

**A Study of****“NECK CIRCUMFERENCE A FOUNDATION FOR STYLING NECKLINE AND COLLAR”****Haseen Ahmad**Department of Mathematics, Statistics and Computer Science,  
C.B.S.H., G. B. Pant University of Agriculture and Technology, Pantnagar-263145**Abstract**

*In this present study assessed, the average measurements, ideal size and the variability among measurements of neck circumference (round neck). The correlation between measurements of the height and measurements of neck circumference (round neck) was measured. This measurement makes master, when making clothes and keep focus on the neck of children in the age group of 5 and 6 years.*

**Keywords-** *Measuring tape, eyebrow pencil, ruler, silver chain.*

**I. INTRODUCTION**

Neck line is the top edge of the garment that surrounds the neck, specially from the front view neck line, neck line also reefer's to the over line between all the layer's clothing and the neck shoulders of a person/child ignoring the unseen. All the units of a dress are important but the neckline and collar acts as a back ground for the face should therefore be considered most important area of the entire costume. Appropriate neck circumference is required to get perfect shape and size of any neckline or collar. The neck line whether it is with collar or without collar can accent or appear to modify the contour of the face. A V-shaped neckline will make a face appear longer, a deep V –will increase apparent length more than a shallow V. A square neckline will increase the apparent width of the face. Similarly a round neckline can seem to increase length or width depending upon the depth of the curve. If the neck line repeats the contour of the lower part of the face it will tend to emphasize it. If a child with a square jaw wears a square neckline the jaw appears square, where as if a V-shaped neckline is worn the face seems longer and fewer squares.

In addition to this there are variety of shaper in different types of collars, they differ from each other in many respect but they are alike in one way that is important to understand, each collar has neckline (inner edge) and style line (Outer edge).

It does not matter how the outer edge of the collar is shaped this shape does not effect its basic construction. The curve of the inner edge (neckline) however is important. It is the relation of the curve at this edge to the neck line curve of the garment, which determines the collar's type. The more alike the two curves are less the collar will stand up from the neck edge (flat collar), the more these curves differ the more, the collar will stand up (Standing Collar). If the curves differ slightly the collar will stand up to some extent than full (rolled collar).

The above mentioned point show that the basic neckline is important for both collars as well as for styling the neckline, keeping these facts in mind the present study was under taken to obtain the

average measurements of neck circumference (round neck) of children between the age group of 5 and 6 years .

## **II. MATERIALS AND METHODS**

The subjects were selected from three different places i.e. Pantnagar, Rudurpur and Haldwani. One school from each place was selected randomly and fifty percent of the population of the children (only boys) between age group of 5 and 6 years at each selected school were measured and studied. The only criteria for the selection of sample were according to age group and the simple random sampling technique was used in selection of sample size  $n= 92$ .

Measuring tape, eyebrow pencil, ruler and silver chain were the only required equipments to take round neck measurements, before measuring a 'land mark'(x) was marked with the help of eyebrow pencil at the base of the centre front, and then silver chain was kept at the marked point (land Mark) and taken around the neck, back to the starting point at front. The chain was measured with the help of measuring tape and the measurements were recorded. The height of the children was also measured to study the correlation coefficient between measurements of height and measurements of neck circumference for this study. After collection of round neck measurements the data were classified, summarized, tabulated and analyzed.

1. The arithmetic mean was calculated to find out the average measurements of neck circumference (round neck) and mode was calculated to know the ideal size of neck circumference (round neck) measurements, which provides an ideal size a fit to maximum number of children between age groups 5 and 6 years.
2. The standard deviation was calculated to know the deviation from the average, mean measurements of the neck circumference.
3. The criterion  $\mu \pm \sigma$  rule was used to find out the lower and upper limits, measurements of neck circumference of the children between age groups of 5 and 6 years.
4. The K. Pearson's product moment formula was used to study; sample correlation coefficient 'r' to measure the degree of relation ship between the measurements of height and measurements of neck circumference (round neck) of the children, 't' test was used at  $\alpha = 5\%$  level of significance with  $(n-2)$  degrees of freedom, to test the significance of sample correlation coefficient 'r'.

## **III. RESULT AND DISCUSSIONS**

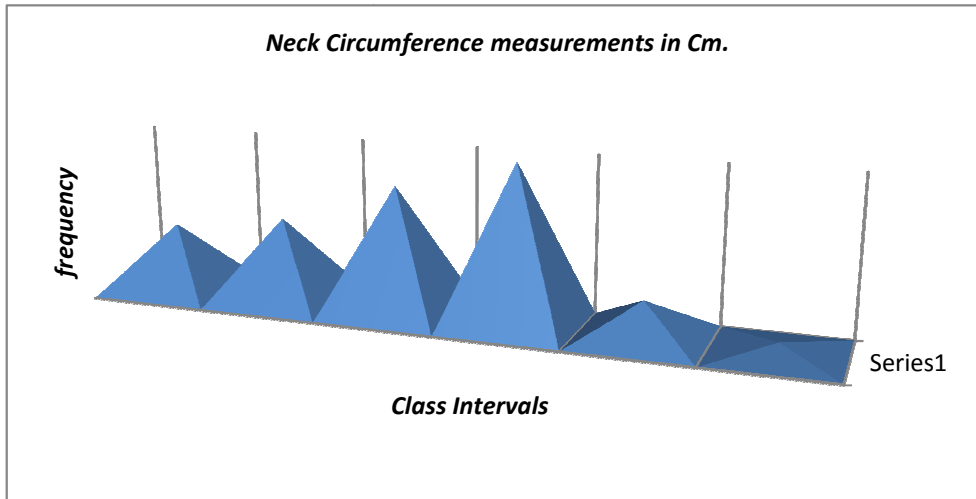
The total population of boys with in three selected schools were  $N=184$  and thus, a random sample of size  $n= 92$  was selected (boys only) for this study.

In this study it was found that the average measurements of neck circumference (round neck) of the children between age groups of 5 and 6 years were,  $\bar{x} = 25.08$  Centimeters, and to study the ideal size, other measure mode was studied, which indicates that the measurements of neck circumference (round neck) of maximum children were 25.70 Centimeters.

The Sample correlation coefficient was measured 'r' = + 0.168 , which indicates a positive correlation between the measurements of height and measurements of neck circumference (round neck) of the children, but this correlation coefficient 'r' was found in significant.

Neck line is a difficult to master when making clothes, since the basic neck circumference acts as a foundation for developing any style of neckline and collar, this study provides the ideal size and variations among measurements of neck circumference (round neck) for the children in the age group of 5 and 6 years, which will be very useful for the students in research, in manufacturing ready made collar; house wife's, tailors and the garment manufacturers.

***Histogram for Neck circumference measurements for the children in the age group of 5 and 6 years***



<b><i>Statistics of neck circumference measurements of children in the age group of 5 and 6 years</i></b>	
<b><i>Mean</i></b>	<b><i>25.086 Cm.</i></b>
<b><i>Median</i></b>	<b><i>25.160 Cm.</i></b>
<b><i>Mode</i></b>	<b><i>25.706 Cm.</i></b>
<b><i>Standard deviation</i></b>	<b><i>1.2480 Cm</i></b>
<b><i>Variance</i></b>	<b><i>1.5575 Cm.</i></b>
<b><i>Coefficient of Variation</i></b>	<b><i>4.975%</i></b>
<b><i>Standard error of mean</i></b>	<b><i>0.1301</i></b>
<b><i>Skewness</i></b>	<b><i>-0.496</i></b>

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