Materialised Ideals: Sizes and Beauty

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Abstract
Today’s clothing industry is based on a system where clothes are made in ready-to-wear sizes and meant to fit most people. Studies have pointed out that consumers are discontent with the use of these systems: size designations are not accurate enough to find clothing that fits, and different sizes are poorly available. This article discusses in depth who these consumers are, and which consumer groups are the most dissatisfied with today’s sizing systems. Results are based on a web survey where 2834 Nordic consumers responded, complemented with eight in-depth interviews, market analysis on clothing sizes and in-store trouser size measurements. Results indicate that higher shares of the consumers who have a body out of touch with the existing beauty ideals express discontentment with the sizing systems and the poor selection available. In particular, large women, very large men, and thin, short men are those who experience less priority in clothing stores and have more difficulties in finding clothes that fit. Consumers tend to blame themselves when the clothes do not fit their bodies, while our study points out that the industry is to blame as they do not produce clothing for all customers.

Keywords: Clothing sizes, beauty norms, labelling, finished goods, obesity, clothes shopping, clothing norms.
Introduction

Dressing requires finding clothes that fit our bodies and the way we look, as well as the society and occasions we are part of (Entwistle 2000: 8; Klepp & Bjerck 2010: 94). The fit of a garment contributes, among other things, to the confidence and comfort of the wearer (Alexander et al. 2005: 52; Klepp 2008: 13). As we will show in this article, a complex interplay between physical and mental structures is critical for the possibility to appear well dressed.

Today’s apparel industry is based on a system where clothes are made in ready-to-wear (RTW) sizes. The industry faces challenges as RTW clothes are supposed to fit a variety of bodies while at the same time balancing economic and practical limitations in production and profitability. It is costly to produce clothes in several different sizes, and therefore the industry concentrates the selection of sizes to fit the target customer groups. This means that the apparel industry has to prioritize some customer groups over others. Thus, it is of interest to study which consumer groups have the most trouble finding clothes that fit their bodies and preferences. Further, we want to explore the reasons for apparel manufacturers’ priorities and resulting consequences for the consumers. In order to investigate this, a web survey was conducted in three Nordic countries, supplemented with qualitative interviews with selected consumers. To obtain information about the clothing sizes, trousers were measured in a variety of clothing stores and market analysis on the availability of different sizes was performed.

Development of Size Designation Systems and Ready-To-Wear Clothing

Ready-To-Wear clothing has existed since the industrial revolution. Previously, clothes were made to fit each individual either by the wearer themselves, family members or professional dressmakers or tailors. The first grading systems were the proportional dressmakers’ systems used between 1820 and 1838. They used a single body measurement, such as bust measure, from which the other pattern dimensions were then graded in equal proportions (Kidwell 1979: 20). These were based on tailors’ experience and not on scientific anthropometric studies. Wars during the eighteenth century resulted in expanding armies and the production of large quantities of uniforms, which created the need of systemized size grading and resulted in statistical information about men’s body measurements (Aldrich 2007: 6). Between 1939 and 1940, the first large-scale scientific study of women’s body measurements was conducted in the US (O’Brien & Sheldon 1941). During the first half of the twentieth century, British sizing was often organized by 2 inch division in the bust, waist or hip size and sets of size designation codes such as SW (small woman), W (women’s size), OS (outsize) and XOS (X-outsize) were used. Average women’s size W would be fitted for 36-38 inches bust. Some British manufacturers adopted American methods of number coding, such as women’s sizes 10, 12, 14. Already then the different size designation systems were considered confusing, and efforts were made in the later part of the twentieth
century, both in the US and Europe, to develop standardized sizing through body measurement surveys and the use of statistical methods (Aldrich 2007: 41). The first scientific size charts were published by the British Standards Institution (BSI), including a set schedule of code sizing related directly to body measurements in 1953. In the US, the first standard clothing sizes, CS 215-58, were published in 1958 (US Department of Commerce). Development of an international sizing system for clothing started in 1969 and the first international standard for clothing size designations, including definitions and body measurement procedures, was finally published in 1977 (ISO 3635). The European committee for standardization has adopted a modified version of this standard in to their work (EN 13402-1 2001) and is now working to develop a new European size designation system (prEN 13402-4). They have experienced problems in reaching a common size code; it has to be informative and indicate sizes accurately, but at the same time not too complicated for the consumers from different nations to understand or for the apparel industry to use.

Figure 1 Clothing size labels use several different size designation systems

**Fit Problems with Size Designations**

Several studies have shown that there are disparities within clothing sizes used today. The most obvious disparities are the national labelling differences between countries. Chun-Yoon and Jasper (1993: 28) and Ujevic et al. (2005: 75) found that there were significant differences even though clothing would have the same size designation. To overcome this problem, international clothing chains often give several size designations in the same label (Figure 1). The sizing differences are not only a problem within the international markets, but also on a national level, as great disparities can be found within sizes. Several studies have demonstrated this by measuring both women’s and men’s trousers (Sieben & Chen-Yu 1992: 80; Kinley 2003: 23; Faust et al. 2006: 77; Laitala et al. 2009: 21). Schofield & LaBat (2005: 25) have studied 40 graded patterns and size charts for women from 1873 up to the year 2000 in the US and found out that they were all different. Rather than taking into account the results from anthropometric studies, they mainly use the proportional grading systems, similar to the ones tailors used before anthropometric data was available. Some of the problems are, for example,
that the different height groups recommended by anthropometric data are not taken into account and the vertical and length measurements increase as the girth dimensions increase. Therefore, short or tall women are forced to select a fit based on either their vertical or horizontal measurements (ibid.).

More than ever before, the apparel industry is faced with customers occupying a larger spectrum of sizes due to both migration from different cultures and an increase in weight and height of the average western consumer. Today, more people are considered overweight or obese than in earlier times (WHO 2006: 1). In the later years several comprehensive, national anthropometric sizing surveys that utilize the new body scanning technologies have been conducted (Meunier 2000: 715; Ashdown & Dunne 2006: 123; Bye et al. 2006: 74; Connell et al. 2006: 84). According to Meunier (2000), the use of three-dimensional landmark coordinates for body type is superior to the use of circumferential measurements in predicting clothing sizes. The studies indicate that the population has changed considerably during the last decades; for example, the average waist girth of British women has increased by 15 cm since 1952 (Bodymetrics 2005: 3), and 38% of women and 44% of men are either overweight or obese. This means that most old size charts are out dated, and the international clothing industry is in demand for more international, standardized solutions (Chun-Yoon and Jasper 1994: 81; Stylios 2004: 135).

Today, many consumers express frustration over the sizing systems and the incorrect use of the system. Several consumers report the need to actively seek out different apparel brands in order to identify brands that sell clothes that fit their body size and type (LaBat 2007: 103). Such frustration is typical of how sizing systems are experienced today; it is complicated to find clothes that fit the body.

Two contradictory explanations for intentional sizing variations are offered: The most common is so-called ‘vanity labelling’, which means that the garments are labelled smaller than they actually are in order to flatter the customers as they fit into a smaller size than their ‘real’ size (Kinley 2003: 21; Ennis 2006: 30). The opposite to this is the claim that fashion manufacturers only produce clothing in small sizes and mark the sizes too large as a marketing advantage for clothes that should only fit thin ‘trendy’ bodies. Other explanations give more coincidental disparities, such as the use of different size fit models, size statistics from different resources, and the grading from the fit model to the other sizes (Workman 1991: 34; Ashdown 1998: 324; Kinley 2003: 20). The anthropometric data that may be used as a base for size tables can come from many different sources. There are variations between the decades, nations, as well as company specific adjustments to fit for a specific customer target group.

The fit of the garment is dependent on more details than the basic size. As Ashdown (1998: 324) points out, the size tables are often based on two or three body dimensions such as bust, waist and hips. The proportions and distances between these body measures vary greatly between the individuals. It has been
shown that only 47% of the US female population fit the medium hip category, which is defined as hips being 2 inches greater than the bust (Cooklin 1990). According to UK’s national sizing survey performed in 2004, 60% of shoppers have difficulty finding clothes that fit (Bodymetrics 2005: 3; Treleaven 2007: 113). It has been shown that the customer groups that have most problems are mainly women, especially those who need larges sizes, and the elderly (Chowdhary and Beale 1988: 783; Peura-Kapanen 2000: 22; Colls 2004: 593; 2006: 537; Salusso et al. 2006: 96; Hauge 2007: 65). A study of senior citizens showed that 61% expressed a definite need for special sizing, and 92% mentioned at least one body location that caused fitting problems with ready-made clothing (Richards 1981: 265). Attention has also been drawn to disabled users who have problems to find suitable clothing, not only due to sizes and fit problems but also regarding shopping possibilities and service at the stores (Thorén 1996: 389). Wearing the right clothes with a good fit contributes to the confidence and comfort of the wearer both physically and socially. Being inappropriately dressed for an occasion can cause feelings of awkwardness and vulnerability (Entwistle 2000: 7). Therefore, everybody should have a possibility to dress appropriately.

The contemporary western female beauty ideal is characterised by facial attractiveness, thinness, and fitness (Freedman 1984: 39; Hesse-Biber 1996: 4; Lennon 1997: 63; Thesander 1997: 201; Rudd & Lennon 2000: 152). This is described as ‘the cult of thinness’ (Hesse-Biber 1996: 11) or ‘tyranny of slenderness’ (Chernin 1981: 83; Bordo 2003: 33), which are reported to increase the stigma of being obese and to create body dissatisfaction in increasingly younger age groups (Williamson & Delin 2001: 80). In addition to the importance of female beauty ideals, an increased attention has been reported on male bodies (Mishkind et al. 1986: 112; McCaulay et al. 1988: 381; Dworkin & Wachs 2009: 33). Professor of law Deborah Rhode writes about ‘Beauty bias’: discrimination and prejudices based on appearance, especially against overweight people (Rhode 2010: 29).

As the review of beauty ideals has shown, some groups in particular rely on good clothes in order to achieve confidence, comfort, and respect. The studies of sizes have indicated that some consumer groups are more exposed than others and more often encounter trouble when trying to find suitable clothing. It has also been documented that there are variations within clothing sizes. However, we are lacking information concerning the connection between these themes, a further analysis of the reasons, and the consequences for the consumers. Also, most of the cited literature is based on studies made in the US or in the UK; therefore, we wanted to study this in a Nordic context.
Knowledge Sources for Sizes, Clothes, Labelling, People's Thoughts and Bodies

Our research questions are: Which consumer groups have most trouble finding clothes that fit their bodies and preferences, and what are the implications of today’s sizing systems for consumers? Figure 2 illustrates the approach we have applied for answering these questions. Consumers’ ideas, experiences, and opinions are symbolized by the thought bubble. The human symbolizes the physical body, the trousers indicate garments, and the size labels indicate the size designation given for garments. We have examined the relationship between these four elements by several different methods: a consumer survey supplemented with in-depth interviews, market analysis on availability of sizes, and in-store clothing size measurements. The consumer survey gave information on the relation between clothes, body, and labelling as the consumers experience it. In addition, some in-depth interviews were conducted in order to obtain more profound data than could be supplied by the web survey. Market research of size selections and in-store clothing measurements contributed with information about the relationship between size codes and clothing measures, as well as on the availability of sizes. The on-going standardization work focuses on the same four elements, but the working group concentrates on the size designations and the results from anthropometric studies.

Figure 2 Relations between the four research areas and the research methods used to study them
This paper discusses mainly the first methods described, the consumer survey and in-depth interviews, giving information on how the consumers relate to clothing sizes and size labelling. In addition, some findings from the trouser size measurement study are given. More information about the project can be found in Laitala et al. (2009).

**Method 1: Quantitative Data**

Data of consumers’ experiences and opinions concerning clothing sizes, size labelling, and perception of the body was collected through a web-based survey in three Nordic countries: Finland, Norway and Sweden. The questionnaire included respondents’ social background, information and personal opinions of their body types, experiences with clothing purchases including the search for the correct size, fit and style, as well as experiences with different size designation systems. All of the questions had alternative answers that the respondent could tick off, complemented with a comment field. Each quotation from the survey is presented with a code that gives information about the respondents: Nationality, gender, age and reported letter size; e.g., Norwegian female, 25, size XL.

Respondents were recruited through three channels: media publicity, a Finnish consumer panel, as well as private and work-related contacts through e-mail lists and web pages. A total of 2834 people completed the web questionnaire, but the distribution between the three countries was very uneven. Most respondents were Finnish (1958), followed by 497 Norwegians, 331 Swedes and 48 replies from other countries. The Finnish dominance may be caused by the use of a Finnish consumer panel and a high level of media publicity.

The background variables for the respondents are presented in table 1. The values are given as percentage for each country. The cases are not weighed. The distribution of respondents is uneven and evidently dominated by females (81%). The two youngest age groups are overrepresented in comparison to the average of the adult population, and the oldest age group is underrepresented. The 60+ group constitutes 27% of the total population, but only 7% of the respondents. The majority of respondents has higher education and lives either in the capital city or another large city.

Due to the selected recruitment methods, the received data is not representative of the whole population. All of the respondents volunteered to take part in the research, and it is assumed that their participation may be caused by a special interest in the subject, with the exception of the consumer panel in Finland. In addition, a web-based questionnaire excludes respondents that do not have access to the Internet. Therefore, the results cannot be generalized for the entire population of each country or for comparison between the countries. However, the large number of respondents can be compared with each other in the sample and the sample can be viewed as an example of consumers in the Nordic countries.
Table 1: Respondents divided by background variables given as a percentage of each country and compared to population (15 years and older) (Nordic Council of Ministers 2007: 61, 63, 124, 128, 138)

Method 2: Qualitative Data

The survey was subsequently supplemented with in-depth interviews in order to gather information about Norwegian customers’ experiences with the size labelling systems: How do the customers keep informed and how do they comprehend today’s labelling systems? What is regarded as problematic when it comes to buying clothes and how do they adapt their own shopping habits to the size labelling system?

A half-structured interview guide was used where the topic was fixed but not the order of the questions. The questions were formulated in a manner that made the informants describe and reflect on their experiences with the size labelling system in the form of a conversation. We were looking for comprehensive descriptions and experiences from customers who have met challenges when shopping for clothes. The informants’ experiences with the size labelling system
will be presented together with the quantitative material in order to better understand and to exemplify the survey results.

Our intention was to interview people with atypical body types, which may constitute an additional challenge when shopping for clothes. Two examples would be large or unusually tall persons. We were especially interested in talking to men because 81% of the respondents to the quantitative survey are women; consequently, men’s experiences have been less illuminated by the web questionnaire. First informants were recruited in stores that specialized on clothing for large and tall men, but this turned out to be unpractical as the customers did not have the time to talk, and loud music made it difficult to record the interviews. Therefore, the scope was widened and informants were recruited through colleagues and friends by ‘word of mouth’. The qualitative material consists of interviews with eight people aged 21-78 years.

**Method 3: Market Research and Clothing Size Measurements**

59 clothing stores in the capitals of Finland, Norway and Sweden were visited in order to study the availability of clothing in different sizes and to measure the relationship between clothing size designation and the actual measures. In order to find out which sizes were available in the different shops, we asked sales personnel at most of the visited stores, and checked by studying the clothing selection available. The dimensions of 152 different trousers were measured in two sizes, giving a total of 304 trousers. Trousers were selected for measurement because their form is more homogeneous than most other garments, such as shirts that come in many different shapes and fits, which would make it very difficult to find points of comparison. Trousers are also used by both men and women, and they are easily found in most clothing stores. Most of the earlier size and fit related studies also refer to trousers; these are the garments that consumers report having most trouble finding a suitable fit (Sieben & Chen-Yu 1992: 76; Kinley 2003: 22; Shin & Istook 2007: 142). We collected information on actual sizes, sizing systems, the relationship between these elements, and the sizes that were available in the stores. We aimed for a balanced distribution of different store categories and selected stores based on several parameters, such as country of origin, type of chain, client target age group, gender, and price level.

The measurements include trousers in size categories small (S) and large (L), or in matching sizes in corresponding size designation systems. This was done in order to see the difference between the sizes within the same model, as well as to be able to compare different models with each other. Measurement points for trousers were waist, length of the leg (both inner and outer seam), thigh (measured at the widest part of the upper leg), and length of seat seam. Some of the trousers are excluded from the size comparison because not all models were found in correct sizes, and some materials were flexible, and therefore, the measurements became too uncertain.
Availability of Clothing in Different Sizes

During the market research the personnel of visited clothing stores were asked which size range they had available. Often, the personnel had problems answering due to several reasons. One was that they used several different size designation systems and did not know which system to refer to. The three most common size designation systems for trousers in Nordic stores were numbers such as 36, 38, 40, waist measure in inches (especially for jeans), and letter sizes such as S, M and L. In addition to these three, we found several other designation systems, such as centimetre sizes for men, codes like 1, 2, 3, or the numbers used in the UK or the US. Another obstacle for the store personnel determineing exact smallest or largest size was that the stores took in different sizes in different clothing brands and could have a small selection of clothing that was sold in larger sizes than most of the assortment. For example, some jeans stores for young women had only up to size 30” in basic assortment (corresponding to approximately number size 40), but had some jeans types that were sold in a couple of sizes larger than any other jeans in the store. According to the store personnel this limited selection was not a problem because larger sizes were available in the boys’ section where bigger girls could choose some trousers that were considered to have a unisex fit.

The availability of sizes varied, especially according to the store size. Smaller stores do not usually have a large stock of each trouser type and not many sizes are included in the selection. The largest available size in these stores for women was often 42. Some stores for women had a clothing selection for larger sizes (usually starting from size 44) located in a separate section of the store. These were typically the Nordic chains such as H&M, KappAhl, Lindex and Seppälä. The models that are sold in these sections are not the same as those sold in the section for sizes 42 and below. Some stores, such as Cubus, had a different approach and a wider size selection up to size 46 of the same garments that are sold in small sizes.

Sizes between 36 and 40 are easiest to find for women. Size 34 can be found in some places, whereas size 32 is quite rare. For bigger sizes it is quite easy to find size 42, and 44 is not too difficult either, except for high-fashion stores where these sizes were often not available. Size 46 and bigger are mainly sold in specialized stores or separate departments within the chain stores. Mail-order companies often have a wider selection in larger sizes. When the sizes are labelled with letter sizing, it is often easy to find sizes between XS and L for women, a bit more difficult to find XL, and even more rare to find sizes XXL or larger. For men, it was more rare to see size XS than XL, and XXL was quite common too, at least in stores targeted for adult customers above the age of 30.

Survey respondents selected which size they usually use. The distribution of sizes is given in Figure 3. The same figure indicates which sizes are usually available at stores; the red limits are used for women and the blue for men. This shows that, particularly, the availability of large sizes is a problem. This figure
does not take into account the different fits that might be required in addition to the basic size. A large athletic male informant with broad shoulders described his problems for finding fitting clothes:

Well you're talking to us big guys, so for us it is not always easy to find sizes that fit in Europe, so I buy most of my clothes in the U.S. An XXL in the U.S. might fit me, while XXL in Europe is far too small. [...] When it comes to large sizes here, they are not intended for the body shape I have... If I'm going to buy clothes they are too narrow on the shoulders and very big here (around the waist). [...] Also, I use a tailor, a Thai tailor who makes suits, and shirts. Who measures me. [...] If the sizes were more uniform and predictable, I would like to buy clothes online. (Norwegian male, 39, size 3XL)

We saw clear differences between the genders when the respondents reported their ease of finding clothing that fits. Figure 4 highlights that men and women have different opinions when it comes to the possibility of finding clothes that fit their body sizes and body shapes, as well as their desired styles. Over 50 percent of the men think it is very or quite easy to find clothes, while 37 percent of the women think the same. However, there is a great difference between respondents with a BMI below and above 25. As depicted in figure 4, men’s experiences are similar to those of women’s: men with a BMI below 25 consider it easier to find clothes that are in accordance with their own style, body shape and size. When looking at age-related experiences, older women find it more difficult to find clothes that fit their style than young girls. For men, there is no significant difference between the age groups. The 22% of overweight women that have trouble finding their size corresponds well to the division in Figure 2, where about 20% falls outside the basic size selection of stores.
Body mass index is used as a criterion for medical intervention for obese people and has been criticized for being inaccurate as it does not differentiate between fat and muscle (Jensen 2007: 53). With this in mind, we have in addition to body mass index also worked out another way of estimating body types. We asked the informants to report the clothing size they usually use and to describe their bodies’ height and build (weight) in comparison to average build and height.

Figure 4 Ease of finding clothes that fit desired style, as well as body shape and size by gender and BMI. Percent. (N = 2567)

Figure 5 Percentage of respondents that have difficulties finding clothes in desired size and style. Percentage of each body type category by gender. Percent. (N = 2770)
Figure 5 emphasizes a correlation between ‘normal’ body type and ease of finding clothes according to style, body shape and size. Males with normal weight and height and women that are thin with average height report finding clothes the easiest. Over 80% of the females who describe themselves as larger/rounder than average do not consider it easy to find clothes, independent of height. We also see a similar tendency with large males, but in addition the tall men stand out. Another category of men that report difficulties in finding clothing are thin and short men. The highest percentages of dissatisfied men are among those who are either short or tall. Women are, in general, more dissatisfied, and the most dissatisfied are the ones that have round or large body types regardless of whether they are short, average height, or tall.

Many of the respondents on the web survey had chosen to write in the comments fields. The comments show with all possible clarity that many are provoked by the difficulties to find clothes that fit both due to bad labelling or because the fact that the size is not available at all. The comments also made it clear that the location where the clothes can be found has meaning for consumers. This is true whether it is adults who need to buy kids’ clothes or women that have to buy men’s clothing. Separate departments or shops for large people increase availability but does not necessarily make the purchase situation pleasurable:

My size is exactly the smallest size in the chain stores’ ‘fat-department’, which gives, to say the least, a very limited range. I can just forget about the brand and youth stores. Unfortunately, it seems that all have forgotten that women have breasts. I never fit in the clothes and I’m so tired. (Swedish female, 32, size varies).

The others implied that they can find their sizes but not in the styles they want due to poor selection. One Norwegian respondent described he had trouble finding clothes for special occasions, especially ‘…Other party outfits except dark suits. No cool clothes are produced for fat people.’ (Norwegian male, 50, size XXXL). The shopping will affect the mood and body image negatively when customers are not able to find any clothing that fits. This was described by several respondents.

Clothes are used to highlight and decorate the body, as well as to hide it. Clothes have a double purpose as they reveal and display at the same time (Hollander 1993: 3). However, when clothing advice is given for dressing large or round bodies the clothes’ ability to hide and reduce the body is emphasized. Dark colours and matte surfaces combined with vertical lines are the techniques for achieving this (Klepp 2010).

I often end up feeling like having a style of an old hag, because I’m plump around the middle and there are no sexy clothes in bigger sizes! If you’re fat, you must look awful, it seems! (Norwegian female, 43, size XXL)

While ‘everything is permitted’ on the thin and trendy bodies, larger people are discouraged to use many different types of clothing including certain colours, contemporary styles and fashion items, as well as clothing that reveals the body
(Klepp 2010). What the magazines and etiquette books portray as good advice is materialised in the limited selection in the ready-to-wear market.

Also big women want beautiful clothes, not just some ‘beer barrel covers’! For example, in Prisma [Finnish department store] they are supposed have big sizes. When you see the selection, you get really disappointed. In smaller sizes you can find a lot of colours, but in my size only gloomy browns. (Finnish female, 58, size XL)

In clothing advice literature an equal sign is placed between young and slim. A similar assumption affects the market. This makes it particularly difficult for the young and large. They can choose between two ways of being ‘wrongly dressed’; either wrong in relation to their age or wrong in relation to their body (Klepp and Storm-Mathisen 2005: 337). Young women may then feel that the only correct thing to do is to change one’s body, as the following respondent concludes:

Especially when buying jeans all seem to be too small, and I have to look for my size at the big girls’ department together with the sales personnel. At that point, the only option seems to be dieting. (Finnish female, 27, size S with wide hips).

The problem of finding clothes that fit does not only have a practical dimension; it also has deeper effects and influence on the consumers’ self-esteem. The frustrating search for appropriate clothing and use of unflattering garments are a constant reminder that the individual does not meet the expectations of what is considered a beautiful and successful body type.

Another point of dissatisfaction concerns the size labelling systems’ lack of relevant information. Numerous respondents commented on this matter, saying that the length of trousers should be included in the size code more often, indicating whether they are short, normal or long. Also, indications for different body types were highly desired.

**Problems with Size Designations**

The results from in-store trousers’ waist girth measurements show great variations in waist size between trousers that should be the same size according to the size designation. A variation of over 15 cm in circumference was found in all four categories (small and large sizes for women and men). The greatest variation can be found in large sizes for women; a total of 21 cm. In some cases trousers labelled size small have wider waist girth than trousers labelled size large. It shows that a size medium will overlap both small and large sizes to a great extent. These results are similar to the findings of Kinley (2003), who reported 21.6 cm variations within a size 4 trousers’ waist measurement.

Measurement results correspond well with the survey results. Over 98% of the respondents experience variations in clothing sizes, either very big differences or a least some variations. Less than one percent of the respondents say they can always use the same size. The majority of women (65 percent) say they find big size differences between different brands or stores, whereas the majority of men
(51 percent) only find some variations. Most respondents don’t care which size designation system is used, as long as the clothing sizes are consistent. There is a lot of frustration over the sizes and sizing differences, and several consumers comment on the impossibility to buy anything without trying it on first; some even say the size designation is not even instructive when trying to find clothing that fits. Many respondents also comment that the sizes vary even within the chain/store:

I always try clothes on. I can never go into a store and look at the size and then know that it will fit. And it’s also because I think that the same number is not the same… Even within the same brand and same store. Not the same pants, but like if I take one pair of pants, and another next to it, different model, then one of them fits and the other does not. Even though they have the same 38 or 36 or 40 or whatever. (Norwegian male, 38, size XL)

Another point of discontent is the confusion between the different size designation systems. Consumers feel that it is often difficult to interpret or distinguish the different codes from each other, and it is very confusing when one garment is labelled with several different systems.

A wish to be Thinner

It has been reported that some consumers use clothing as a tool to measure and control the body size (Colls 2004: 588; 2006: 536). Therefore, it is likely that they prefer to use small size designations rather than large ones. In order to study this, we asked if the respondents have sometimes bought clothing that was too tight because they are planning to lose weight. The division of answers is presented in Figure 6.

These results show that women are more likely to buy a smaller size than needed, as well as the overweight and obese respondents. We did not specifically ask the reasons for these purchases, but based on the comments there were two main categories; psychological and practical reasons. The psychological reasons included respondents that preferred to select the smaller size when possible in order to feel slimmer or smaller: ‘When the big is big and the small is just a bit too small, you get tempted to buy a smaller one, especially if the clothes at big girls’ stores are too big and too expensive’. (Finnish female, 42, size XL). Other respondents reasoned the act as a goal to lose weight: ‘I sometimes buy a bit tight garment (especially if it is a really nice one) to get a goal for losing a couple of kilos’ (Finnish female, 56, size XL).
Figure 6 Respondents that have sometimes bought too tight clothing on purpose. Answers divided by gender and BMI. Percentage. N= 2561

Some respondents said they felt they had no option, as their own, bigger size did not exist: ‘I have, but because it has been the biggest size. One size bigger would have fitted better, but I did not find anything else’ (Swedish female, 53, size varies).

Several respondents also commented that they had done it before, but had learned from that mistake and did not do it anymore. Some, also, had too small clothes from before: ‘Why would I buy too tight clothes when my wardrobe is full of them from before?’ (Finnish female, 44, size XL). These comments indicate that several of the consumers wish to fit into a smaller size, and even retain their old clothing that is too small in case they manage to lose weight.

Double Pressure

There is a striking correlation between the ideals of beauty and the findings of the survey. The results reveal that women in general have a harder time finding clothes that fit their style, body shape and size than men do. Older women find it more difficult to find clothes that fit their style than younger women. However, Tiggemann (2004: 38) has shown that the importance of appearance including body shape and weight decrease as women age, although body dissatisfaction remains rather stable up to an old age. The focus on beauty is stronger for women than for men and visible aging is interpreted as negative in relation to female beauty (Rhode 2010).
The availability of sizes varies between clothing stores, but there is a very clear tendency that an increase in body size makes it more difficult to find clothes that fit, more so for women than men. For men, the categories with most trouble finding suitable clothing are small men using size XS/S, the very tall, and the very large. The consequence of poor clothing selection is that consumers can’t get adequate clothing in many clothing stores. Women using sizes 44 or larger often have to go to special stores for large sizes or separate departments in chain stores. Girls that use over 32” jeans size may have to buy their jeans in men’s department if they wish to buy their trousers in jeans stores aimed at young people. These findings support the earlier studies that the respondents who use bigger sizes are less satisfied with the available clothing selection and existing sizing systems, and hope for a better functioning system (Chowdhary & Beale 1988: 783; Colls 2004: 593; Hauge 2007: 67).

When observing the consumer groups that reported finding clothes the easiest, significant differences between the genders can be seen. Women who are thinner than average found it easier to find clothing than women of average weight, whereas for men it was easier for those in the normal weight category. The beauty ideals of today are different for men and women (Grogan 2008: 9; Rysst 2010: 22). As for the height, the opposites of tall men and short women are favoured as ideals when selecting partners (Nettle 2002: 1920). Short men are considered less attractive and regarded as having a lower status (Jackson & Ervin 1992: 441). Several studies have shown that the female beauty ideal has moved toward an increasingly thin standard (Garner 1980: 489; Silverstein et al. 1986: 895; Groesz et al. 2002: 2; Cortese 2008: 36). The ideal body for men is different, as men should be normal weight but preferably well toned (Mishkind et al. 1986: 105; Mort 1988: 201; Wienke 1998: 255). These results indicate that it is easier to find clothing that fits for consumers whose bodies more closely resemble the beauty ideals.

When examining the beauty ideals and gender stereotypes it seems the fact that small men and large women have a poor selection of clothes is not a coincidence. The poor clothing selection could be interpreted as giving lower priority to large female consumers who differ from the ideals, since the clothing selection is narrower and models are different than clothes sold in smaller sizes. The groups concerned are also those who have the greatest difficulties in appearing well-dressed even when they find clothes that fit their size. Dressing a body that deviates from current beauty ideals is more difficult than dressing the ideal body (Entwistle 2000). Appearing well-dressed, modern, cool, etc., is problematic even if the clothes in themselves are ‘right’ and fit their body size. In today's women's fashion the relationship between the body and the clothes is crucial. It is on the slim female body that clothes appear ‘right’. At the same time, a body in accordance with current body ideals will easily be perceived as beautiful and modern, regardless of whether the clothes are (Klepp & Storm-Mathisen 2005:
Both the qualitative interviews and the commentaries in the web questionnaire show that size labelling not only acts as a tool to find clothes that fit the body. The relationship between bodies and clothes is not strictly a question of body sizes or a size code but involves deeper individual and social questions (Nettleton & Watson 1998: 1-20; Entwistle 2000: 6-12; Howson 2004: 118; Shilling 2004: 87; Turner 2004: 82; Fraser & Greco 2005: 1-36). For some consumers the size code in itself is important, beyond finding clothes that fit the body. The clothes measurements refer to the measurements of the body, which again are measures of beauty and self-control, particularly for women. Women can, for instance, quantify the size of their bodies by determining if a garment fits their body or not (Borregaard 2004: 36; Colls 2004: 588). Statements such as ‘If I don’t fit into size medium, I refuse to try on a larger size. I am not large!’ (Norwegian female, 68, size M), shows the size code in itself has a value. Not only does it represent the size of the garment but also the size of the person wearing it. However, this is not only a feminine property, as one of male respondents described:

The size is not important, but it is not funny to go from 38 to 40 for example… Of course you want to be even smaller, when I was active in sports I used size 36, and in a way that feels like the correct size for me. (Norwegian male, 39, size 3XL)

This has also been found in other studies, for example Rysst (2010), where one informant tells of the discouraging feeling of finding her ‘own size’ to be too small to fit her. Getting into a particular (smaller) size thus becomes a goal in itself. LaBat and DeLong (1990: 47) suggest that it is inevitable for women to compare their bodies to an ideal when they try to fit their body to available clothes, and it is, therefore, inadequate to base sizing systems on ideal proportions. One consequence of this is vanity labelling, where the producers can use the labelling to appeal to consumers’ wish to be thinner. The shift of focus from body weight to a toned and correct body shape indicates that clothing sizes will remain crucial in the struggle to obtain the perfect body (Guendouzi 2004: 1644).

Conclusions: Materialised Norms

Size labelling is a communication system between manufacturers and consumers. The purpose of the system is to make it simpler for the consumers to find clothes that fit. That presupposes three things: the manufacturers must label the sizes correctly, the consumers must understand and trust the size labelling, and the clothes must fit the consumers’ bodies. The material revealed flaws in all these three areas. Producers label the clothes incorrectly; one pair of trousers labelled Large can be smaller than another one labelled Small. They produce too few selections, especially in the big sizes, and large women, small men, and very large
men have the most trouble finding their sizes at stores. Consumers, on the other hand, do not trust the labelling system for good reasons. Less than 1% of the respondents could always use the same size. In addition, they attribute intrinsic value to the symbols used to indicate clothing sizes. A system that was developed to indicate the measurements of clothes has become a normative system connected with body ideals. Results indicate that higher shares of the consumers who have a body out of touch with the existing beauty ideals express discontentment with the sizing systems and the poor selection available. Consumers tend to blame themselves when the clothes do not fit their bodies, while our study has pointed out that the industry is to blame, as they do not produce clothing for all customers.

Developing a new labelling system that works better thus entails challenges on several levels. It should be based on the newest anthropometric studies and correspond to the given body dimensions providing possibilities for larger variety in size selections with different fits. A main challenge is, of course, to systematize information and make it easily available. This must be done in a way that does not reinforce the stigmatizing aspects of the sizes that do not fit the prevailing beauty ideals. The associations connected to the existing size designations will break first, but it is likely that this will only be temporary and the new designations will obtain similar associations. However, as the newly suggested size designation system includes a wider selection of body measures and a more complex code, the users may relate it to different parts of their body. Thus, the identification between size codes and body ideals becomes more complex and it will, therefore, take longer for the numbers or letters to receive such a double meaning, and at best, it will not happen at all. It is a paradox that those who really need good clothing to make their bodies socially acceptable are those who have the least choice and the greatest difficulty in finding something that fits. Notions of beauty ideals, according to which women should be small and men large, do not only exist in our imagination but also in the material structures that surround us. Failing to find clothes that fit supports the further stigmatization and materialization of the judgmental gaze cast upon people whose bodies do not conform to beauty ideals.

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Notes
1 See discussion of thin, trendy bodies in Neumann (2010: 33) and Rysst (2010: 18).
2 Report is available at http://www.norden.org/sv/publikationer/publikationer/2009-503.

References
Aldrich, Winifred (2007): ‘History of Sizing Systems and Ready-to-wear Garments’, Susan P. Ashdown (ed.), Sizing in Clothing: Developing Effective Sizing Systems for Ready-to-wear Clothing, Cambridge: Woodhead Publishing Limited, 1-56.
Alexander, Marina, Lenda Jo Connell & Ann Beth Presley (2005): ‘Clothing Fit Preferences of Young Female Adult Consumers’, International Journal of Clothing Science and Technology, 17:1, 52-64.
Ashdown, Susan P. (1998): ‘An Investigation of the Structure of Sizing Systems’, International Journal of Clothing Science and Technology, 10: 5, 324-341.
Ashdown, Susan P. & Lucy Dunne (2006): ‘A Study of Automated Custom Fit: Readiness of the Technology for the Apparel Industry’, Clothing and Textiles Research Journal, 24: 2, 121-136.
Bodymetrics (2005): ‘UK National Sizing Survey (SizeUK): Information Document’, London.
Bordo, Susan (2003): Unbearable Weight: Feminism, Western Culture, and the Body, Berkeley, California: University of California Press.
Borregaard, Karen (2004): ‘Hvis jeg ikke kan passe en størrelse 42, er jeg blevet for tyk’, Copenhagen: Sociologisk Institut, Københavns Universitet.
Bye, Elizabeth, Karen L. Labat & Marilyn R. Delong (2006): ‘Analysis of Body Measurement Systems for Apparel’, Clothing and Textiles Research Journal, 24: 2, 66-79.
Chernin, Kim (1981): The Obsession: Reflections on the Tyranny of Slenderness, New York: Harper & Row.
Chowdhary, U. & N. V. Beale (1988): ‘Plus-Size Women’s Clothing Interest, Satisfactions and Dissatisfactions with Read-to-Wear Apparel’, Perceptual and Motor Skills, 66:3, 783-788.
Chun-Yoon, Jongsuk & Cynthia R. Jasper (1993): ‘Garment-sizing Systems: An International Comparison’, International Journal of Clothing Science and Technology, 5:5, 28 - 37.
—— (1994): ‘Development of size labelling systems for women’s garments’, International Journal of Consumer Studies, 18:1, 71-83.
Colls, Rachel (2004): “‘Looking Alright, Feeling Alright’: Emotions, Sizing and the Geographies of Women’s Experiences of Clothing Consumption’, Social & Cultural Geography, 5:4, 583-596.
—— (2006): ‘Outsize/outside: Bodily Bignesses and the Emotional Experiences of British Women Shopping for Clothes’, Gender Place and Culture, 13:5, 529-545.
Connell, Lenda Jo, Pamela V. Ulrich, Evelyn L. Brannon, Marina Alexander & Ann Beth Presley (2006): ‘Body Shape Assessment Scale: Instrument Development For Analyzing Female Figures’, Clothing and Textiles Research Journal, 24:2, 80-95.
Cooklin, Gerry (2000): Pattern Grading for Women’s Clothes, the Technology of Sizing, London: BSP professional Books.
Cortese, Anthony (2008): Provocateur: Images of Women and Minorities in Advertising, Lanham: Rowman & Littlefield.
Dworkin, Shari L. & Faye Linda Wachs (2009): Body Panic: Gender, Health, and the Selling of Fitness, New York: New York University Press.
EN 13402-1 (2001): ‘Size designation of clothes - Part 1: Terms, definitions and body measurement procedure (ISO 3635:1981 modified) ’, in European Committee for Standardization (ed.).
Ennis, Holly (2006): ‘Vanity sizing: The Manufacturing of Self Esteem’, Dialogues@RU: Journal of Undergraduate Research, 5, 26-37.
Entwistle, Joanne (2000): The Fashioned Body: Fashion, Dress, and Modern Social Theory, Cambridge: Wiley-Blackwell.
Faust, Marie-Eve, Serge Carrier & Pierre Baptist (2006): ‘Variations in Canadian women’s ready-to-wear standard sizes’, Journal of Fashion Marketing and Management, 10:1, 71-83.
Fraser, Mariam & Monica Greco (eds) (2005): The Body: A Reader, London: Routledge.
Freedman, Rita Jackway (1984): ‘Reflections on Beauty as it Relates to Health in Adolescent Females’, Sharon Golub (ed.), Health care of the female adolescent, New York: The Haworth Press, 29-46.
Garner, D. M., Garfinkel, P. E., Schwartz, D., & Thompson, M. (1980): ‘Cultural Expectations of Thinness in Women’, Psychological Reports, 47, 483-491.
Grosz, Lisa M., Michael P. Levine & Sarah K. Murnen (2002): ‘The Effect of Experimental Presentation of Thin Media Images on Body Satisfaction: A Meta-Analytic Review’, International Journal of Eating Disorders, 31:1, 1-16.
Grogan, Sarah (2008): Body Image: Understanding Body Dissatisfaction in Men, Women, and Children, London: Routledge.
Guendouzi, Jackie (2004): “‘She's Very Slim”: Talking About Body-Size in all-Female Interactions’, Journal of Pragmatics, 36:9, 1635-1653.
Hauge, Benedicte (2007): ‘Kroppserfaringer og slankevænner : en kvalitativ studie av kvinnor som slanker seg’, Fagrapport nr. 5-2007, Oslo: National Institute for Consumer Research.
Hesse-Biber, Sharlene Nagy (1996): Am I Thin Enough Yet? The Cult of Thinness and the Commercialization of Identity, Oxford: Oxford University Press.
Hollander, Anne (1993): Seeing Through Clothes, Berkeley & Los Angeles: University of California Press.
Howson, Alexandra (2004): The Body in Society: An Introduction, Cambridge: Polity Press.
ISO 3635 (1977): ‘Size Designation of Clothes - Definitions and Body Measurement Procedure’, International Organization for Standardization (ed.).
Jackson, Linda A. & Kelly S. Ervin (1992): ‘Height Stereotypes of Women and Men: The Liabilities of Shortness for Both Sexes’, The Journal of Social Psychology, 132: 4, 433-445.
Jensen, Arne (2007): ‘Feilslutninger om fedmeproblemet’, Samfunnspolitikken, 4, 52-61.
Kidwell, Claudia B. (1979): Cutting a fashionable fit: Dressmakers’ drafting systems in the United States, Washington D.C: Smithsonian Institution Press.
Kinley, Tammy R. (2003): ‘Size Variation in Women's Pants’, Clothing and Textiles Research Journal, 21:1, 19-31.
Klepp, Ingun Grimstad (2008): ‘Clothes, the body and well-being: What does it mean to feel well dressed? ’ Project note, Oslo: National Institute for Consumer Research.
Klepp, Ingun Grimstad & Mari Bjerck (2010): ‘Klær og utstyr for en hver anledning – Friluftslivets spesialisering’, Forskning i friluft 2009, Oslo: Friluftslivets fellesorganisasjon, 89-102.

Klepp, Ingun Grimstad & Ardis Storm-Mathisen (2005): ‘Reading Fashion as Age: Teenage Girls and Grown Womens Accounts of Clothing as Body and Social Status’, Fashion Theory: The Journal of Dress, Body and Culture, 9:3, 323-342.

LaBat, Karen L. (2007): ‘Sizing Standardisation’, S. P. Ashdown (ed.), Sizing in Clothing: Developing Effective Sizing Systems for Ready-to-Wear Clothing, Cambridge: Woodhead Publishing Limited, 88-107.

LaBat, Karen L. & Marilyn R. DeLong (1990): ‘Body Cathexis and Satisfaction with Fit of Apparel’, Clothing and Textiles Research Journal, 8:2, 43-48.

Laitala, Kirsi, Benedicte Hauge & Ingun Grimstad Klepp (2009): ‘Large? Clothing Size and Size Labeling’, TemaNord 2009:503, Copenhagen: Nordic Council of Ministers.

Lennon, Sharron J. (1997): ‘Physical Attractiveness, Age and Body Type: Further Evidence’, Clothing and Textiles Research Journal, 15:1, 60-64.

McCaulay, Marci, Laurie Mintz & Audrey A. Glenn (1988): ‘Body Image, Self-esteem, and Depression-proneness: Closing the Gender Gap’, Sex Roles, 18:7, 381-391.

Meunier, Pierre (2000): ‘Use of Body Shape Information in Clothing Size Selection’, Human Factors and Ergonomics Society Annual Meeting Proceedings, 44, 715-718.

Mishkind, Marc E., Judith Rodin, Lisa R. Silberstein & Ruth H. Striegel-Moore (1986): ‘The Embodiment of Masculinity - Cultural, Psychological, and Behavioral Dimensions’, American Behavioral Scientist, 29:5, 545-562.

Mort, Frank (1988): ‘Boy's own? Masculinity, Style and Popular Culture’, R. Chapman & J. Ruth-erford (eds), Male Order: Unwrapping Masculinity, London: Lawrence and Wishart.

Nettleton, Sarah & Jonathan Watson (eds) (1998): The Nordic Countries in Figures 2007 Copenhagen: Nordic Council of Ministers.

O’Brien, Ruth & W.C. Sheldon (1941): ‘Women's Measurements for Garment and Pattern Constructions’, Washington DC: US Department of Agriculture.

Peura-Kapanen, Liisa (2000): ‘Kuluttaja vaate- ja jalkinemarkkinoilla - Löytyykö sopivankoko-inen? ’ Julkaisuja Kuluttajatutkimuskeskus.

prEN 13402-4 (2007): ‘prEN 13402-4 Size designation of clothes - Part 4: Coding system’, in European Committee for Standardization (ed.).

Rhode, Deborah L. (2010): The Beauty Bias: The Injustice of Appearance in Life and Law, New York: Oxford University Press USA.

Richards, Mary Lynne (1981): The Clothing Preferences and Problems of Elderly Female Consumers’, The Gerontologist, 21:3, 263-267.

Rudd, Nancy A. & Sharron L Lennon (2000): ‘Body Image and Appearance-Management Behaviors in College Woman’, Clothing and Textiles Research Journal, 18: 3, 152-162.

Rysst, Mari (2010): ‘Looking Good and Big Bodies: How Norwegians Conceptualize Body Ideals, the Big Body and Suitable clothes’, Mari Rysst (ed.), Aesthetic Ideals and Big Bodies: a comparative study of Russia and Norway - Collection of Papers presented at Moscow, 17-18 September 2009 Oslo: SIFO, 13-30.

Rysst, Mari (2008): “I want to be me - I want to be kul”: An Anthropological Study of Norwegian Preteen Girls in the Light of a Presumed “Disappearance” of Childhood’, The Department of Social Anthropology, Oslo: University of Oslo.

Salusso, Carol J., John J. Borkowski, Naomi Reich & Ellen Goldsberry (2006): ‘An Alternative Approach to Sizing Apparel for Women 55 and Older’, Clothing and Textiles Research Journal, 24: 2, 96-111.
Schofield, Nancy A. & Karen L. LaBat (2005): ‘Exploring the Relationships of Grading, Sizing, and Anthropometric Data’, Clothing and Textiles Research Journal, 23:1, 13-27.
Shilling, Chris (2004): The Body and Social Theory, London: Sage Publications.
Shin, Su-Jeong Hwang & Cynthia L. Istook (2007): ‘The Importance of Understanding the Shape of Diverse Ethnic Female Consumers for Developing Jeans Sizing Systems’, International Journal of Consumer Studies, 31:2, 135-143.
Sieben, Wanda A. & Hsiu-I. Jessie Chen-Yu (1992): ‘The Accuracy of Size Information on Men’s Prewashed Jeans’, Clothing and Textiles Research Journal, 11:1, 74-82.
Silverstein, Brett, Barbara Peterson & Lauren Perdue (1986): ‘Some Correlates of the Thin Standard of Bodily Attractiveness for Women’, International Journal of Eating Disorders, 5, 895-905.
Stylios, George K. (2004): ‘New Measurement Technologies for Textiles and Clothing’, 2nd International Textile Clothing and Design Conference, Dubrovnik, Croatia, 135-149.
Thesander, Marianne (1997): The Feminine Ideal, London: Reaktion Books.
Thorén, Marianne (1996): ‘Systems Approach to Clothing for Disabled Users: Why is it Difficult for Disabled Users to Find Suitable Clothing’, Applied Ergonomics, 27:6, 389-396.
Tiggemann, Marika (2004): ‘Body Image Across the Adult Life Span: Stability and Change’, Body Image, 1:1, 29-41.
Treleaven, Philip (2007): ‘How to fit into your clothes: Busts, waists, hips and the UK National Sizing Survey’, Significance, 4:3, 113-117.
Turner, Bryan S (2004): The Body & Society: Explorations in Social Theory, London: Sage Publications.
Ujevic, Darko, Lajos Szirovicza & Isak Karabegovic (2005): ‘Anthropometry and the Comparison of Garment Size Systems in Some European Countries’, Collegium antropologicum, 29:1, 71-78.
US Department of Commerce (1958): ‘Commercial standard CS 215-58: Body measurements for the Sizing of Women's Patterns and Apparel’, National Bureau of Standards (ed.). Washington, DC: U.S. Government printing office.
WHO (2006): ‘Obesity and Overweight: Fact sheet no. 311’.
Wienke, Chris (1998): ‘Negotiating the Male Body’, The Journal of Men's Studies, 6:3, 255-282.
Williamson, Samantha & Catherine Delin (2001): ‘Young Children's Figural Selections: Accuracy of Reporting and Body Size Dissatisfaction’, International Journal of Eating Disorders, 29:1, 80-84.
Workman, Jane E. (1991): ‘Body Measurement Specifications for Fit Models as a Factor in Clothing Size Variation’, Clothing and Textiles Research Journal, 10:1, 31-36.