

Impact of design enrichment for figure problems of women

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■ **ABSTRACT** : The beautiful human body, is when it is in perfect hormonal health, and is also free from disease. Good taste in dress involves not only consideration of beauty but critical judgments of suitability and appropriateness. Clothes are a form of artistic expression. They create definite moods and feelings through personality of the garment. They can project such images as glamour, romance, casual, sporty, elegance and femininity. Well-fitted garments are important for women as it enhances appearance and contributes to a feeling of high self-esteem. Even into the 21st century, we have not achieved the goal of providing the same quality of fit for “everybody”. Instead, we have dismissed the unique body and expect all bodies to fit into standard-sized garments. With the development of a mass customization model, the apparel industry has the opportunity of providing custom-fitted and designed garments for the individual. Most of the ready-made sector is designing garments for the perfect body shapes. There is need for specific designs of garments for women who have fat deposition in the abdominal area at the thigh, at the lower back, at the arms and also some-times they are heavy busted. These different body shapes challenge the designer to design in a way that could conceal the out of shape parts of the body and bring elegance to the dressing sense of obese women. The researchers have designed apparel, which are design specific as per the body shape of the consumer. The designing is done to conceal the deformed body parts, and impart a good created image where all these defects are concealed.

■ **KEY WORDS** : Obesity, Fitting, Body shapes, Plus-size clothing

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The beautiful human body, is when it is in perfect hormonal health, and is also free from disease. The outer skin of the human body is elastic and adipose tissue tends to deposit in various parts of the body when it is either afflicted by hormonal imbalance, disease or even pregnancy hence changing the external appearance of the body. This creates need to design garments which could camouflage the out of shape parts of the body, and bring about an appropriate shape of the body, which is close to the normal shape. It takes a skillful designer to examine the body shape and design accordingly.

Ready-to-wear apparel has been the primary source of apparel for consumers in industrialized nations for half a century. Our outfit is one of the most important aspects of our personality and social life. Good taste in dress involves not only consideration of beauty but critical judgments of suitability and appropriateness. Clothes are a form of artistic expression. They

create definite moods and feelings through personality of the garment. They project images as glamour, romance, casual, sporty, elegant and femininity. Every woman aspires to dress well and look good but obesity poor self-esteem.

It is seen that the shape and size of average women increases with hormonal changes and age disease. Many departmental stores carry lines for bigger women. But even in 21st century we have not achieved the goal of providing the same quality of fit for “everybody”. With the development of a mass customization model, the apparel industry has the opportunity of providing custom-fitted and designed garments for the individual. Most of the ready-made sector is designing garments for the perfect body shapes. There is need for specific designs of garments for women who have fat deposition in the abdominal area, at the thigh, at the lower back, at the arms and at the hip and also some-times they are heavy busted as the adipose tissue tends to collect more on areas or parts of the body, which

do not receive any physical exercise and hence get deformed and bulge, as metabolism slows down with age. These different body shapes challenge the designer to design in a way that could conceal the out of shape parts of the body and bring elegance to the dressing of obese women. To overcome this problem, the researcher has designed apparel which is specific as per body shape of the consumer.

A pilot study was conducted to exactly find the mind set of out of shape women. It was found that they suffered from extreme inferiority complex because of their body shape and also suffered from low self-esteem. 89.6 per cent of the obese women wanted to dress fashionably, but lacked awareness of appropriate design. But nature is never perfect and deformities are part of nature, clothing is second skin and it can find remedies which could enhance the low self-esteem of obese women of all ages by providing aesthetic designs.

The sizing specifications begun in the 1940s and began forming the basis of today's standards. They were developed to reflect incremental changes in body measurements but not variations in body shape. Studies indicate that over 50 per cent of women in the U.S cite difficulty in finding apparel that fits (Kurt Salmon Association, 2000 and Pisut, 2001).

Looking back three decades, pattern makers, educators and other working with the fit of women's garments noted that the "figure characteristics" profiling body parts either above or below the waist differed from the hourglass figure (Minott, 1974 and 1978 and Armstrong, 1995).

According to Gazzuolo (1985) body form variance by using both anthropometric and photogrammetric analysis and visual data from body form analysis to dimensional data to define pattern shape including the major proportions (length/width and critical dimensions front and back, sites of prominence, spatial relationships and contour angles.

Biederman (1985) stated the theory of shape analysis. According to this theory analysis of body types for apparel suggests that

- All persons who wear a specific size category cannot be assumed to be the same shape, or
- Individuals who range from small to large or short to tall within one apparel size category may have similar or different shapes.

Objectives :

Keeping the above facts in mind, the study was undertaken with the following objectives:

- To create designer outfits for out of shape women.
- To create designs which could conceal the part of the body having excess fat.
- To study the acceptability of the developed patterns.

Hypothesis :

Based on reviewed literature the following hypothesis was formulated.

- H₁- It is assumed that the lack of poor fit is being faced by larger number of women.
- H₂- It is assumed that women of any size want to look their best.
- H₃- Fitted outfits lead to good appearance management which leads to higher social acceptability.
- H₄- The specially designed outfit will be able to conceal the excess fat part of the body.

RESEARCH METHODS

Analysis of body shapes :

Fifteen body scans were taken to assist the different body shapes of Indian women. Female body shapes often change over time whether the change is due to puberty, child birth, weight loss or weight gain. On the basis of body scans, the researcher can say that women have a much broader spectrum of body shapes as shown in Fig. A.

Front torso shape: Side view(A) :

Defined front waist with rounding or fullness below, in abdominal area and flat or relatively flat midriff above.

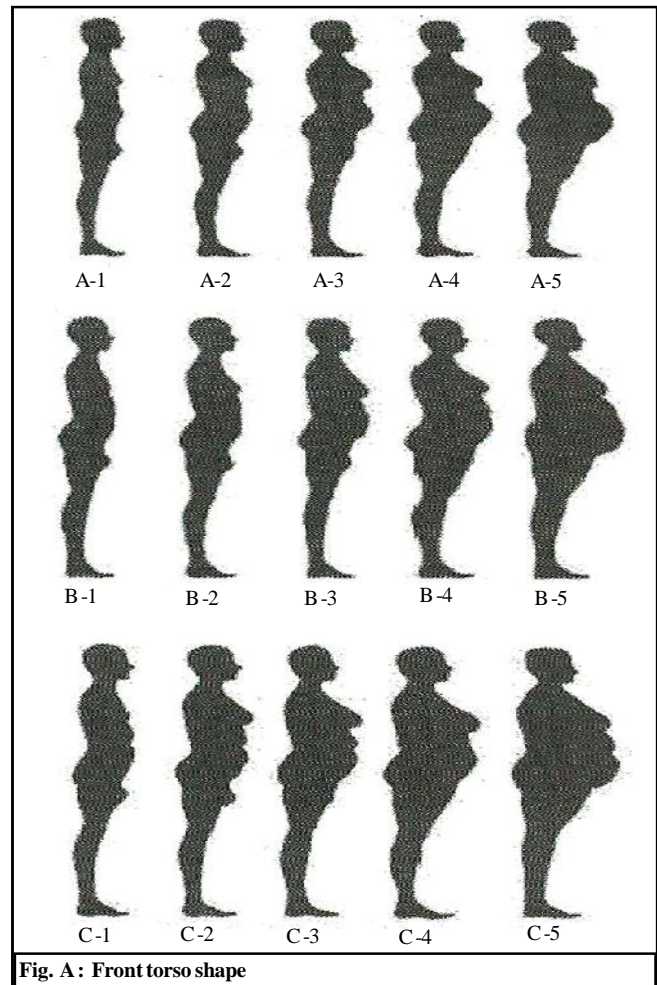


Fig. A : Front torso shape

Front torso shape: Side view (B) :

Relatively even curvature below bustline, with apex in waist or abdominal area.

Front torso shape: Side view (C) :

Intended front waist relatively balanced rounding or fullness above or below.

Independent of fat percentage, weight or width, female body shapes are categorized in four elementary geometric body shapes: banana, apple, pear and hourglass.

Apple or V shape (triangle downward) :

Apple shaped women have broader shoulders compared to their (narrower) hips. This type of women tends to have slim legs/thighs, while the abdomen and chest look larger compared to the rest of the body. Fat is mainly distributed in the abdomen, chest, and face.

Banana, straight or I shape (rectangular) :

The waist measurement is less than 9 inches smaller than the hips or bust measurement. Body fat is distributed predominantly in the abdomen, buttocks, chest, and face. This overall fat distribution creates the typical ruler (straight) shape.

Pear, spoon, bell or A shape (triangle upward) :

In this case, hips are larger than the bust measurement. The distribution of fat varies, with fat tending to deposit first in the buttocks, hips, and thighs. As body fat percentage increases, an increasing proportion of body fat is distributed around the waist and upper abdomen. The women of this body type tend to have a (relatively) larger rear, thicker thighs, and a smaller bosom.

Hourglass or X shape (triangles opposing, facing in) :

The hip and bust are almost of equal size with a narrow waist. Body fat distribution tends to be around both the upper body and lower body. This body type enlarges the arms, chest, hips, and rear before other parts, such as the waist and upper abdomen as shown in Fig. B.

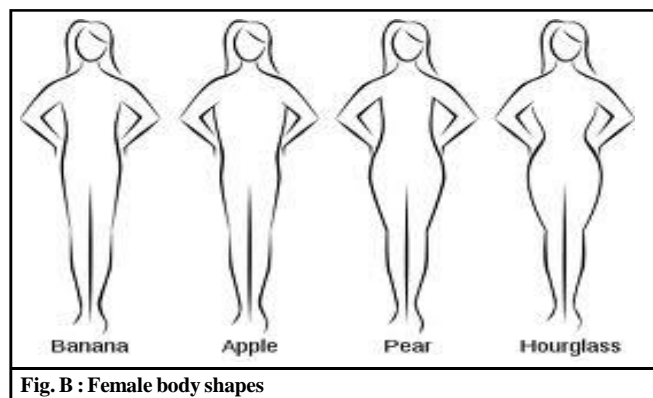


Fig. B : Female body shapes

Design development :

Total ten sketches of a variety of upper torso garment (kurta) were created manually and out of ten designs, seven were selected on the basis of appropriate design.

Selection of fabric :

Cut length of cotton silk fabric was used for fabrication process. Cotton fabrics are soft and skin friendly and are available in various attractive designs, patterns and colours. These fabrics are light weighted, silky, easily washable and extremely comfortable. Fine weaving and good draping were the considerations while the fabric was selected for the garments.

Design no. 1:



This style of dress is designed to conceal bulge in the stomach. Fullness is given at the centre by using box pleats. Long loose sleeves are designed to hide the thickness of heavy arms. Embellishments like buttons are used at the centre and at cuffs to draw attention from top and bottom.

Design no. 2:



This black coloured dress is designed to conceal broad waistline. Fullness is given by using gathers at the neck line. Raglan sleeves are incorporated in the dress. This outfit is made very loose and dark colour is comfortable in the chest area. Its looseness conceals the actual heavy bust line.

Design no. 3:



This princess cut dress exhibits vertical lines from shoulder to hem in the front and back panel of the kurta. In this dress darts were hidden inside the princess line to show a figure hugging dress which had no darts. A slit is given at the back to ensure comfort and style. Due to the presence of vertical princess lines, on both sides of the dress, the figure appears to be more in shape with the natural curves of the body. It imparts curved lines on the kurta to conceal large hip size.

Design no. 4:

This style of dress is designed to create disillusion of vision around the centre of the body. The use of lines in white



and black creates so much interest that the interest of the onlooker gets caught in the lines and he does not notice the bulging tummy of the wearer, hence this body defect is camouflaged. The fine lines in various directions were hand painted on the front and back panel of the kurta before it was stitched.

Design no. 5:



This outfit was created by using a textured lined coloured fabric. The front panel of the dress was cut in six panels in different line directions. The entire panel was stitched and running stitch was done to emphasize the panels. This dress focuses the eyes of the onlooker at the centre where the seams meet and the researcher has made an effort by camouflaging the extra fat at the thighs.

Design no. 6:



This yoke printed dress paired with knife pleats over the stomach is specially designed for a woman who is expecting and it provides fullness at the area where there is need for space for the growing foetus and also keeping the mother comfortable. In this dress, pregnant woman may feel more comfortable as the free flowing fabric falls over the stomach there by hiding the expanding belly without any discomfort. The dress is so designed that it could be used even afterwards.

Design no. 7:



This dress is designed to conceal the heavy busted portion. A ruffle running in diagonal direction from neck to waistline not only enhances the height but also camouflages the pot belly and large bust size, giving an illusion of more slender and tall figure.

Pattern development :

On the basis of selected designs, patterns were created by using flat pattern method. The pattern was created by using flat pattern design on brown paper. The design after careful work was transferred

on fabric, leaving allowances for adding fullness where the design required. Each piece of the dress was assembled in the desired shape by the researchers herself. Fashion maker was used. Stitch length was adjusted to international norms of 10-12 (SPI) stitches per inch. The lower hemline and sleeves were skillfully done by turning the hem of each garment, they were later ironed at 204 °C / 400 °F imparted a neat finish before trial.

Evaluation of the developed products :

All the developed products were subjected to visual evaluation by a panel of ten judges who were post graduate students of Textile and Apparel Designing. All the designs were ranked according to their preferences obtained. The attributes assigned for evaluation of developed products were neatness, suitability of design and overall appearance. All the products were evaluated on a likert scale of 10. Design no.1 and 2 scored an average mean of 7 while design no. 4 scored an average mean of 8. Design no. 5 and 6 scored an average mean of 5.5 points. Design no. 7 scored an average mean of 7.3 points. The researchers could understand from the scores that the dresses were appreciated by the judges. The apparel industry could use them for enhanced consumer satisfaction and self-esteem.

RESEARCH FINDINGS AND DISCUSSION

Seven dresses were selected and finally subjected to sewing application. For designing of garments, flat pattern method was used. The designs were drafted on a large sheet of paper and cut according to the design. Cotton fabric was selected for the preparation of garment. An exclusive range of cotton fabric is easily available across the globe. It was found that the selected fabric (cotton silk) was suitable for garment making as it drapes well and also helps in camouflaging the problematic areas.

All the stitched garments were visually evaluated by a panel of judges (Fig. 1). Ratings were done on a likert scale which was out of 10 and further mean scores was calculated.

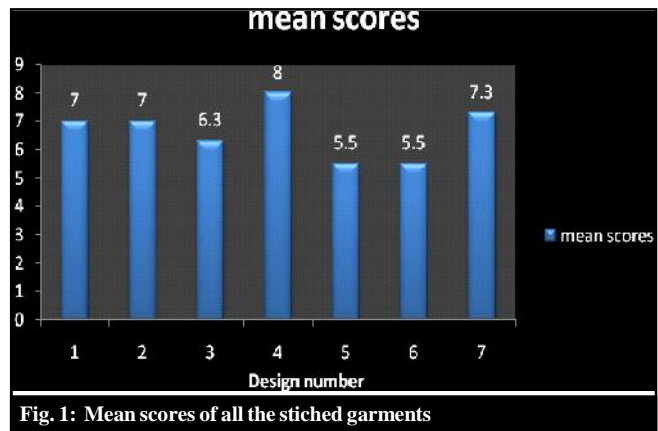


Fig. 1: Mean scores of all the stitched garments

On the basis Likert of scale it was found that the design no. 4 got the maximum score (8) and ranked first followed by design no. 7 (7.3) and design no. 1 (7). Simple mean scores are reported in Table 1. All the developed garments reported to be comfortable and well fitted.

Design no.	Mean scores
1	7
2	7
3	6.3
4	8
5	5.5
6	5.5
7	7.3

Conclusion :

Clothes are more than just pieces of fabric and they are a way of expressing our personality and feelings. To select the right apparel for oneself with proper fit is more important. This research also reinforced the importance of visual imagery in achieving good fit. However, interest in developing creative designs for obese women is expanding. Variations in silhouettes could be achieved by imparting dramatic effects of colour contrast, plackets and pockets.

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