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A review on sizing systems for readymade garments in India and different types of body shapes of females

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Abstract
This review paper shows the unavailability of a correct and standardized sizing system for readymade garments in India. Every brand in India follows their own sizing chart which is based on the international sizing chart of readymade garments. Since our Indian body shapes are totally different from the internationals figures, international sizing systems based garments fail to fulfil the need of our Indian customers. Reviews show that the lack of availability of correct and standardized sizing system, targeting to Indian people is a big issue.

Keywords: Sizing system, body shapes, readymade garments

Introduction

Readymade garments revolution is created due to globalisation and industrialization in the present era. Readymade garments producing companies produce readymade garments in bulk for India, but actually it's not for Indians because the sizing chart we follow for making readymade garments for India is based on international body shapes and figures. Since, our Indian body shapes are very different from the international body shapes, Indian customers are not satisfied from the sizing and the fitting of readymade garments. It is the huge problem of readymade garments industries in India.

Types of Body Images

There are many types of body shapes of females which can be mainly classified into seven types which are

Triangle body shape

In triangle or pear body shape, female's hips are larger than bust and shoulder. Pear body females have beautiful slim neck and proportionally slim shoulders and arms. Weight of the body flows upper to downward. Lower portion of body is heavier than upper body. Thighs and hips are heavy. Waist is slimmer than hip and it is the best asset of the body. Hips are bigger than bust and shoulder. In triangle body shaped women have greater amount of body fat in lower parts of the body (hip, thighs& legs). Hips are the widest area of the body. Hip measurement is more than 5% bigger than bust or shoulder measurement.

Since people with triangle body shape have narrower waist, have lower risk of heart diseases, diabetes and other risks of metabolic syndrome. Pear body shape indicates a lower metabolic risk compared to an apple body shape.

Inverted tringle body shape

Inverted body shape is opposite to the triangle body shape. Weight of the body is flowed downward to upward. Inverted triangle body shape women have broad shoulder, ample bust and a wide back. Inverted body shape is opposite to the triangle body image. Inverted triangle body shape women have broad shoulder, ample bust, a wide back and the hips are narrower than shoulder with thin shaped legs. The difference between the measurements of shoulders and hips are more than 5 percent. Females having inverted triangle body shape have a strong upper body.

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In inverted triangle body shape, fat is stored around the abdomen and the back. It is very similar to apple body shape. Inverted triangle-shaped people have risk of obesity, heart diseases, high blood pressure, stroke, gall bladder disease. The accumulated fat in abdomen put pressure on kidneys, liver, heart and can affect their functions.

Rectangle body shape
This is also called as banana body shape. Females of this body type, shoulder, bust, waist and hip measurements are around the same. They have not a curvy figure. The differences between the measurements of shoulder, bust, waist and hip are less than 5 percent of each other. WHR is a more accurate predictor for various diseases, sex hormone aberration and female attractiveness than either overall body fat or breast and buttock size (Bjbrntorp 1988; Singh 1988). Females of rectangle body shape have 1 (waist hip ratio) WHR approximately. 1.0 WHR, which is not typical of healthy and fecund females, a female with a tubular body shape would have no body curves, and 1.0 WHR would approximate the body shape of such a female. A low WHR is an indicator of greater fecundity and healthiness.

Mostly women are thin with rectangle body shape. There is a very low chance of gaining weight, this is why females of banana shape have lowest risk of health issues, but when they acquire weight, fat is accumulated in abdomen which causes diabetes, heart diseases, breast cancer, depression and lower rates of fertility can be occurred.

Hourglass body shape
It is considered as the most beautiful shape of women in which shoulder and hips measurements are nearly same. Waist measurement is at least 25 percent smaller than shoulder, bust or hip measurements. It is most curvy and feminine figure. The fat of the body stored in upper and lower body. Fat is accumulated in arms, chest and hips. Waist and upper abdomen is thin than shoulder, bust and hips. Most of the body fat is distributed in bust, hips and thighs.

In hourglass figure, waist –hip ratio is less than 8. Hourglass women's WHR is around 0.7 or lower is associated with good health, good reproductive system and most desirable and attractive figure. This figure indicates the higher rates of fertility and lower rates of chronic diseases.
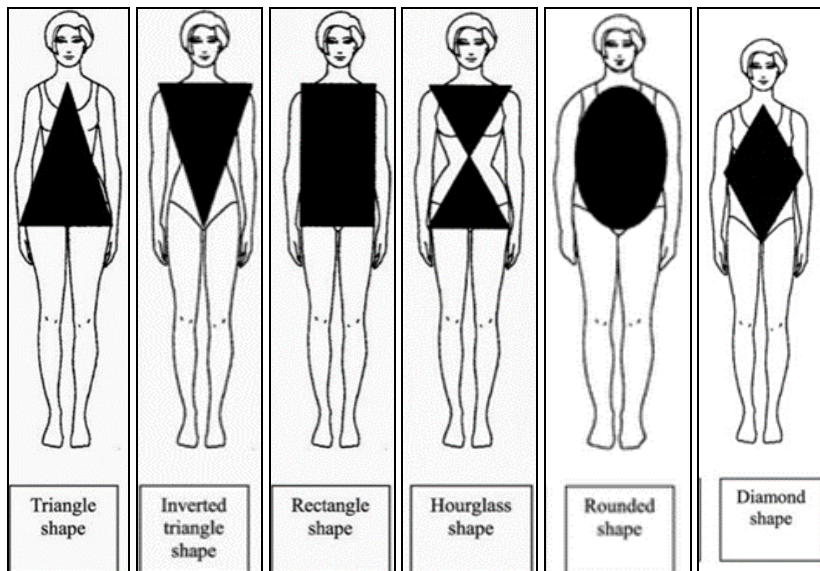
Full hourglass figure
Most of the Indian women have full hourglass figure. Females having full hourglass figure, heavy bust, heavy hips are occurred. They have narrower waist than hips and bust but the WHR is not as low as hourglass figure. Some fat is also accumulated in waist except hips and busts which causes obesity, diabetes and heart diseases can be occurred.

Oval or apple body shape
Apple body shaped women carry weight around the mid-section and bust. They probably has slim legs and arms. Most of the fat is stored in abdomen, above the waist and below the waist. Apple shaped females have undefined waistline or have little waist definition. Mostly waist size is larger than hip size. Since fat is stored in upper waist, it is most dangerous body shape from the health view because fat is stored in the waist and above the waist because the fat stored in waist and above the waist, around lower waist, hips and thighs is associated with a greater risk heart diseases, diabetes and stroke. WHR for apple shaped woman is above 0.8.

Diamond body shape
Diamond body shaped women have a full mid-section starting from under the bust line. Their hips are broader than their bust and shoulders. They have undefined waist and it is the widest part of their body. Most of the fat is stored in stomach, back, hips and buttocks. The shaped lower legs and arms are most attractive features of the body.

Triangle shape | Inverted triangle shape | Rectangle shape | Hourglass shape | Rounded shape | Diamond shape

Literature Review of Body Images and Sizing Systems for Garments in India
A "size" is an item having specified measurements along certain dimensions, such that it will be perfectly a person with measurements equal to that size (Tryfos, 1986) [3]. The purpose of an apparel sizing system is to divide a varied population into homogeneous subgroups. Members of a subgroup are similar to each other in body size and shape so that a single garment can adequately fit each of them. Members of different subgroups are dissimilar and would therefore require different garments (Ashdown & Delong, 1995) [2].

Fit of clothing is a major factor affecting the physical and psychological comfort of the wearer. (Norsaadah Zakaria, December 2011) [4].

Bureau of Indian Standards (BIS) identified three body heights; short (166 cm), regular (174 cm) and tall (182 cm) recommended the use of the difference in figure types as the classification of ready-to-wears and developed aset of procedures to formulate standard sizes for all figure types. In early times, the classification of figure types was based on body weight and stature. Later on, anthropometric dimensions were applied for classification. (M. martin jeyasingh and kumaravel Appavoo, 2012) [7].

It may be said that there exists no record of a systematic, all India anthropometric survey ever conducted. And so, today there exist as many sizes and sizing systems in the Indian clothing market as there are brands! The sizes are different, the nomenclature is different and the size intervals are also different in each case. (Deepti Gupta, 2008) [8].

Women have greater amounts of body fat in lower parts of the body (gynoid,"pear-shaped" body fat). Furthermore, variation in the gynoid body shape should not only be correlated with variation in reproductive potential, but such variations should systematically affect the judged degree of female attractiveness. The nature of body fat distribution is largely determined by the gynoid body shape (Hefferman et al. 2002) [5].

The typical range of WHR for healthy premenopausal women has been shown to be 0.67 to 0.80.WHR size provides reliable information about the reproductive age, fertility and health status of a woman at a glance (Singh 1994).

Anthropometry is an anthropological method dealing with measuring and investigating the
human body and the relationship between the dimensions of its parts. The international organization for setting norms ISO passed in 1989 the norm ISO 8559 for anthropometric examinations provided with a list and description of body measures in view of constructing garments. (Darko Ujevi, Lajos Szirovicza and Isak Karabegovi, 2005) [9].

Conclusion
It is obvious that people want of "right size" readymade garments having fabric, texture, style, colour and price accommodating their needs. "Size" is a major criterion while choosing readymade garments. But unfortunately, garment industries target Indian customers lack an accurate, specific, standard size chart for its people. Due to which people suffer from the "size" issues.

Most of the females who buy readymade garments cannot use it as comfortably as customised garments. The reason beside it is improper fitting of the garments.

Since, it is the era of globalisation and industrialisation; many international brand established in India side by side to local brands, But the better expansion and growth of the industry depends on a more vital factor, the development of standard garment sizes and satisfaction of customers.

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