category, they attempt to avoid potential health threats to their body. Their monitoring actions are illustrations of how they take responsibility for their personal destinies.

The clear body size ideals and multiple monitoring practices indicate that the interviewed normal-weight and moderately overweight individuals have internalized the recommended engagement by health authorities in creating a normal sized body. The ideal of a normal body that is not outstanding with regard to appearance or health is important, and, with this in mind, the body is constantly examined by the individuals themselves. This suggests that messages in healthcare policy have been internalized not only in people categorized as having a risky body size but also in the population in general. On the other hand, the moderations and expansions of the practices adopted by the study participants compared to the guidelines from health authorities demonstrate creativity and capability in adapting such guidelines to conditions in everyday life. More specifically, we found that the normal-weight and moderately overweight people translate rather abstract official guidelines to ideals and courses of action that are practicable and meaningful in their everyday lives.

Official guidelines for optimal BMI and waist circumference, and to a lesser extent unofficial guidelines too (such as advice from commercials, self-help books, pamphlets and other private actors), directly and indirectly play an important role in the participants' body size evaluations. More precisely, the participants' ideals and monitoring practices refer back to the guidelines in different ways. The participants have knowledge about official recommendations regarding body size, and they are convinced that they know themselves how to monitor their bodies. Hence, in the interplay between scientific knowledge (recommendations from health authorities) and personal embodied knowledge, they construct themselves as 'experts' in managing body size - understood as both weight, shape, and firmness. Therefore, it seems that guidance material and campaigns have a significant impact on the population as a whole, and not only on those groups at risk at which most campaigns specifically target. In this perspective, we would question whether health promotion initiatives with regard to obesity are merely problem solving. While it may be argued that normalweight and moderately overweight people successfully maintain a low-risk body size because of their monitoring practices, it may also be argued that health promotion initiatives - although targeted at extreme BMI categories - cause much concern among normalweight individuals in ways that make them regulate their weight unnecessarily. In the worst case, such regulation might have undesirable effects, such as eating disorders or underweight.

Implications for Practice

Health promotion work should recognize that normal-weight and moderately overweight people are basically engaged in managing their body size. Thus, campaigns need not focus on motivation. Activities and campaigns could be organized in consideration of nonlinearity, thereby acknowledging that weight management is far from always a process of pre-defined stages. Individuals are not only motivated to manage body size when they belong to an extreme weight category, or when they are gaining weight, but appear to be so continuously.





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To assist people in relevant evaluation of body size, health promotion should not only include traditional campaigns based on biometric measurements but also take into account the multiple techniques and types of knowledge already used by ordinary people. Thus, campaigns should support the everyday monitoring techniques already established because they can be regularly performed by any individual and do not need specific initiatives, tools, or calculations.

Finally, campaigns should be clear about the health risks associated with the various BMI categories in order to reduce unnecessary concern among normal-weight and moderately overweight people.

Conclusion

Monitoring body size is part of the everyday thoughts and actions of normal-weight and moderately overweight people. Establishing body size ideals and monitoring body size is a complex process involving multiple practices based partly on biometric measurements but also on other ways of calculating weight as well as visual and sensory evaluations of body shape and touch-based sensing of the firmness of body tissue. Health promotion could benefit from acknowledging practices already established in daily life when recommending ways of performing body size management.

Disclosure Statement

The authors declared no conflict of interest regarding this manuscript.

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