

Chapter IV

RESULTS AND DISCUSSION (Contd.)

Part II

OTHER PHYSICAL MEASUREMENTS

The preceding Part I has been devoted to the discussion of results pertaining to two main aspects of physical growth, viz. weight and height, regarding which sufficient research studies have been made especially in the west, though very few systematic ones in India. The present part II deals with findings on other aspects of physical growth, as referred to in the beginning. Hardly a few studies (particularly in Gujarat) have been made in this respect. Much information based on statistical analysis of data on these aspects of measurements as related to a number of variables can be studied and included here, but only the most relevant part is discussed briefly in this chapter owing to limitations of space and nature of work for a thesis like this; the rest will form a follow-up work in other subsequent studies. The investigator has not been able to go through advanced statistical analysis in these cases, though an attempt is made to submit a general view of findings on these aspects of growth through a summary of tables and figures wherever possible. All data of children from 2 to 6 years on these remaining aspects of physical growth at 17 age-points at interval of 3 months

(5699 children) as well at 5 main age levels at interval of one year (1692 children) have been summarized, tabulated and analysed.

3. HEAD CIRCUMFERENCE

As presented earlier, the data on head circumference of 5699 children at 17 age-points as well as of 1692 children at five main age levels of 2, 3, 4, 5 and 6 years, consisting of both boys and girls from urban and rural areas, of five different socio-economic levels, have been analysed statistically and the results have been summarized in tables 4.21^{to 4.24} and illustrated graphically in figures 4.21 to 4.24 below. The head circumference was measured in cms. as explained in the beginning and the general picture of these measures of all children is represented in table 4.21 which summarizes the means and standard deviation of observations on 5699 children at each of 17 age-points, sex-wise and area-wise. Figure 4.21^(i, ii, iii) illustrates the same along with increase at each successive age-point represented by histograms showing absolute increases from the original base at first age-point of two years, and the relative increase or decrease from just the preceding age-point being shown by the velocity curve.

It is seen from results in table 4.21 that head circumference on the whole goes on increasing from 46.60 cms. at 2 years of age to 49.68 at age of 6 years, and the increase is almost linear as seen in fig. 4.21, though not consistently uniform. These data

were subjected to statistical analysis by t-test to study significance of differences in means due to sex and area of residence. These results are summarized in table 4.22(i) for sex differences and table 4.22(ii) for area differences.

Table 4.22

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693	15.2785	Beyond .01
M	49.003	48.198		
SD	2.008	1.963		
(ii) Area:	Urban	Rural	t-value	Significance
N	4766	933		
M	48.667	48.395	3.7655	Beyond .01
SD	2.111	1.499		

It is observed from the results in table 4.22 that both the sex as well as area of residence played a significant role in contributing to the growth in head circumference; boys showed significantly higher growth (49.003 cms.) than girls (48.198 cms.) and similarly urban children showed on an average higher growth (48.667 cms.) than girls (48.395 cms.), and these differences were statistically significant.

Next, the data of 1692 children of five main age levels at

2, 3, 4, 5 and 6 years were separately summarized for comparison, and these are represented in tables 4.23 (i) to 4.23 (v) (area x sex-wise) for each of five age levels, and illustrated in figures 4.22 for area and 4.23 for sex. Same trend of differences in sex and area groups is observed also at these five age levels.

Further, the data of boys and girls at each of 5 main age levels were classified according to five socio-economic levels, in order to observe the effect of socio-economic status on growth of head circumference. These data are summarized in table 4.24 on the whole for 5 age levels and in tables 4.24 (i) to 4.24 (v) (socio-economic level x sex-wise) for each of five age levels. The growth at each of 5 age levels for SE level is illustrated in fig. 4.24 along with successive increase by means of histograms.

It would be seen from tables 4.24 as well as 4.24 (i to v) that head circumference on the average increases not only with increasing age, but there is a trend for it to increase with increasing socio-economic level on the whole as well as separately in case of boys and girls.

4. CHEST CIRCUMFERENCE

Data (means, ^{and} SDS ~~and increase~~) on measurement of chest circumference in cms. on all 5699 children at each of 17 age-points are summarized in table 4.25, area-wise and sex-wise and

illustrated graphically in fig. 4.25.

It is seen from these data that chest circumference on the whole beginning with 46.54 and at age of 2.0 years goes on increasing upto 52.24 cms. at age of 6-0 years, and the increase does not seem uniform. These data were subjected to t-test to examine the significance of the influence of sex and area of residence. These results are summarized in table 4.26 (i) & (ii) for sex and area respectively.

Table 4.26

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	50.785	49.614	16.0279	Beyond .01
SD	2.844	2.649		
(ii) Area :	Urban	Rural	t-value	Significance
N	4766	933		
M	50.311	49.826	4.8210	Beyond .01
SD	2.888	2.364		

It is revealed from results in table 4.26 that both sex and area of residence are significant factors contributing to the growth of chest. Boys showed on an average significantly broader chest (50.785 cms.) than girls (49.614 cms.); and urban

children significantly more (50.311 cms.) than rural children (49.824 cms.).

Further, the data of 1692 children at five main age levels have been summarized for comparison and represented in table 4.27 (i to v) area x sex-wise at each of age levels, and graphically illustrated in figures 4.26 for area and 4.27 for sex and area groups is observed at these five age levels.

Finally, data of boys and girls at each of five main age-levels were split up according to five socio-economic levels studied, and are summarized in table 4.28 on the whole at 4.28(i) to 4.28(v) (SE x sex-wise) separately for each of five age levels, and graphically represented in fig. 4.28.

It would be observed from table 4.28 that chest circumference increases with increase in upto SE_4 , but a slight decrease at SE_5 level at all age levels, except in case of age of 4 years where there is continuous increase upto SE_5 .

5. SHOULDER WIDTH

As above, data on shoulder width in cms. were tabulated and analysed. Table 4.29 and fig. 4.29 represent the means of shoulder width of 5699 children, both boys and girls, urban and rural, at each of 17 age-points from 2 years to 6 years at interval of three months.

It would be seen from these data that shoulder width on the whole increases from 21.07 cms. at 2 years to 26.80 cms. at 6 years with an average of about .3 cm. per age-point or 1.0 cm. per year though not uniformly. These data were subjected to statistical analysis by applying t-test in order to examine the sex and area differences in growth in shoulder width. The results are summarized in table 4.30.

Table 4.30

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	25.038	24.921	3.2040	Beyond .05
SD	2.001	1.920		
(ii) Area :	Urban	Rural	t-value	Significance
N	4366	933		
M	24.798	24.762	3.3538	Beyond .01
SD	2.008	1.715		

It is seen from results in table 4.30 that boys had a significantly higher shoulder width (25.038 cms.) than girls (24.921 cms.), and urban more (24.798 cms.) than rural (24.762 cms.).

Next, same data for 1692 children at main five age levels from 2 years to 6 years at interval of one year were separately tabulated for comparison and are represented in table 4.31 (i to v) area x sex-wise for each age level and illustrated in fig. 4.30

for area and 4.31 for sex. Same trend of differences is observed.

Finally, the data of 1692 children, boys and girls, at each of five main age-levels were tabulated according to five socio-economic levels studied, and are summarized in table 4.32 on the whole, and in tables 4.32 (i to v) SE x -sex-wise separately for each age level, and graphically represented in figure. 4.32.

It would be observed from table 4.32 that shoulder width usually increases with increase in SE level upto SE_4 , but a slight decrease at SE_5 at all age levels except in children of four and five years, who show continuous increase upto SE_5 .

6. ARM LENGTH

Next, data on arm length in cms. were classified and analysed statistically. Table 4.33 summarizes the means, SD, etc. of arm length (area x sex-wise) of 5699 children at each of 17 age-points, and these are graphically illustrated in fig. 4.33.

It would be seen from table 4.33 that arm length on the whole increases from 34.99 cms. at age of 2 years to 47.71 cms. at age of 6 years with an uneven rate of increase. These data were subjected to t-test to examine sex and area differences in growth of arm length. Table 4.34 summarizes the results of the t-test.

Table 4.34 (arm length)

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	43.639	42.806	8.1970	Beyond .01
SD	3.907	3.745		
(ii) Area :	Urban	Rural	t-value	Significance
N	4766	933		
M	43.296	43.001	2.1237	at .05 level
SD	3.821	4.009		

It is apparent from table 4.34 that both sex and area of residence played a significant role in growth of arms length beyond .01 and at .05 level of significance. Boys had more arm length (43.639 cms.) than girls (42.806 cms.); and urban children had more (43.296 cms.) and rural children (43.001 cms.).

Next, the data of 1692 children at 5 main age levels were classified and are represented in table 4.35 (i to v) for each age level (area x sex), and in figures 4.34 for area and 4.35 for sex. Same trend of growth is observed.

Finally, same data of 1692 children were classified according to socio-economic level and are represented in table 4.36 on the whole and 4.36 (i to v) separately for each age level, and graphically in fig. 4.36.

It is again seen from table 4.36 that arm length too increases with increase in SE level at each age level.

7. SITTING HEIGHT

The sitting height for each child was obtained in terms of cms. These data of 5699 children at 17 age-points are summarized in table 4.37 and illustrated in fig. 4.37.

It would be observed from table 4.37 that sitting height goes on increasing with age, from 46.51 cms. at 2 years to 58.73 cms. at 6 years, at uneven rate. These data were subjected to t-test to study the significance of difference between means of sex and area. The results are summarized in table 4.38.

Table 4.38

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	54.531	53.593	8.4236	Beyond .01
SD	4.200	4.981		
(ii) Area :	Urban	Rural	t-value	Significance
N	4766	933		
M	53.994	54.564	3.7690	Beyond .01
SD	4.2661	4.003		

Results in table 4.38 reveal significant sex as well as

area differences. As usual, boys had more sitting height (54.531 cms.) than girls (53.593 cms.); however in contrast to all measures, the rural children had significantly more sitting height (54.564 cms.) than urban children (53.994 cms.); in other words, the rural children had longer trunk part in comparison to lower limbs, since urban children were found taller on the whole, as seen from table 4.21 earlier.

Next, the data of 1692 children at main five age levels have been summarized in table 4.39 (i to v) area x sex-wise separately for each age level and illustrated in fig. 4.38 for area and fig. 4.39 for sex. Same trend of differences as in table 4.37 is observed also in table 4.39.

Finally, the same data of 1692 children have been rearranged to observe the effect, if any, of socio-economic level. These data^{are} summarized in table 4.40 on the whole, and in tables 4.40 (i to v) for each age level. All these are graphically shown in fig. 4.40.

It would be observed from results in table 4.40 that mostly sitting height increases also with increase in SE level at each age level.

8. UPPER ARM CIRCUMFERENCE

Data on upper arm measurements (in cms.) of 5699 children at 17 age-points have been tabulated in table 4.41 and graphically represented in fig. 4.41.

The table 4.41 shows that upper arm circumference increases on the whole with increase in age, thus from 13.77 cms. at age of 2 years to 15.07 cms. at age of 6 years, with slight increases at each interval. These data were subjected to t-test to examine the significance of sex and area differences. The results are summarized in table 4.42.

Table 4.42

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	14.712	14.730	0.4594	Not significant
SD	1.557	1.489		
(ii) Area :	Urban	Rural	t-value	Significance
N	4766	933		
M	14.784	14.394	7.1801	Beyond .01
SD	1.549	1.361		

Results revealed that there were no sex differences in upper arm circumference; strangely yet, the girls tended to have larger upper arm circumference (14.730 cms.) than boys (14.712 cms.). However, as usual, area of residence was a significant factor; urban showing higher figure (14.784 cms.) than rural children (14.394 cms.).

Next, the data of 1692 children at five main age levels were examined. These are represented in table 4.43 (i to v) area x sex-wise for each of five age levels, and graphically in fig. 4.42 for area and fig. 4.43 for sex. Same trend of differences is observed.

Finally, same data have been classified according to five socio-economic level^s, tabulated on the whole in table 4.44 and separately for each age level, SE x sex, in tables 4.44 (i to v); and graphically represented in fig. 4.44.

It would be marked from table 4.44 that upper arm circumference also increases with increase in SE level at each age.

9. FORE-ARM CIRCUMFERENCE

The data on fore-arm circumference in cms. for 5699 children at 17 age-points have been classified and presented in table 4.45 area x sex-wise and represented graphically in fig. 4.45.

The table 4.45 shows that fore-arm circumference increases with increase in age, beginning with 13.79 cms. at 2 years of age to 15.48 cms. at 6 years of age, almost similar to the growth of upper arm circumference; fore-arm circumference to some extent seems to be^a little more than upper arm circumference.

These data were tested by application of t-test to study the influence of sex and area of residence. The results are summarized in table 4.46.

Table 4.46

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	15.091	14.901	5.2579	Beyond .01
SD	1.216	1.505		

(ii) Area :	Urban	Rural	t-value	Significance
N	4766	933		
M	15.045	14.772	5.3943	Beyond .01
SD	1.430	0.955		

It is seen that there are significant sex as well as area differences in growth of fore-arm circumference. Boys had a significantly greater measure of fore-arm (15.091 cms.) than girls (14.901 cms.), and urban had greater measure (15.045 cms.) than rural (14.772 cms.). In all cases, fore-arm circumference was observed to be greater than upper arm circumference.

Next, the same data of 1692 children at five main age levels have been represented in table 4.47 (i to v) area x sex-wise for each age level, and in fig. 4.46 for area and fig. 4.47 for sex.

The general trend of growth (table 4.47 and fig. 4.46 & 4.47), represented at five main age levels, ignoring the in-between

three-monthly points, remains almost the same as that in the continuous growth observed at all seventeen age-points shown in table 4.45 and fig. 4.45.

Finally, the same data of 1692 children were classified according to socio-economic level, and have been represented in table 4.48 on the whole as well as separately in tables 4.48 (i to v) for each age level, and illustrated in fig. 4.48.

Again, the table 4.48 reveals that the fore-arm circumference usually increases with increase in socio-economic level especially at 4 and 5 years. In all cases, the data in the sub-cells at age of 2, 3 and 6 years in respect of socio-economic level is so small that it is inadequate to draw reliable statistical inferences though there is a trend for each aspect of physical growth to increase with increase in SE level.

10. THIGH CIRCUMFERENCE

With the same procedure, data on thigh circumference in cms. for 5699 children at 17 age-points have been tabulated in table 4.49 and represented graphically in fig. 4.49.

It is seen from table 4.49 that thigh circumference increases with age from 25.35 cms. at 2 years of age to 30.25 cms. at 6 years of age, with somewhat uneven rate of increase. These data were subjected to t-test in order to test the significance of difference between means of sex as well as area in growth of

thigh circumference. The results have been summarized in table 4.50.

Table 4.50

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	28.354	29.029	10.3770	Beyond .01
SD	2.322	2.587		
(ii) Area :	Urban	Rural	t-value	Significance
N	4766	933		
M	28.790	28.072	8.1478	Beyond .01
SD	2.514	2.173		

It is observed from results in table 4.50 that both sex and area of residence had a significant role in growth of thigh circumference. Again, in contrast to other measures, the girls scored significantly higher (29.029 cms.) than boys (28.354 cms.) on thigh circumference, just as on upper arm circumference. This is a significant feature of growth to be noted. As far as area differences were concerned, here too, the urban children scored significantly higher (28.790 cms.) than the rural children (28.072 cms.).

Next, the same data of 1692 children at five main age levels

have been tabulated in table 4.51 (i to v) area x sex-wise for each age level and represented in fig. 4.50 for area and fig. 4.51 for sex. Same trend of growth is observed.

Finally, the data of 1692 children at five main age levels according to socio-economic level have been tabulated in table 4.52 on the whole, and separately for each age level in tables 4.52 (i to v), and represented graphically in fig. 4.52.

As usual, the thigh circumference too has been found to increase with increase in SE level at each age level with a slight decrease at SE₅ in case of 2 and 6 year old children.

11. CALF CIRCUMFERENCE

As usual, the calf circumference was measured in terms of cms. in case of all 5699 children, and the means and SDs of these children at each of 17 age-points have been summarized in table 4.53 area x sex-wise and graphically represented in fig. 4.53.

It would be seen from table 4.53 that calf circumference increases with increase in age from 17.32 cms. at 2-0 years of age to 20.38 cms. at 6-0 years of age, with somewhat higher increase in earlier years and slower in later period. These data were analysed statistically by t-test to examine the influence of sex and area variables, and the results are summarized in table 4.54.

Table 4.54 (calf circumference)

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	19.502	19.372	2.3149	Significant at .05.
SD	2.032	2.216		

(ii) Area :	Urban	Rural	t-value	Significance
N	4766	933		
M	19.564	18.803	10.0816	Beyond .01
SD	2.225	1.383		

It is seen from table 4.54 that sex was a significant factor at .05 level of confidence and area was significant beyond .01 level of confidence. Boys had a larger calf circumference (19.502 cms.) than girls (19.372 cms.), and urban larger (19.564 cms.) than rural (18.803 cms.).

Next, the same of 1692 children at five main age levels have been tabulated area x sex-wise in table 4.55 (i to v) for each age level, and represented graphically in fig. 4.54 for area and fig. 4.55 for sex.

The results in table 4.55 and fig. 4.54 & 4.55 show the same trend as that in table 4.53 & fig. 4.53.

Next, the same data of 1692 children at 5 age levels were classified according to socio-economic level, and are represented in table 4.56, on the whole, in tables 4.56 (i to v) separately for each age level, and graphically in fig. 4.56.

It is again seen from table 4.56 that calf circumference too increases with increase in SE level generally at each age level, though a slight decrease is observed at SE₅ in case of children of 2 years, 3 years and 6 years, perhaps due to insufficient number of observations in those cells.

12. FOOT LENGTH

Again, following the same procedure of analysis, the data of 5699 children at each of 17 age-points for foot length measured in cms. have been tabulated in table 4.57 and represented graphically in fig. 4.57.

The data in table 4.57 show that foot length increases with increase in age, from 13.24 cms. at 2 years of age to 17.71 cms. at age of 6 years, with almost uniform rate of increase. These data were further analysed statistically by means of t-test to examine the influence of sex and area variables on growth of foot length. Results of t-test have been summarized in table 4.58.

Table 4.58

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	16.333	15.987	7.7661	Beyond .01
SD	1.665	1.694		
(ii) Area :	Urban	Rural	t-value	Significance
N	4766	933		
M	16.241	15.794	7.3750	Beyond .01
SD	1.757	1.334		

It is clear from table 4.58 that both sex and area influenced significantly in growth of foot length. Boys had a significantly longer foot (16.333 cms.) than girls (15.987 cms.) and urban children had longer foot (16.241 cms.) than rural children (15.794 cms.).

Next, for purpose of comparison, the data of 1692 children at five main age levels were separated out and represented in table 4.59 (i to v) for each age level, and graphically in fig. 4.58 for area and fig. 4.59 for sex. The trend of growth remains the same.

Finally, data of 1692 children of 5 age levels were tabulated according to socio-economic level and are represented

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in table 4.60 on the whole as well as separately for each age level in tables 4.60 (i to v), (SE x sex-wise) and graphically in fig. 4.60.

It would be seen from table 4.60 that foot length mostly increases with increase in SE level.

13. LOWER LIMB (LEG) LENGTH

It would be recalled from earlier discussion on procedure of various measures of physical growth described in Chapter III that lower limb or leg length was not directly measured, but was derived by subtracting sitting height from total height already measured directly. These data on means, SDs, etc. of leg length of 5699 children at each of 17 age-points from 2 years to 6 years at interval of three months have been summarized in table 4.61 (area x sex-wise) and represented graphically in fig. 4.61.

It would be observed from results in table 4.61 that the leg length too increases with increase in age, from 33.49 at 2 years to 48.60 at 6 years of age, with somewhat uneven rate of increase, strikingly highest (3.5 cms.) being at 3-3 years, next best (2.3 cms.) at 4-0 years, 1.9 cms. at 2-6 years and remaining almost about 1.0 cm. at other age-points. These data were analysed statistically by means of t-test to study

sex and area differences in growth of leg length. The results are summarized in table 4.62.

Table 4.62

(i) Sex :	Boys	Girls	t-value	Significance
N	3006	2693		
M	44.343	43.709	1.3300	Not significant
SD	20.342	14.854		
(ii) Area :	Urban	Rural	t-value	Significance
N	4766	933		
M	44.435	42.035	3.7359	Significant Beyond .05.
SD	1.951	4.634		

It would be seen from results in table 4.62 that sex variable did not play any significant role in growth of leg length, though boys tended to have somewhat longer leg (44.343 cms.) than girls (43.709 cms.). However, urban children had significantly longer leg (44.435 cms.) than rural children (42.035 cms.).

Next, the same data of 1692 children at five main age levels from 2 to 6 years at interval of one year have been tabulated in tables 4.63 (i to v) and graphically in fig. 4.62 for area and fig. 4.63 for sex. The trend of growth remains the same.

Finally, the same data of 1692 children at five age levels have been tabulated according to socio-economic level in table 4.64 on the whole, and separately for each age level in tables 4.64 (i to v) SE x sex-wise, and represented in fig. 4.64.

It would be again seen from table 4.64 that leg length generally increases with increase in SE level, particularly at age of 4, 5 and 6 years; there is some increase at SE₂ and then decrease in case of children of 2 years, and similarly there is some decrease at SE₂ and then increase in case of children of 3 years, all these perhaps due to inadequate number of observations in these cells.

This completes the discussion on various other measures of physical growth.

General comments :

For all parameters (except upper-arm and thigh circumferences) the boys show consistently higher values at all age-points.

This finding is consistent with the general observation regarding the sex-differences in growth (Hurlock, 1964).

As regards the upper arm the boys show larger growth from 2 years to 3 years and 3 months when the girls tend to overtake the boys which they do at the age point 3 years - 9 months (Fig. 4.2^{41(N)}_(b) after p. 240) after which the girls have larger circumference upto the age point 5 years - 6 months. Again the growth curves for boys and girls meet at the age point 5 years - 9 months after which the boys tend to outgrow the girls.

The upper arm circumference has been suggested as a visible index of protein-calorie nutrition (Jelliffe and Jelliffe, 1969; Jelliffe and Patrice, 1969). According to this criterion the boys show more marked protein-calorie malnutrition from the age point 3 years - 6 months to the age point 5 years - 6 months. As no parental preference for girls to boys is expected, this may be reflecting the physiological superiority of girls over boys in utilizing the available nutrition.

The same growth trends for boys and girls are seen

49 (ii) after p. 256

in case of the thigh (Fig. 4.2~~(3)~~). Here the girls show distinct superiority over boys from the age point 3 years-6 months onwards throughout the age-range under investigation.

Sitting Height

The data on children of 4 years or older are more reliable than for the younger children as the latter do not often follow instructions to sit straight while being measured.

Area (Milieu) differences. (Fig. 4.21 ^{4.62} ~~to m~~).

In general the urban children show superiority in growth over the rural children. This superiority begins to be prominent by the time the child reaches the age point 3 years-6 months and for all parameters the city children show distinctly superior growth from the age-point 4 years onwards. The head circumference is an apparent exception, but here also (Fig. 4.21 (c)) the differences are small and the slight superiority seen for the rural children may be due to the state and quantity of hair on the head as the head measurement was taken with the hair. The data on head circumference in this study suffer from the fact that measurements had to be taken with hair on the head.

Socio-economic levels and growth.

The samples for socio-economic level 5 (SE 5) were too

small for the investigator to draw valid statistical inferences. The children belonging to socio-economic level 4 (professionals like doctors and lawyers^e, senior officers, professors etc.) showed consistently superior growth at all age-levels for all parameters under investigations.

The socio-economic level 4 includes people who are well-educated. Of all the lots, they generally do not depend upon hereditary wealth for their status. They are expected to be more particular and careful for the proper development of their children and at the same time have the adequate means to realize their expectations. Perhaps, parents of highest socio-economical status (SE 5) seem to be less careful than those of SE 4, though expected; it may be their negligence or more busy indulgence in their other dealings, or even their assumption that things are taken care of in view of their wealth and status; it may be even due to inadequate number of sample in SE 5.

The I.C.M.R. study does not include Bengal, Bihar and Gujarat. Hence there is need for investigations to establish regional norms for these areas. In the I.C.M.R. study the mean values of height and weight of children belonging to different states were found to be significantly different from one another, which fact also makes it imperative to plan regional studies.

The present investigation is the most extensive investigation in Gujarat undertaken so far and it includes more parameters of growth than any investigation reported so far. Its findings may be utilized for fixing the regional norms for Gujarat for the pre-school-age children (2 years to 6 years). It is suggested that the parameters of growth found for the SE 4 children be accepted as norms for pre-school children of Gujarat. These norms can be revised later in light of more extensive investigations.

Table 4.21 - showing M and SD for Head circumference in cm. at 17 age-points for whole sample area-wise, sex-wise and area X sex-wise. (cross-sectional study).

Age point Yrs./months	Milieu X Sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
1	2	3	4	5
2 - 0	47.30 1.446	46.06 1.120	47.08 0.880	45.14 0.710
2 - 3	47.74 1.304	46.79 1.755	48.33 0.932	46.90 0.937
2 - 6	47.85 1.407	46.76 1.130	47.39 1.449	45.92 1.069
2 - 9	47.99 1.351	46.91 1.189	47.53 1.188	47.62 1.251
3 - 0	48.17 1.306	47.16 1.259	48.17 1.371	47.60 1.475
3 - 3	48.24 1.159	46.69 1.169	47.75 1.288	47.64 1.255
3 - 6	48.54 1.212	47.43 1.182	48.40 0.927	47.51 0.900
3 - 9	48.40 1.306	47.67 1.296	48.36 1.169	48.07 1.478
4 - 0	48.91 1.206	47.69 1.758	48.49 1.493	48.24 1.196
4 - 3	48.99 1.864	48.18 1.314	48.71 1.148	48.42 1.170
4 - 6	49.04 1.255	48.38 1.328	48.89 1.144	48.60 1.374
4 - 9	49.26 1.284	48.36 1.368	49.20 1.553	48.80 1.280
5 - 0	49.42 1.851	48.65 1.921	49.38 1.721	48.95 1.486
5 - 3	49.45 1.837	48.85 1.406	49.40 1.304	49.00 1.613
5 - 6	49.86 1.333	48.92 1.391	49.50 1.325	49.00 1.301
5 - 9	50.04 1.316	49.16 1.341	49.60 1.368	49.00 1.449
6 - 0	50.19 1.305	49.31 1.362	49.60 1.539	49.10 1.220

Table 4.21 - contd.

Head circumference in cm.

Age-point s.months	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	10
2 - 0	46.74 1.440	46.05 1.256	47.26	45.86	46.60 1.424
2 - 3	47.28 1.170	47.44 1.153	47.79	46.80	47.30 1.073
2 - 6	47.35 1.394	46.84 1.478	47.79	46.68	47.29 1.407
2 - 9	47.49 1.385	47.58 1.196	47.91	47.03	47.51 1.352
3 - 0	47.72 1.376	48.00 1.381	48.17	47.18	47.74 1.375
3 - 3	47.49 1.165	47.70 1.244	48.15	46.84	47.53 1.869
3 - 6	48.00 1.318	48.12 0.999	48.50	47.44	48.03 1.253
3 - 9	48.06 1.300	48.20 1.344	48.39	47.75	48.09 1.322
4 - 0	48.29 1.575	48.37 1.366	48.84	47.76	48.30 1.475
4 - 3	48.46 1.675	48.60 1.156	48.93	48.21	48.48 1.575
4 - 6	48.74 1.330	48.84 1.393	49.01	48.41	48.67 1.347
4 - 9	48.84 1.323	49.00 1.562	49.25	48.69	48.36 1.376
5 - 0	49.15 1.889	49.16 1.748	49.41	48.69	49.15 1.879
5 - 3	49.12 1.673	49.23 1.479	49.44	48.88	49.20 1.687
5 - 6	49.24 1.395	49.23 1.336	49.80	48.92	49.34 1.399
5 - 9	49.61 1.397	49.30 1.493	49.94	49.12	49.44 1.454
6 - 0	49.78 1.402	49.30 1.403	50.07	49.27	49.68 1.414

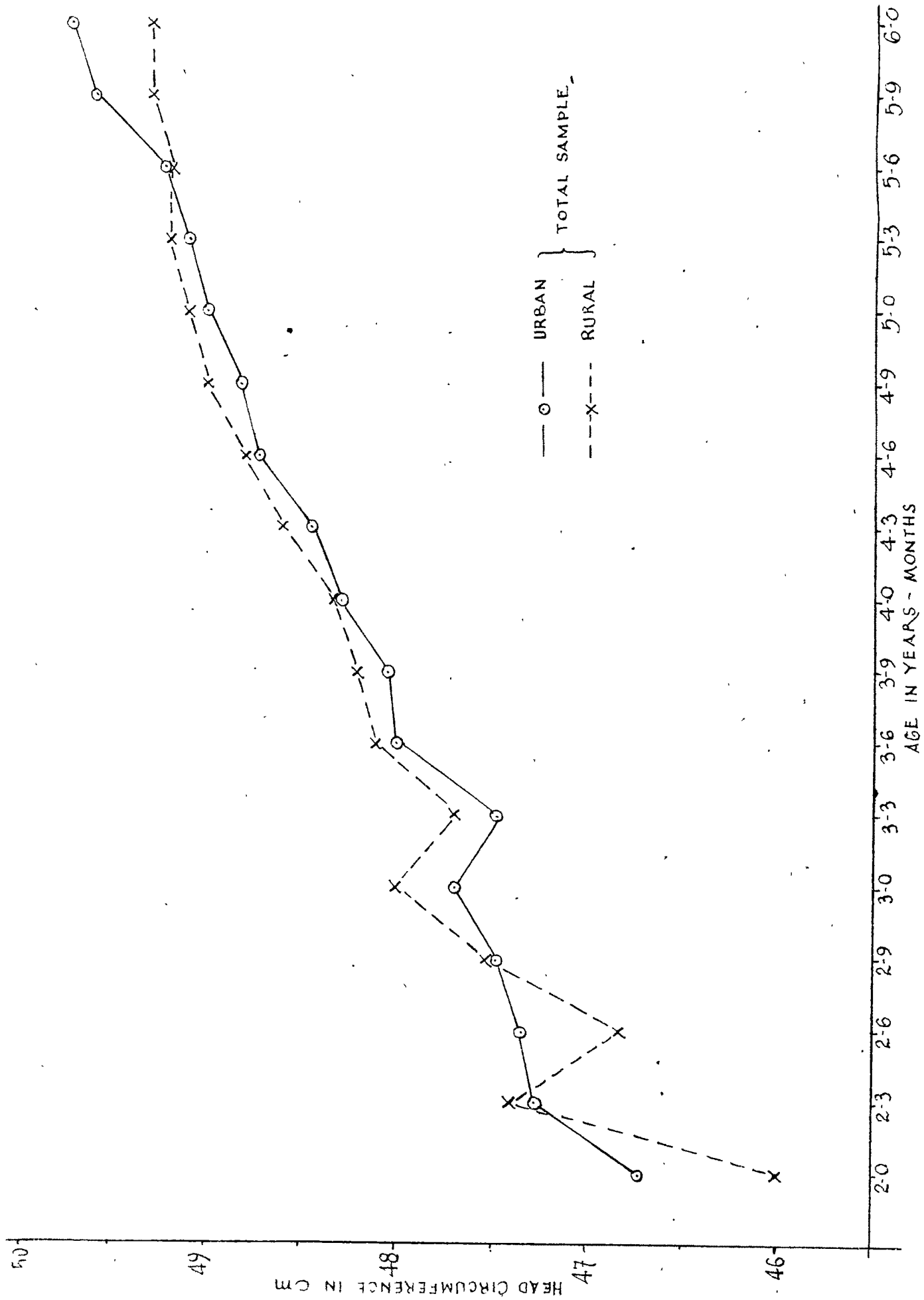


FIG. 4.21-(i)

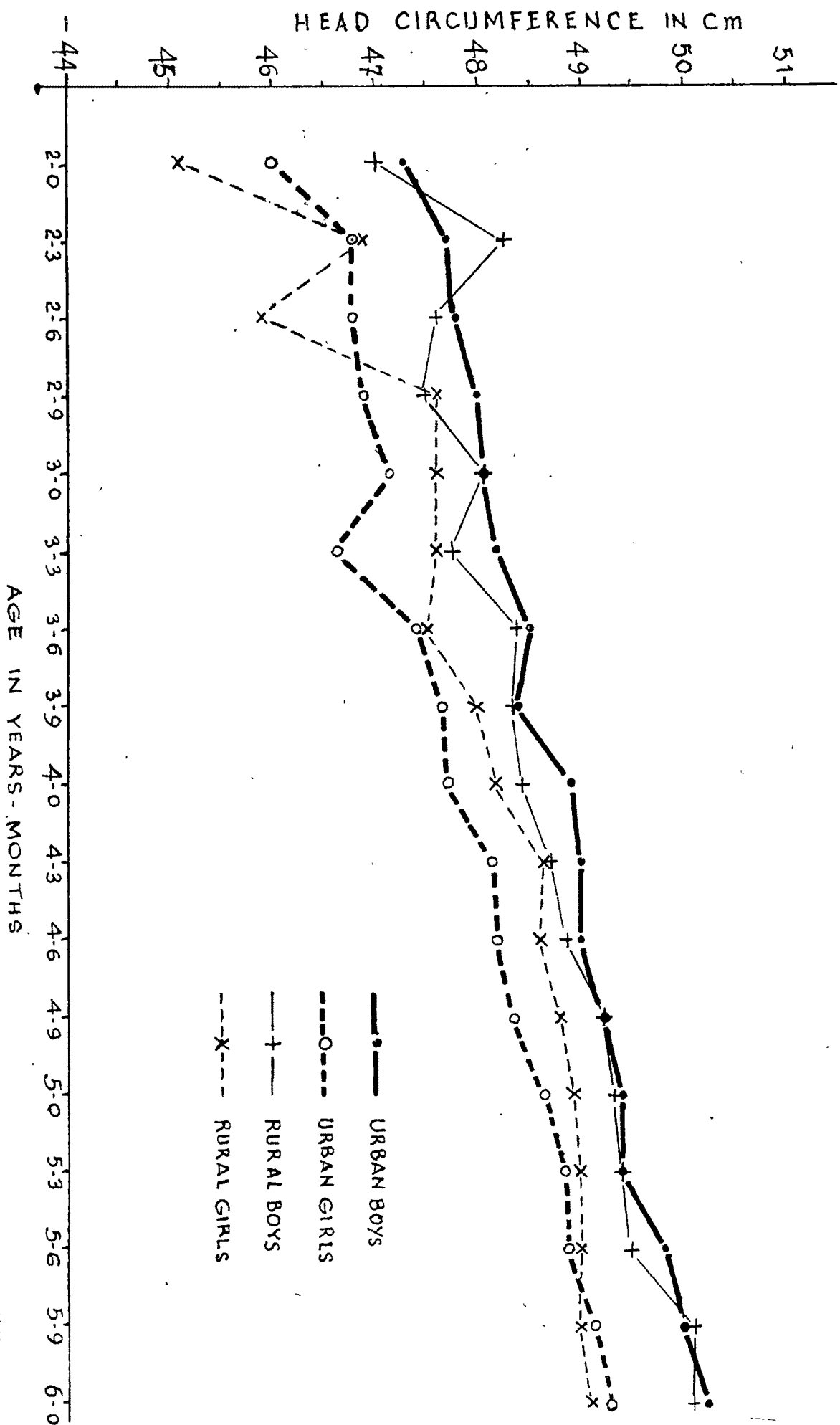
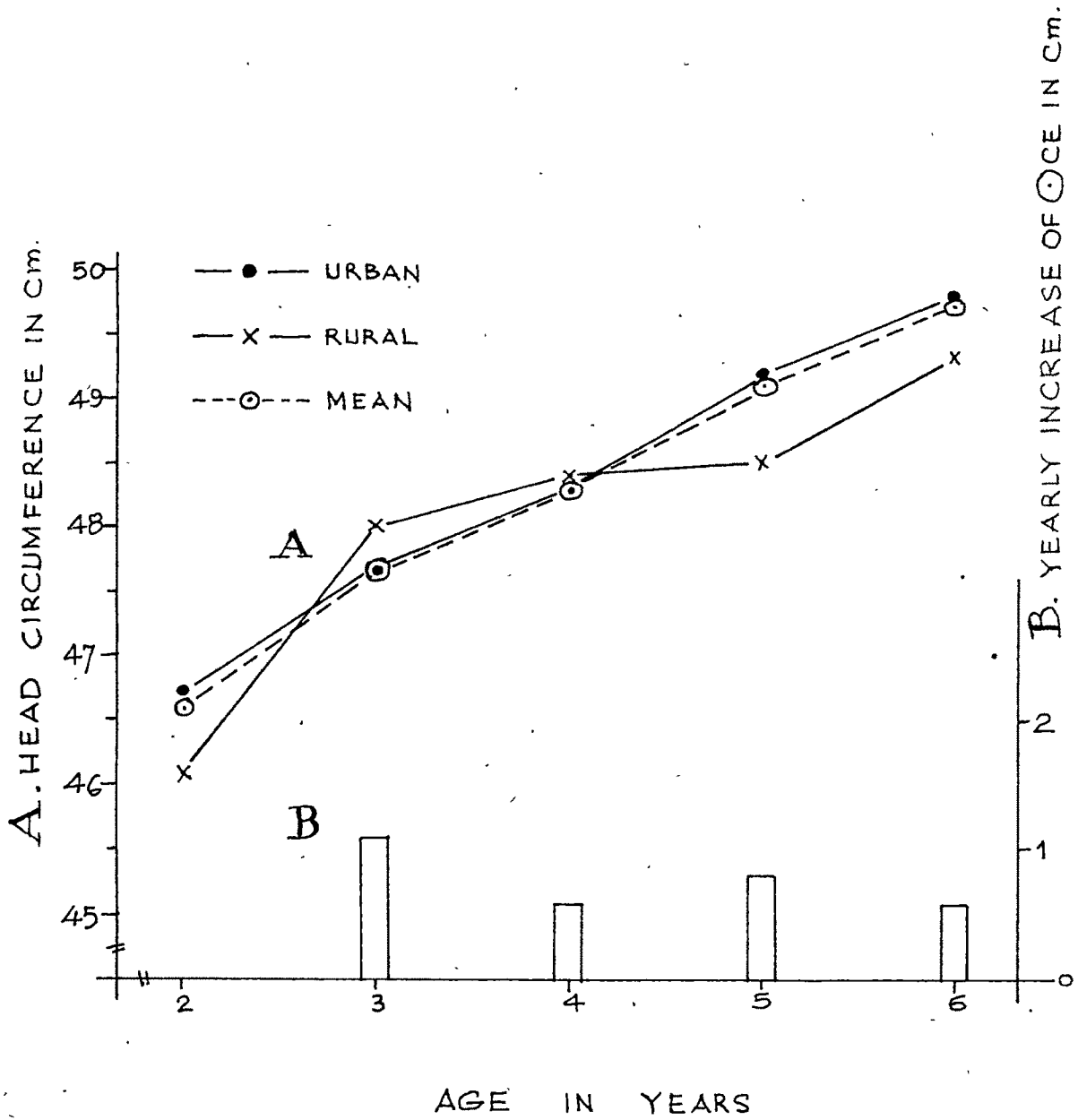


FIG. 4.21-(iii)

GRAPH NO. 422



201

201

Table 4.23 (i) - showing Head circumference in cm. area x sex-wise
for the age level 2-0 years.
(cross-sectional study).

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	47.303	46.063
	SD	1.446	1.120
	N	38	32
Rural		47.075	45.144
		0.880	0.710
		8	9
			M 46.602
			SD 1.424
			N 87

Table 4.23 (ii) - showing Head circumference in cm. area x
sex-wise for the age level 3-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	48.165	47.164
	SD	1.306	1.259
	N	107	86
Rural	M	48.167	47.600
		1.371	1.475
		12	5
			M 47.742
			SD 1.375
			N 210

Table 4.23 (iii)-showing Head circumference in cm. area x sex-wise for the age level 4-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M 48.912	47.689	48.294
	SD 1.206	2.569	2.103
	N 176	180	356
Rural	48.486	48.241	48.379
	1.493	1.196	1.366
	35	27	62
			M 48.306
			SD 2.010
			N 418

Table 4.23 (iv)-showing Head circumference in cm. area x sex-wise for the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M 49.422	48.648	49.050
	SD 1.281	2.537	1.998
	N 283	256	539
Rural	49.087	47.718	48.459
	1.721	1.486	1.748
	46	39	85
			M 49.056
			SD 1.979
			N 624

Table 4.23 (v)-showing Head circumference in cm. area x sex-wise for the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M 50.198	49.311	49.778
	SD 1.305	1.362	1.402
	N 150	135	285
Rural	49.443	49.103	49.288
	1.539	1.220	1.403
	37	31	68
			M 49.684
			SD 1.414
			N 353

Table 4.24-showing Head circumference in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Level in years	Socio-economic levels (SE)										Totals
	Low	Low-middle	Middle	High-middle	High						
						SE 1	SE 2	SE 3	SE 4	SE 5	
2 - 0	M	45.833	46.584	46.597	46.842	46.833	46.602				
	SD	1.330	1.467	1.498	1.156	2.363	1.424				
	N	6	25	34	19	3	87				
3 - 0		47.806	47.352	48.028	47.868	46.000	47.742				
		1.447	1.254	1.422	1.315	-	1.375				
		18	71	82	38	1	210				
4 - 0		47.955	48.057	48.506	48.488	48.857	48.306				
		1.222	2.827	1.305	1.488	1.346	2.010				
		33	148	154	76	7	418				
5 - 0		48.597	48.847	49.101	49.212	49.821	49.106				
		1.344	1.443	1.718	3.234	1.353	1.979				
		68	204	227	111	14	624				
6 - 0		49.224	49.465	49.781	49.950	50.875	49.684				
		1.559	1.464	1.369	1.219	1.302	1.414				
		38	110	121	76	8	353				

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Table 4.24 (i)-showing Head circumference in cm. socio-economic (SE) level x sex-wise for the age level 2-0 years. (cross-sectional study)

SE level	Sex		Totals
	Boys	Girls	
Low	M	45.500	45.833
	SD	1.414	1.330
	N	2	6
Low-middle		47.107	46.584
		1.519	1.467
		15	25
Middle		47.500	46.597
		1.213	1.498
		18	34
High-middle		47.625	46.842
		0.694	1.156
		8	19
High		46.833	46.833
		2.363	2.363
		3	3
			M 46.602
			SD 1.424
			N 87

Table 4.24 (ii)-showing Head circumference in cm. socio-economic (SE) level x sex-wise for the age level 3-0 years. (cross-sectional study)

S.E.level	Sex		Totals
	Boys	Girls	
Low	M	47.750	47.806
	SD	1.530	1.447
	N	12	18
Low-middle		47.814	47.352
		1.146	1.254
		36	71
Middle		48.478	48.028
		1.334	1.422
		49	82
High-middle		48.381	47.868
		1.161	1.315
		21	38
High		46.000	46.000
		-	-
		1	1
			M 47.742
			SD 1.375
			N 210

Table 4.24 (iii)-showing Head circumference in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years. (cross-sectional study)

S.E. Level	Sex		Totals
	Boys	Girls	
Low	M 48.167	47.778	47.955
	SD 1.160	1.275	1.222
	N 15	18	33
Low-middle	48.772	47.450	48.057
	1.208	3.580	2.827
	68	80	148
Middle	48.841	48.061	48.506
	1.191	1.327	1.305
	88	66	154
High-middle	49.147	47.829	48.488
	1.445	1.227	1.488
	38	38	76
High	50.500	48.200	48.857
	1.414	0.571	1.346
	2	5	7
			M 48.306
			SD 2.010
			N 418

Table 4.24 (iv) - showing Head circumference in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years. (cross-sectional study)

S.E. Level	Sex		Totals
	Boys	Girls	
Low	M 49.145	47.879	48.597
	SD 1.366	0.923	1.344
	N 39	29	68
Low-middle	49.186	48.508	48.847
	1.456	1.352	1.443
	102	102	204
Middle	49.426	48.723	49.101
	1.276	2.061	1.718
	122	105	227
High-middle	49.590	48.820	49.212
	1.224	4.652	3.234
	61	50	111
High	50.833	49.063	49.821
	1.330	0.776	1.353
	6	8	14
			M 49.106
			SD 1.979
			N 624

Table 4.24 (v) - showing Head circumference in cm. Socio-economic (SE) level x sex-wise for the age level 6-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	49.750	48.500
	SD	1.717	0.949
	N	22	16
Low-middle		49.731	49.167
		1.437	1.450
		58	52
Middle		50.233	49.336
		1.199	1.390
		60	61
High-middle		50.255	49.531
		1.275	1.016
		44	32
High		51.667	50.400
		1.042	1.295
		3	5
			M 49.684
			SD 1.414
			N 353

GRAPH NO. 4'24

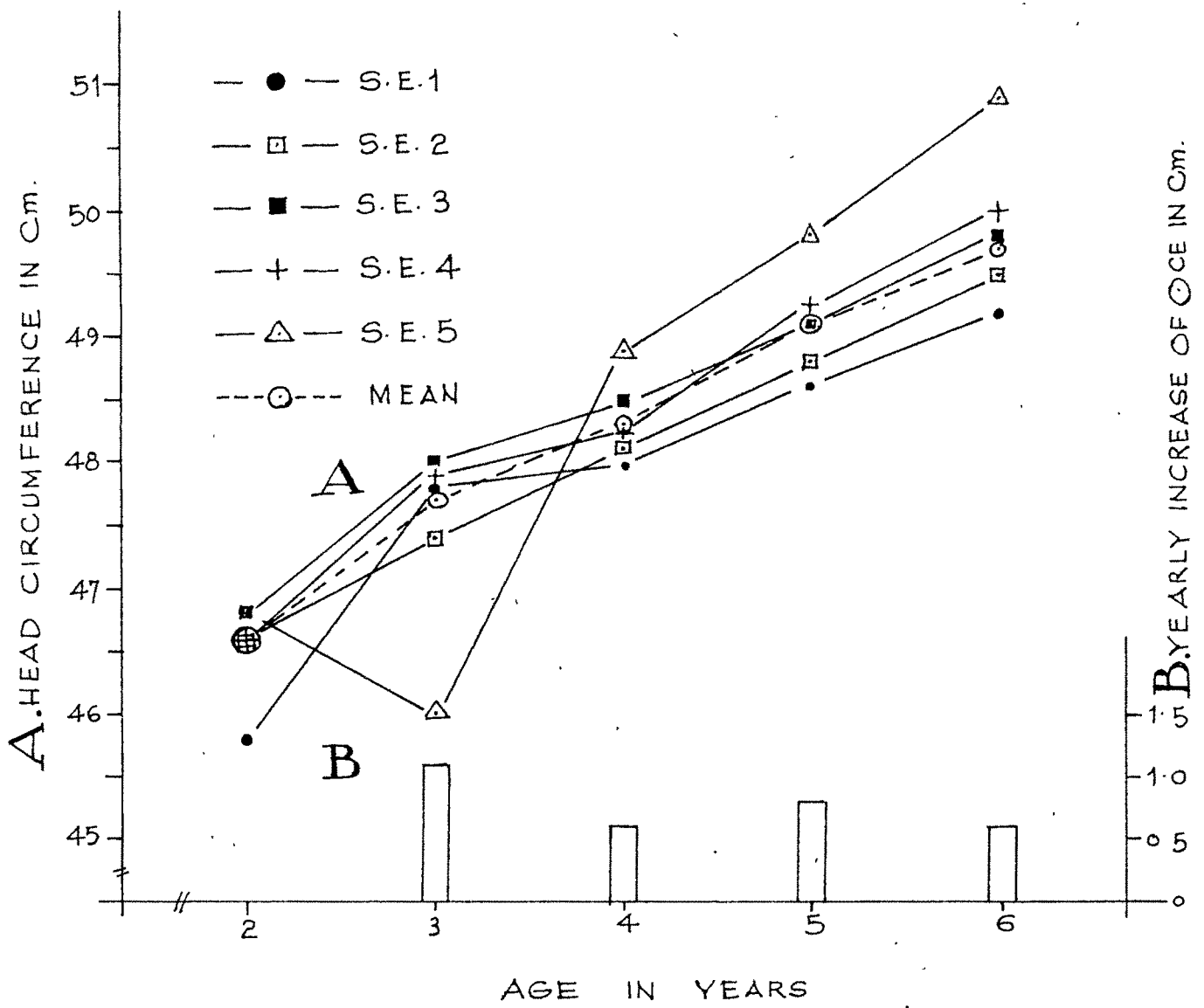


Table 4.25 - showing M and SD for Chest circumference in cm. at 17 age-points for whole sample area-wise, sex-wise and area X sex-wise. (cross-sectional study)

Age Point Yrs./months	Milieu X Sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
1	2	3	4	5
2 - 0	47.12 2.046	46.02 2.330	47.36 2.658	45.19 1.298
2 - 3	47.31 2.030	47.34 2.500	48.50 2.490	46.17 1.707
2 - 6	48.37 2.335	47.34 2.084	49.25 2.841	47.08 1.115
2 - 9	48.46 2.073	47.53 2.156	49.40 2.261	48.00 2.092
3 - 0	49.05 2.151	47.83 2.128	49.40 2.072	48.30 1.782
3 - 3	49.29 1.840	47.89 1.842	49.50 2.320	48.30 1.979
3 - 6	49.84 1.878	48.21 1.989	49.54 1.482	48.45 1.181
3 - 9	49.84 1.743	48.62 1.889	49.82 2.150	48.49 1.663
4 - 0	50.40 1.990	49.12 2.050	49.82 1.990	48.55 1.390
4 - 3	50.62 1.966	49.61 2.032	50.30 2.301	48.71 1.810
4 - 6	50.83 1.912	49.84 1.999	50.30 1.995	48.94 2.197
4 - 9	51.23 1.968	49.92 2.936	50.65 2.434	49.01 2.151
5 - 0	51.65 2.094	50.53 2.820	50.65 1.853	49.40 2.056
5 - 3	51.70 2.112	50.58 2.110	50.70 1.947	49.79 1.888
5 - 6	52.33 2.262	50.92 2.140	50.89 2.202	50.11 1.889
5 - 9	52.77 2.369	51.34 2.160	51.53 2.670	50.74 1.898
6 - 0	53.24 2.393	51.60 2.213	51.95 2.860	50.75 2.458

Table 4.25 - contd.

Chest circumference in cm.

Age-point s. months	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	
2 - 0	46.61 2.233	46.21 2.277	47.16	45.83	46.54 2.234
2 - 3	47.32 2.370	47.04 2.274	47.41	47.16	47.29 2.350
2 - 6	47.79 2.303	48.44 2.536	48.47	47.31	47.86 2.329
2 - 9	48.05 2.200	48.75 2.259	48.62	47.61	48.17 2.211
3 - 0	48.51 2.221	49.09 2.507	49.08	47.85	48.57 2.249
3 - 3	48.61 1.841	49.29 2.275	49.32	47.95	48.68 2.210
3 - 6	49.05 2.090	49.32 1.386	49.75	48.24	49.13 1.951
3 - 9	49.31 1.760	49.35 1.947	49.83	48.59	49.30 1.817
4 - 0	49.78 2.037	49.35 1.833	50.37	49.04	49.70 2.017
4 - 3	50.16 2.057	49.49 2.168	50.56	49.49	50.13 2.074
4 - 6	50.38 2.012	49.59 2.193	50.73	49.69	50.24 2.064
4 - 9	50.62 2.552	49.96 2.447	51.12	49.78	50.51 2.545
5 - 0	51.13 2.550	49.96 1.962	51.51	50.38	50.88 2.505
5 - 3	51.13 2.111	50.14 1.939	51.52	50.44	50.96 2.101
5 - 6	51.63 2.310	50.56 2.096	52.08	50.81	51.47 2.309
5 - 9	52.07 2.375	51.13 2.337	52.51	51.21	51.87 2.395
6 - 0	52.46 2.448	51.33 2.750	52.98	51.44	52.24 2.544

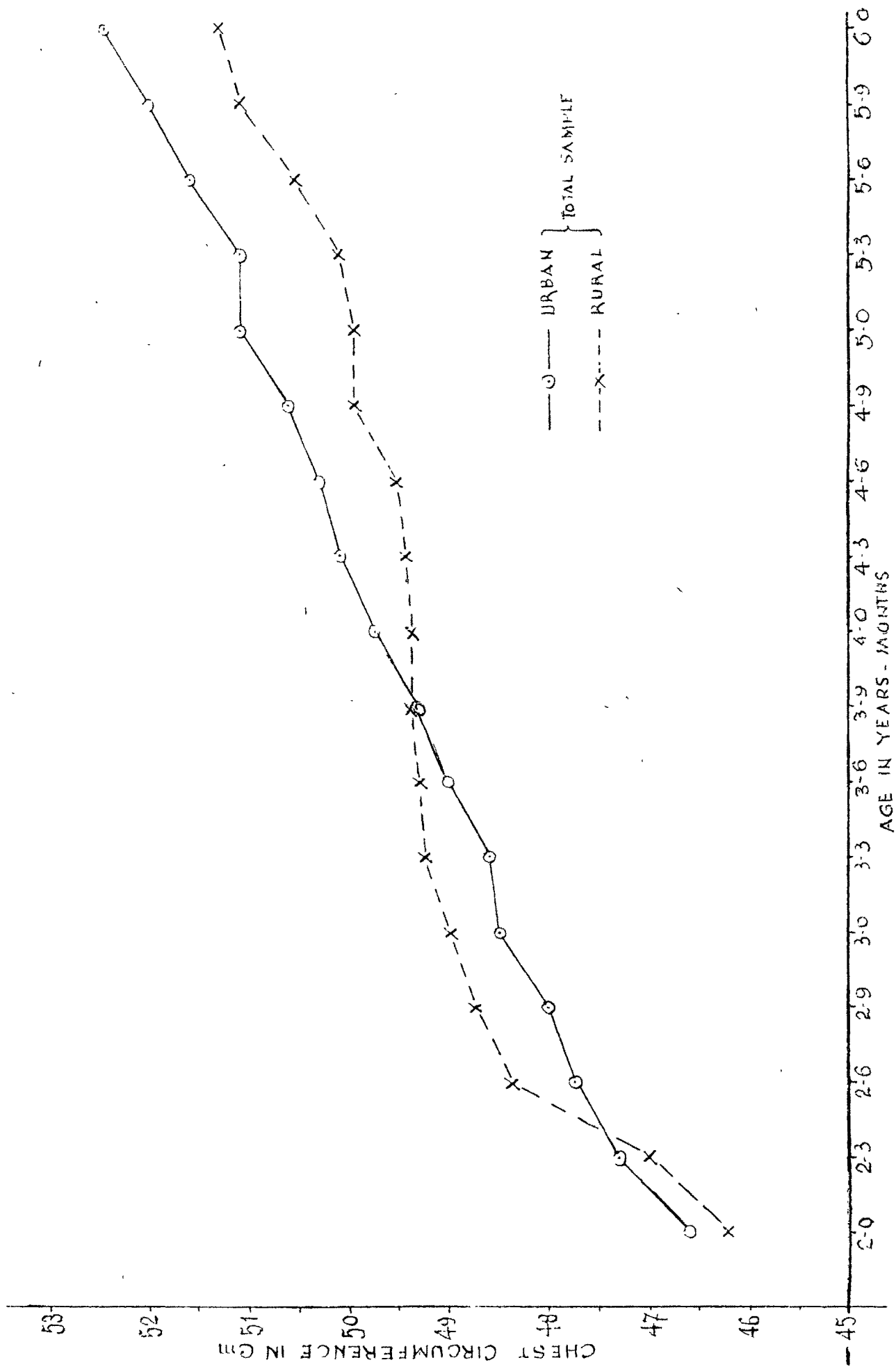


FIG. 4.25 (i)

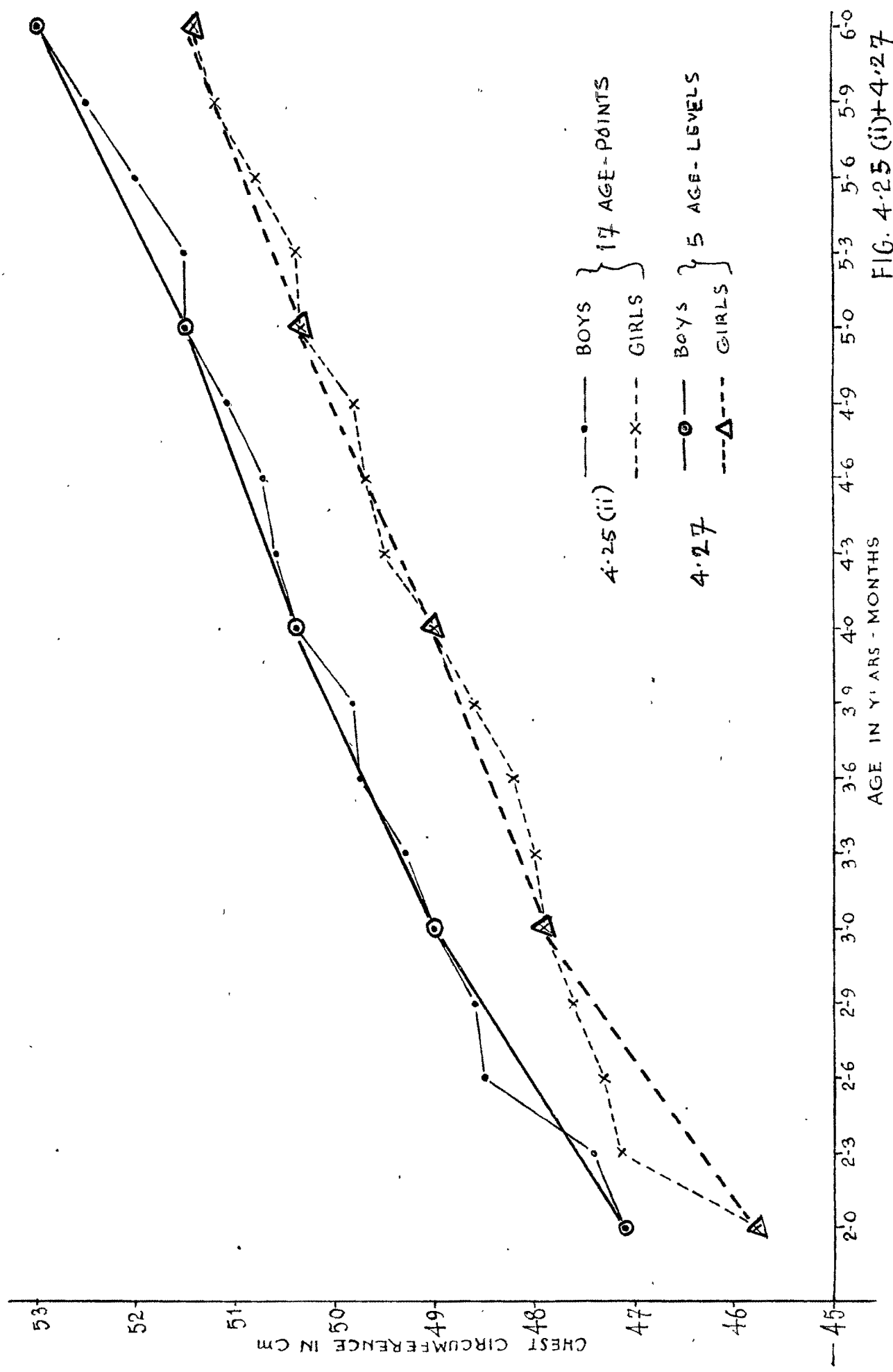


FIG. 4.25(ii)+4.27

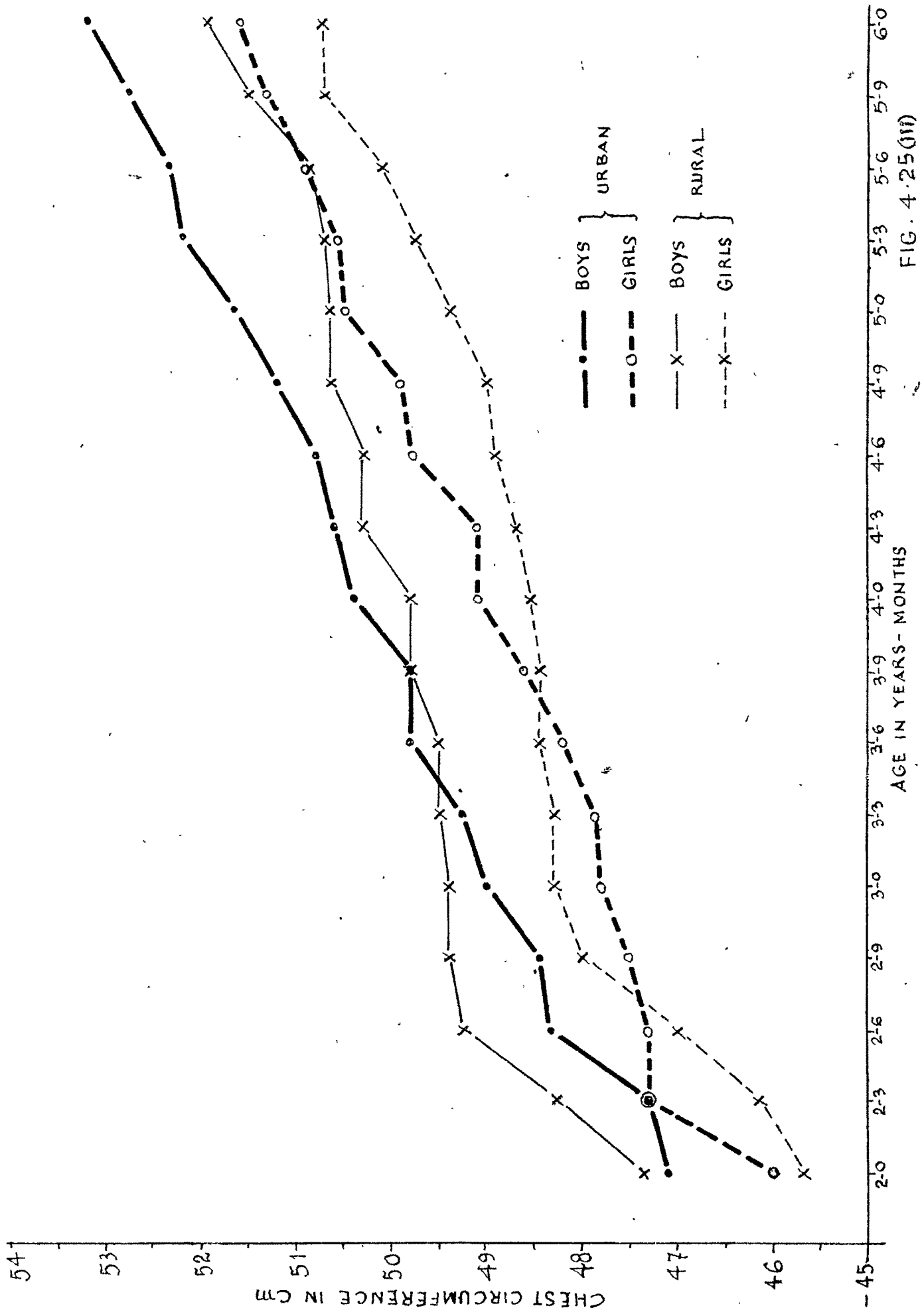


FIG. 4.25(III)

GRAPH NO. 4-26

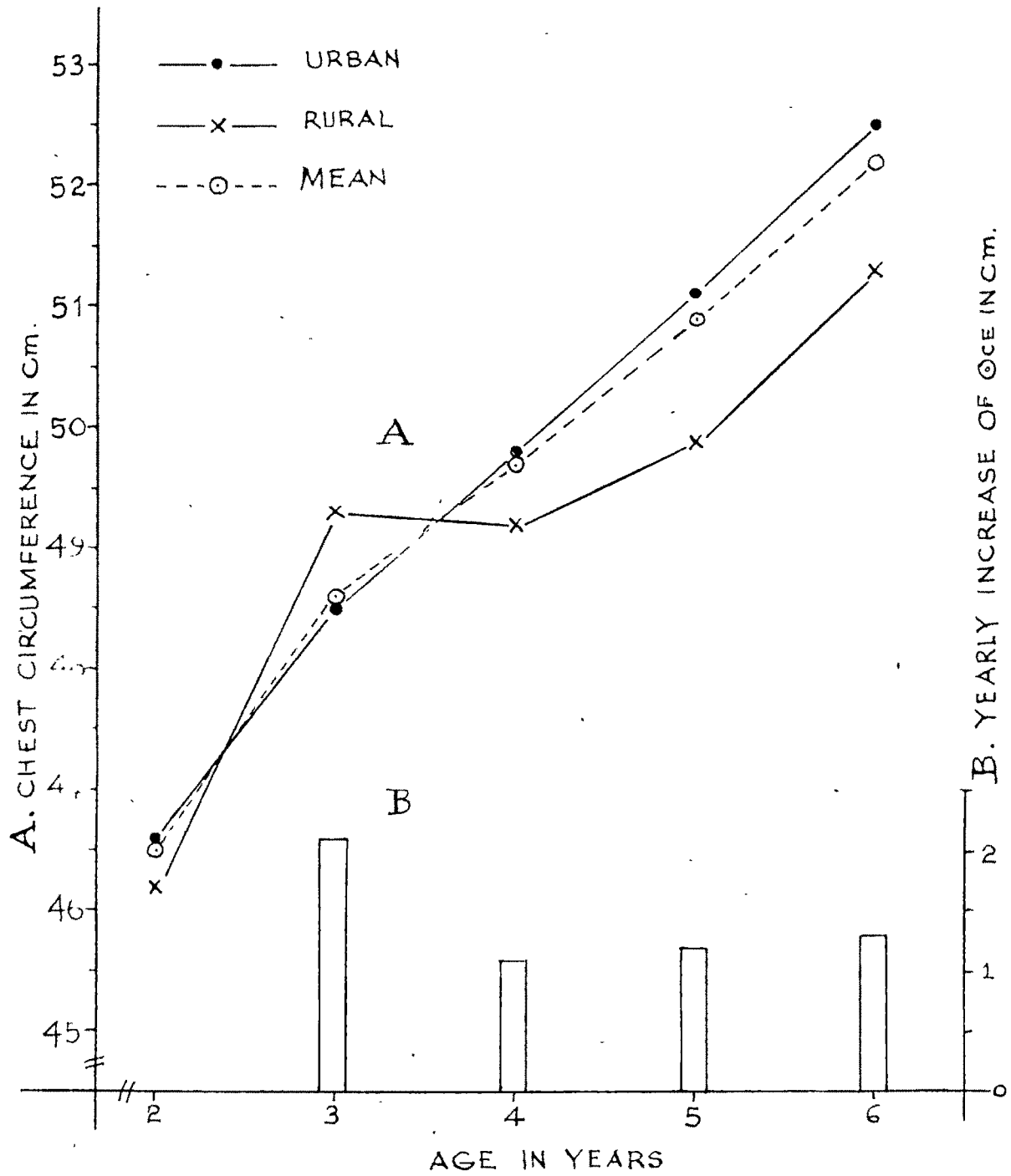


Table 4.27(i)- showing Chest circumference in cm. area x sex-wise for the age level 2-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	47.118	46.016
	SD	2.046	2.330
	N	38	32
Rural		47.362	45.189
		2.658	1.298
		8	9
			M 46.536
			SD 2.234
			N 87

Table 4.27(ii)-showing Chest circumference in cm. area x sex-wise for the age level 3-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	49.053	47.831
	SD	2.151	2.128
	N	107	86
Rural		50.292	46.900
		2.072	1.782
		12	5
			M 48.572
			SD 2.249
			N 210

Table 4.27(iii)-showing Chest circumference in cm. area x sex-wise for the age level 4-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	50.483	49.127
	SD	1.836	2.005
	N	176	180
Rural		49.700	48.556
		1.990	1.390
		35	27
			M 49.709
			SD 2.017
			N 418

Table 4.27 (iv)- showing Chest circumference in cm. area x sex-wise for the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	51.654	50.531
	SD	2.094	2.820
	N	283	256
Rural		50.217	49.603
		1.853	2.056
		46	39
			M 50.877
			SD 2.505
			N 624

Table 4.27 (v)- showing Chest circumference in cm. area x sex-wise for the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	53.243	51.600
	SD	2.393	2.213
	N	150	135
Rural		51.949	50.594
		2.860	2.458
		37	31
			M 52.246
			SD 2.544
			N 353

Table 4.28-showing Chest circumference in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Level in years	Socio-Economic levels (SE)							
	Low		Low-middle		Middle		High-middle	
	SE 1	SE 1	SE 2	SE 2	SE 3	SE 3	SE 4	SE 5
2 - 0	M	44.500	46.560	46.415	47.342	46.667	46.536	46.536
	SD	1.225	2.759	1.703	2.328	2.021	2.234	2.234
	N	6	25	34	19	3	87	87
3 - 0	M	48.750	47.756	49.061	49.013	46.500	48.572	48.572
	SD	2.334	2.289	1.924	2.429	-	2.249	2.249
	N	18	71	82	38	1	210	210
4 - 0	M	49.152	49.382	49.914	50.114	50.357	49.709	49.709
	SD	2.467	2.056	1.843	1.974	1.842	2.017	2.017
	N	33	148	154	76	7	418	418
5 - 0	M	50.331	50.665	51.022	51.552	51.357	50.877	50.877
	SD	2.061	2.265	2.117	3.633	2.365	2.505	2.505
	N	68	204	227	111	14	624	624
6 - 0	M	51.684	51.818	52.475	52.822	51.875	52.246	52.246
	SD	2.420	2.641	2.461	2.539	1.978	2.544	2.544
	N	38	110	121	76	8	353	353

Table 4.28(i)- showing Chest circumference in cm. socio-economic (SE) level x sex-wise for the age level 2-0 years. (cross-sectional study)

S.E. Level	Sex		Totals
	Boys	Girls	
Low	M 43.000	45.250	44.500
	SD 0.0	0.500	1.225
	N 2	4	6
Low-middle	47.300	45.450	46.560
	2.211	3.227	2.759
	15	10	25
Middle	47.050	45.700	46.415
	1.689	1.454	1.703
	18	16	34
High-middle	48.375	46.591	47.342
	2.134	2.257	2.328
	8	11	19
High	46.667	-	46.667
	2.021	-	2.021
	3	0	3
			M 46.536
			SD 2.234
			N 87

Table 4.28 (ii)-showing Chest circumference in cm. socio-economic (SE) level x sex-wise for the age level 3-0 years. (cross-sectional study)

S.E. Level	Sex		Totals
	Boys	Girls	
Low	M 48.500	49.250	48.750
	SD 2.730	1.294	2.334
	N 12	6	18
Low-middle	48.575	46.914	47.756
	2.253	2.031	2.289
	36	35	71
Middle	49.561	48.318	49.061
	1.839	1.828	1.924
	49	33	82
High-middle	49.833	48.000	49.013
	2.123	2.456	2.429
	21	17	38
High	46.500	-	46.500
	-	-	-
	1	0	1
			M 48.572
			SD 2.249
			N 210

Table 4.28(iii)-showing Chest circumference in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years. (cross-sectional study)

S.E.Level		Sex		Totals
		Boys	Girls	
Low	M	49.167	49.139	49.152
	SD	2.050	2.828	2.467
	N	15	18	33
Low-middle		50.243	48.650	49.382
		1.954	1.857	2.056
		68	80	148
Middle		50.500	49.132	49.914
		1.744	1.685	1.843
		88	66	154
High-middle		50.592	49.637	50.114
		1.853	2.000	1.974
		38	38	76
High		52.000	49.700	50.357
		2.121	1.441	1.842
		2	5	7
				M 49.709
				SD 2.017
				N 418

Table 4.28 (iv)-showing Chest circumference in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years. (cross-sectional study)

S.E.Level		Sex		Totals
		Boys	Girls	
Low	M	50.684	49.869	50.331
	SD	1.799	2.311	2.061
	N	39	29	68
Low-middle		51.209	50.122	50.665
		2.257	2.148	2.265
		102	102	204
Middle		51.571	50.385	51.022
		2.080	1.986	2.117
		122	105	227
High-middle		52.041	50.884	51.552
		1.903	4.835	3.633
		61	50	111
High		52.083	50.813	51.357
		2.957	1.831	2.365
		6	8	14
				M 50.877
				SD 2.505
				N 624

Table 4.28 (v)- showing Chest circumference in cm. socio-economic (SE) level x sex-wise for the age level 6-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	52.000	51.250
	SD	2.704	1.966
	N	22	16
Low-middle		52.898	50.613
		2.496	2.264
		58	52
Middle		52.942	52.016
		2.481	2.372
		60	61
High-middle		53.614	51.734
		2.574	2.071
		44	32
High		53.667	50.800
		0.293	1.718
		3	5
			M 52.246
			SD 2.544
			N 353

GRAPH NO. 4.28

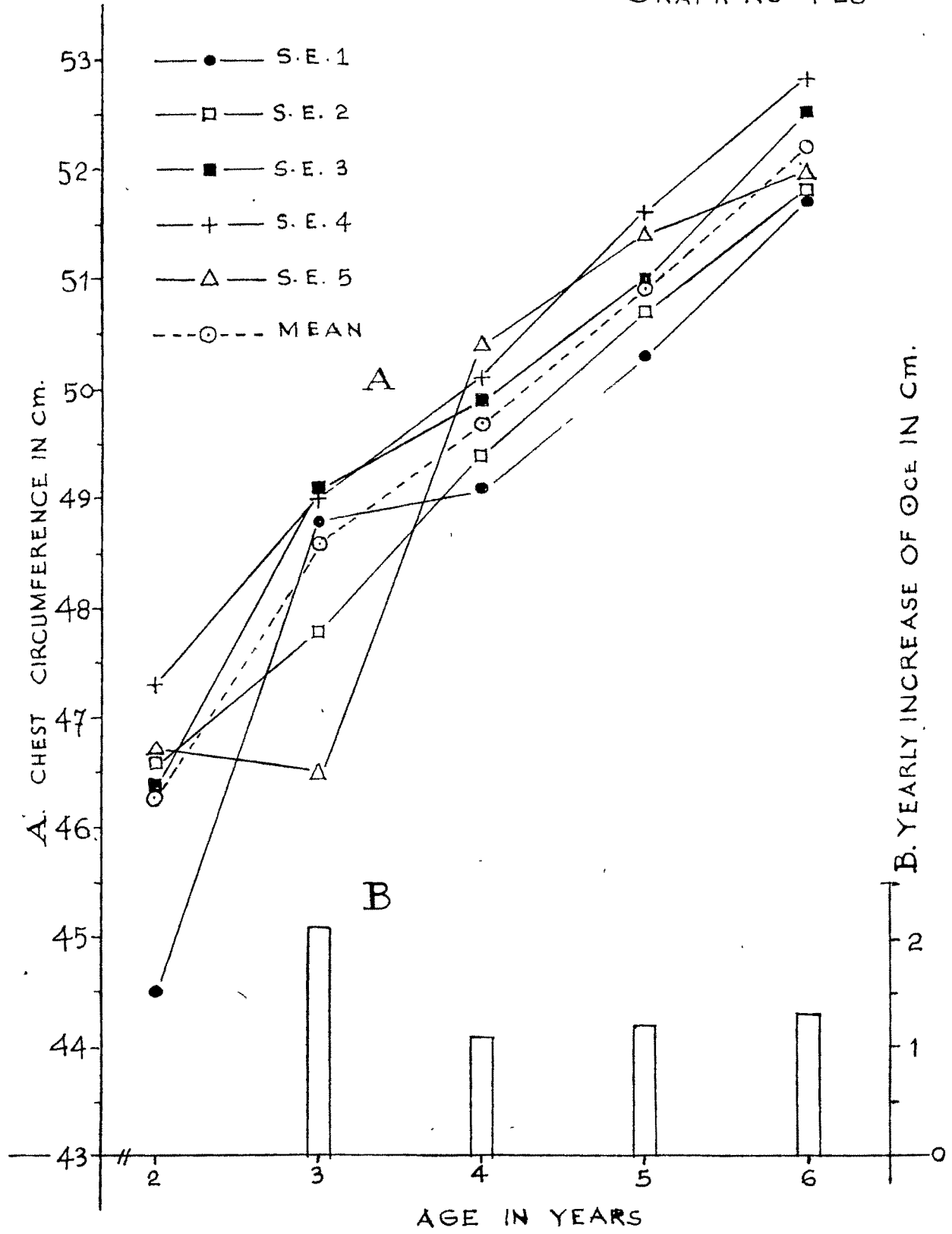


Table 4.29 - showing M and SD for Shoulder width in cm. at 17

age-points for whole sample area-wise, sex-wise and

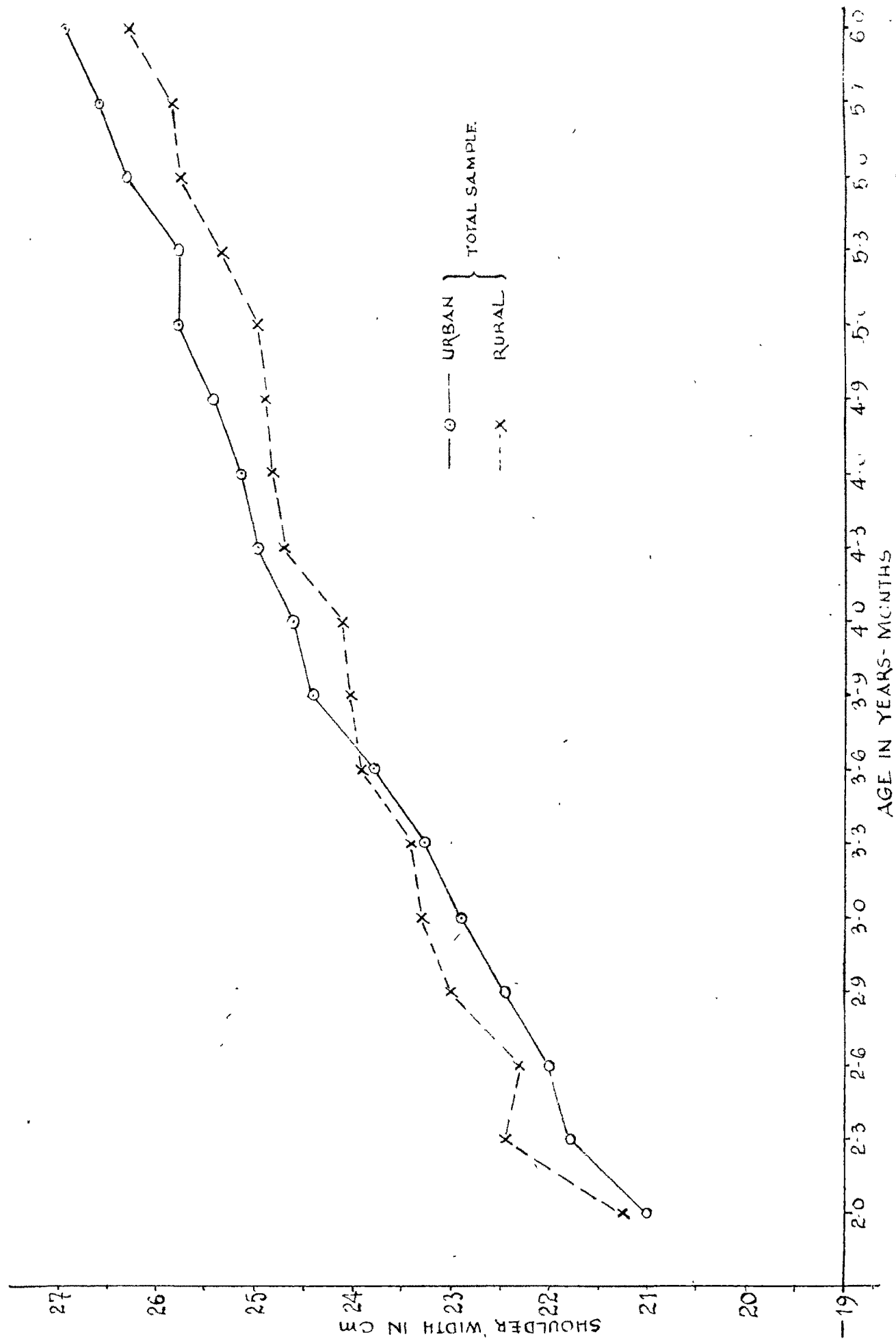
area X sex-wise. (cross-sectional study)

Age Point Yrs./months	Milieu X sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
1	2	3	4	5
2 - 0	21.22 1.240	20.77 1.169	21.70 1.849	20.91 0.934
2 - 3	21.84 1.316	21.79 1.823	22.30 1.840	22.01 1.039
2 - 6	22.13 1.866	22.97 1.165	22.35 1.887	22.33 0.409
2 - 9	22.53 1.488	23.00 1.192	23.02 1.639	22.70 1.515
3 - 0	22.94 1.362	23.00 1.339	23.65 1.574	23.00 1.388
3 - 3	23.32 0.990	23.25 1.138	23.65 1.316	23.00 1.462
3 - 6	24.08 1.056	23.57 1.238	24.07 1.239	23.82 1.150
3 - 9	24.72 1.169	24.02 1.181	24.14 1.327	24.00 1.429
4 - 0	24.79 1.029	24.44 1.181	24.14 1.166	24.12 1.559
4 - 3	25.05 1.153	24.84 1.126	24.82 1.309	24.48 1.456
4 - 6	25.27 1.225	25.07 1.185	24.93 1.412	24.64 1.328
4 - 9	25.52 1.267	25.29 1.283	24.95 1.436	24.90 1.438
5 - 0	25.80 1.264	25.72 1.350	24.95 1.442	24.95 1.507
5 - 3	25.87 1.245	25.69 1.201	25.29 1.397	25.44 1.095
5 - 6	26.34 1.253	26.11 1.176	25.90 1.414	25.61 1.470
5 - 9	26.73 1.261	26.45 1.132	25.90 1.505	25.85 1.420
6 - 0	27.05 1.311	26.80 1.137	26.32 1.495	26.20 1.585

Table 4.29 - contd.

Shoulder width in cm.

age- point Yrs.,Mo.	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	
2-0	21.02 1.220	21.28 1.448	21.30	20.80	21.07 1.263
2-3	21.82 1.572	22.17 1.441	21.88	21.82	21.89 1.513
2-6	22.06 1.579	22.34 1.480	22.15	22.91	22.09 1.567
2-9	22.45 1.332	23.06 1.554	22.61	22.95	22.55 1.386
3-0	22.90 1.349	23.39 1.480	23.01	23.00	22.98 1.378
3-3	23.28 1.059	23.40 1.394	23.37	23.21	23.29 1.116
3-6	23.84 1.173	23.90	24.07	23.61	23.88 1.180
3-9	24.40 1.171	24.05 1.385	24.63	24.01	24.39 1.251
4-0	24.61 1.121	24.13 1.341	24.68	24.39	24.54 1.167
4-3	24.96 1.145	24.70 1.363	25.00	24.79	24.91 1.186
4-6	25.18 1.209	24.80 1.378	25.20	25.00	25.11 1.246
4-9	25.41 1.278	24.92 1.429	25.42	25.23	25.33 1.316
5-0	25.76 1.859	24.95 1.463	25.68	25.62	25.66 1.830
5-3	25.77 1.386	25.37 1.232	25.76	25.64	25.70 1.357
5-6	26.23 1.219	25.78 1.433	26.26	26.04	26.17 1.202
5-9	26.59 1.206	25.86 1.462	26.55	26.32	26.41 1.341
6-0	26.93 1.235	26.26 1.526	26.90	26.69	26.80 1.321



Fl. 4.29(f)

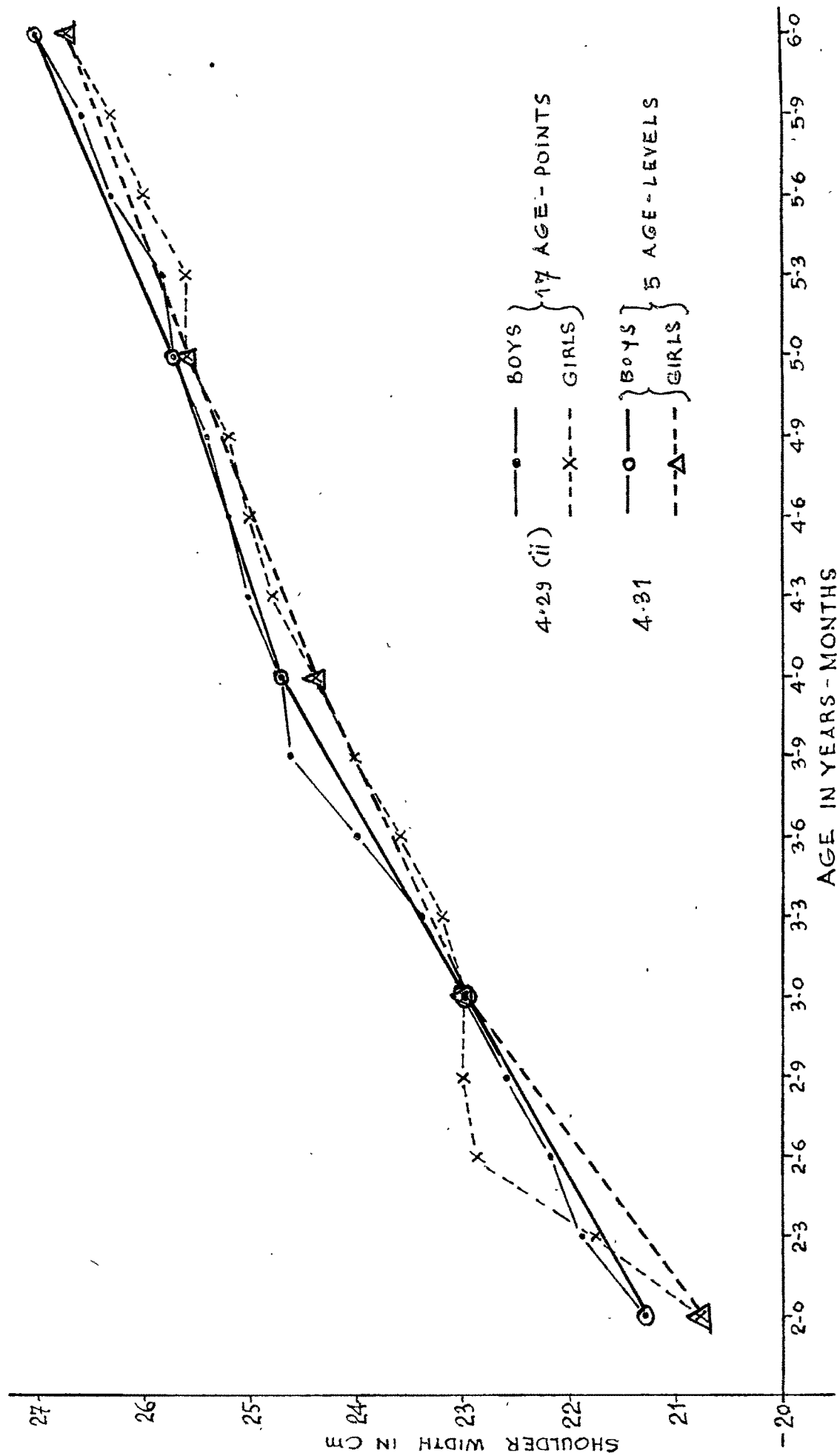


FIG. 4.29(ii)+4.31

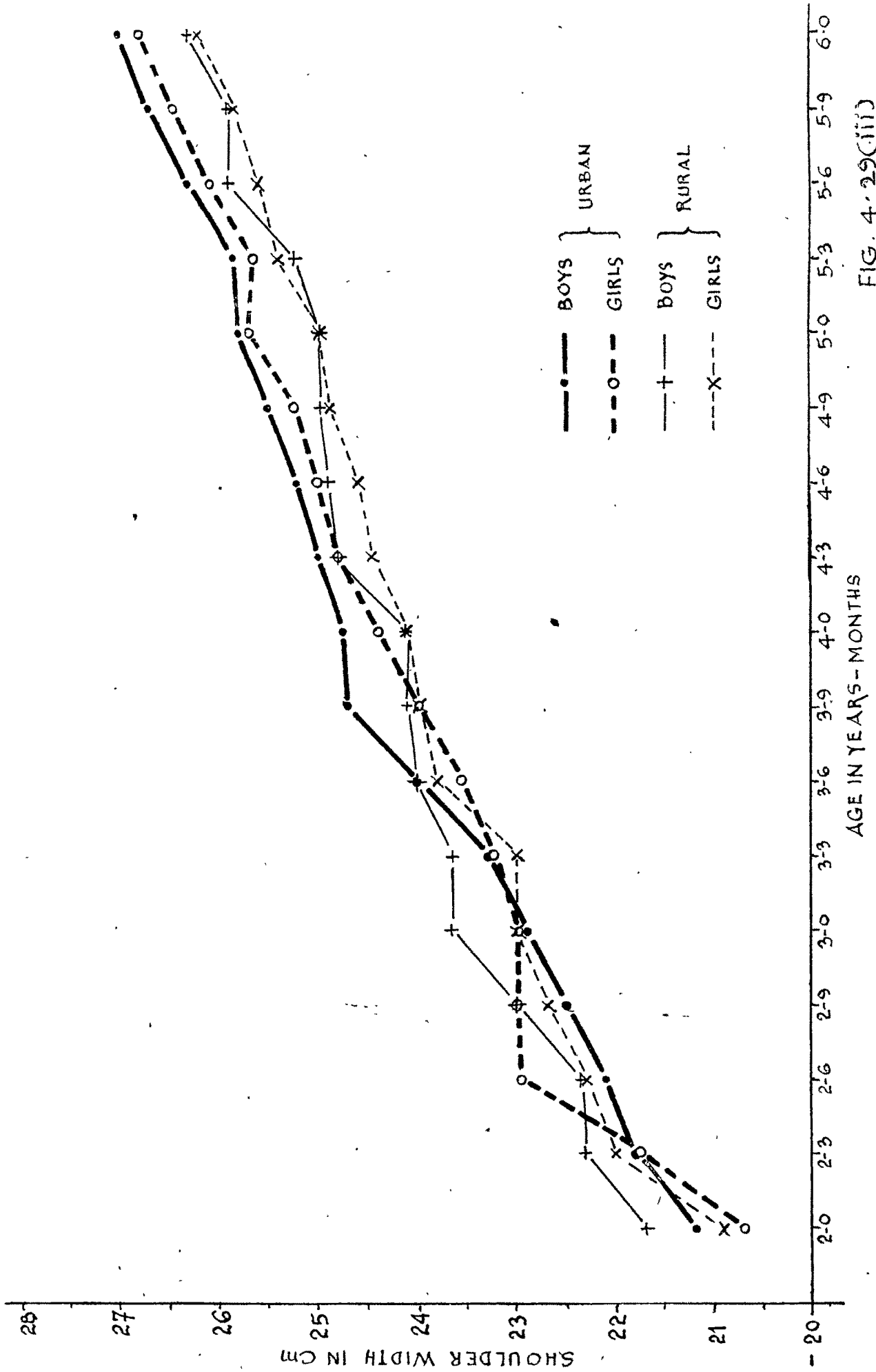
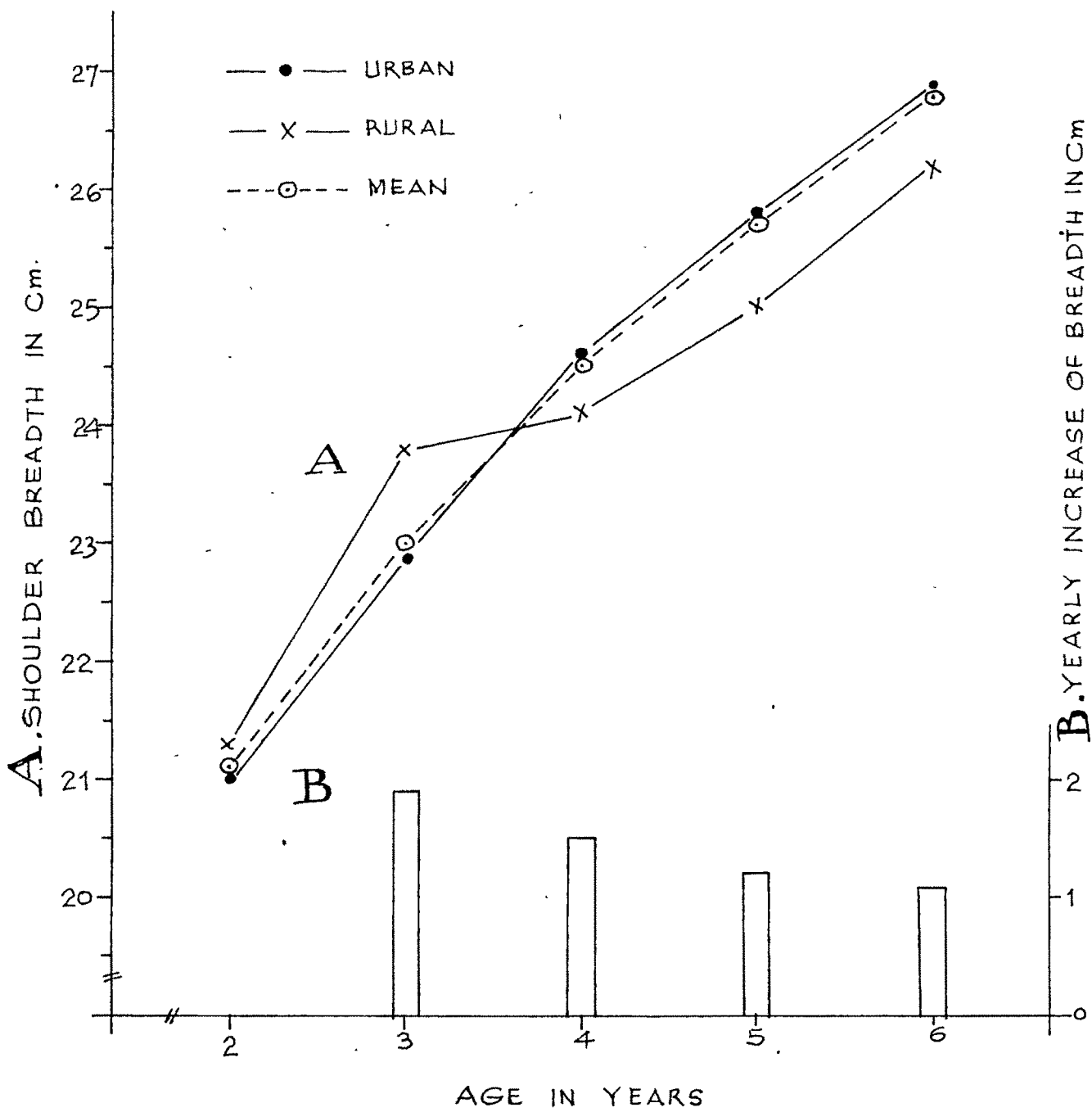


FIG. 4.29(iii)

GRAPH NO. 4.30



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Table 4.31 (i)-showing Shoulder-width in cm. area x sex-wise
for the age level 2-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	21.224	21.017
	SD	1.240	1.220
	N	38	70
Rural		21.700	21.282
		1.849	1.448
		8	17
			M 21.069
			SD 1.263
			N 87

Table 4.31 (ii)-showing Shoulder-width in cm. area x-sex-wise
for the age level 3-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	22.944	22.907
	SD	1.362	1.349
	N	107	193
Rural		23.750	23.794
		1.574	1.480
		12	17
			M 22.979
			SD 1.378
			N 210

Table 4.31 (iii)-showing Shoulder-width in cm. area x sex-wise
for the age level 4-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	24.793	24.613
	SD	1.029	1.121
	N	176	356
Rural		24.086	24.137
		1.166	1.341
		35	62
			M 24.543
			SD 1.167
			N 418

Table 4.31 (iv)-showing Shoulder-width in cm. area x sex-wise
for the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M 25.800	25.727	25.765
	SD 1.264	2.350	1.859
	N 283	256	539
Rural	24.9924.933	25.013	24.969
	1.442	1.507	1.463
	46	39	85
			M 25.657
			SD 1.830
			N 624

Table 4.31 (v)-showing Shoulder-width in cm. area x sex-wise
for the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M 27.050	26.804	26.933
	SD 1.311	1.137	1.235
	N 150	135	285
Rural	26.224	26.306	26.262
	1.495	1.585	1.526
	37	31	68
			M 26.804
			SD 1.321
			N 353

Table 4.32--showing Shoulder width in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Level in years	Socio-Economic levels (SE)					Totals
	Low	Low-middle	Middle	High-middle	High	
	SE 1	SE 2	SE 3	SE 4	SE 5	
2 - 0	M 20.500 SD 1.000 N 6	21.192 1.432 25	20.741 1.132 34	21.737 1.135 19	20.667 1.115 3	21.069 1.263 87
3 - 0	22.417 1.396 18	22.486 1.165 71	23.165 1.329 82	23.776 1.427 38	22.500 - 1	22.979 1.378 210
4 - 0	24.167 1.362 33	24.247 1.289 148	24.758 0.915 154	24.776 1.142 76	25.286 0.952 7	24.543 1.167 418
5 - 0	24.793 1.423 68	25.375 1.375 204	25.747 1.744 227	25.983 2.608 111	26.286 1.069 14	25.607 1.830 624
6 - 0	26.118 1.348 38	26.636 1.287 110	26.825 1.311 121	27.336 1.218 76	27.000 0.926 8	26.804 1.321 353

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Table 4.32(i)-showing Shoulder-width in cm. socio-economic (SE) level x sex-wise for the age level 2-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	19.500	21.000
	SD	0.707	0.707
	N	2	4
Low-middle		21.707	20.424
		1.278	1.349
		15	10
Middle		21.000	20.450
		1.150	1.071
		18	16
High-middle		21.938	21.591
		1.635	0.626
		8	11
High		20.667	-
		1.155	-
		3	0
			M
			SD
			N
			21.069
			1.263
			87

Table 4.32(ii)-showing Shoulder-width in cm. socio-economic (SE) level x sex-wise for the age level 3-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	22.208	22.833
	SD	1.469	1.252
	N	12	6
Low-middle		22.694	22.271
		1.167	1.140
		36	35
Middle		23.102	23.258
		1.396	1.238
		49	33
High-middle		23.905	23.618
		1.366	1.526
		21	17
High		22.500	-
		-	-
		1	0
			M
			SD
			N
			22.979
			1.378
			210

Table 4.32(iii)-showing Shoulder-width in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 24.267	24.083	24.167
	SD 1.033	1.611	1.362
	N 15	18	33
Low-middle	24.478	24.050	24.247
	1.286	1.267	1.289
	68	80	148
Middle	24.818	24.679	24.758
	0.862	0.982	0.915
	88	66	154
High-middle	24.776	24.776	24.776
	1.070	1.223	1.142
	38	38	76
High	26.250	24.900	25.286
	1.061	0.652	0.952
	2	5	7
			M 24.543
			SD 1.167
			N 418

Table 4.32 (iv)- showing Shoulder-width in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 25.161	24.310	24.793
	SD 1.390	1.339	1.423
	N 39	29	68
Low-middle	25.368	25.382	25.375
	1.433	1.323	1.375
	102	102	204
Middle	25.875	25.615	25.747
	1.143	2.256	1.744
	122	105	227
High-middle	26.057	25.948	25.983
	1.245	3.644	2.608
	61	50	111
High	26.417	26.188	26.286
	1.159	1.067	1.069
	6	8	14
			M 25.657
			SD 1.830
			N 624

Table 4.32(v)- showing Shoulder-width in cm. socio-economic (SE) level x sex-wise for the age level 6-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	26.455	25.656
	SD	1.455	1.060
	N	22	16
Low-middle		26.782	26.471
		1.355	1.198
		58	52
Middle		26.697	26.951
		1.334	1.287
		60	61
High-middle		27.489	27.125
		1.323	1.040
		44	32
High		27.000	27.000
		1.500	0.612
		3	5
			M 26.804
			SD 1.321
			N 353

GRAPH NO. 4.32

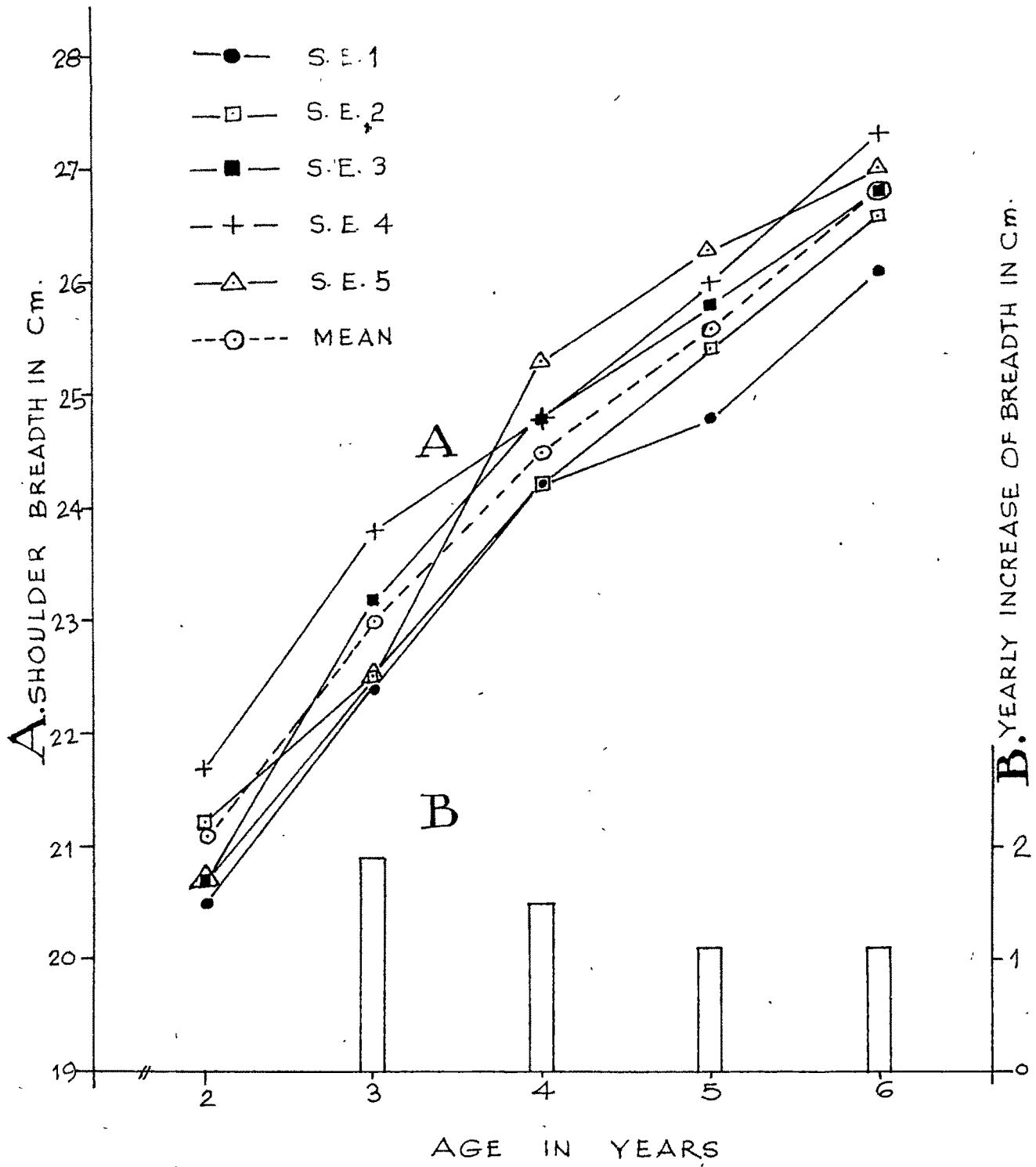


Table 4.33 - showing M and SD for Arm length in cm. at 17 age-points for whole sample area-wise, sex-wise and area X sex-wise. (cross-sectional study).

Age point Yrs./months	Milieu X sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
1	2	3	4	5
2 - 0	35.27 2.797	35.04 1.761	35.66 2.973	32.91 2.082
2 - 3	37.03 2.657	36.54 3.273	38.10 3.464	35.21 3.216
2 - 6	37.96 2.547	36.75 2.232	38.40 3.454	36.20 2.504
2 - 9	38.41 2.154	37.76 1.862	37.84 3.476	37.66 4.287
3 - 0	39.14 2.032	38.60 1.966	38.62 3.619	37.70 4.102
3 - 3	40.02 1.782	39.31 1.912	39.66 3.738	38.30 3.638
3 - 6	41.07 1.842	40.19 2.140	40.02 2.238	40.16 2.115
3 - 9	41.68 2.089	40.93 2.252	41.52 2.426	41.00 2.866
4 - 0	42.53 2.002	41.44 2.166	41.54 2.546	41.29 2.439
4 - 3	43.18 2.135	42.38 2.280	42.97 2.637	42.82 2.706
4 - 6	43.91 2.145	43.10 2.142	43.40 2.377	42.90 2.126
4 - 9	44.57 2.228	43.68 2.084	44.10 2.540	43.11 2.269
5 - 0	45.44 2.248	44.26 2.980	44.57 2.518	43.56 2.758
5 - 3	45.91 2.007	44.81 2.084	44.92 2.573	44.01 2.411
5 - 6	46.80 2.191	45.63 2.138	46.44 2.759	44.80 2.397
5 - 9	47.62 2.074	46.40 2.235	46.45 2.761	45.84 2.188
6 - 0	48.41 2.202	47.14 2.235	47.48 2.887	47.13 3.059

Table 4.33 - contd.

Arm length in cm.

Age-point Yrs.Mo.	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	
2-0	35.17 2.367	34.20 2.835	35.33	34.57	34.99 2.478
2-3	36.82 2.968	35.44 3.593	37.12	36.34	36.77 3.036
2-6	37.40 2.473	37.31 3.141	38.01	36.70	37.34 2.587
2-9	38.10 2.044	37.76 3.800	38.31	37.74	38.05 2.418
3-0	38.91 2.018	38.64 3.956	39.08	38.55	38.89 2.223
3-3	39.69 1.871	39.04 3.671	39.95	39.15	39.58 2.265
3-6	40.65 2.034	40.07 2.263	40.77	40.18	40.52 2.163
3-9	41.34 2.193	41.26 2.656	41.65	40.54	41.29 2.279
4-0	41.98 2.154	41.33 2.480	42.36	41.42	41.88 2.215
4-3	42.81 2.237	42.79 2.655	43.14	42.44	42.81 2.308
4-6	43.54 2.178	43.07 2.298	43.81	43.07	43.46 2.204
4-9	44.16 2.204	43.68 2.465	44.48	43.59	44.08 2.254
5-0	44.88 2.683	44.10 2.663	45.31	44.16	44.77 2.692
5-3	45.35 2.045	44.46 2.250	45.73	44.67	45.19 2.048
5-6	46.22 2.240	45.75 2.791	46.74	45.52	46.15 2.320
5-9	47.02 2.234	46.06 2.485	47.37	46.82	46.82 2.321
6-0	47.81 2.303	47.32 2.950	48.22	47.14	47.71 2.444

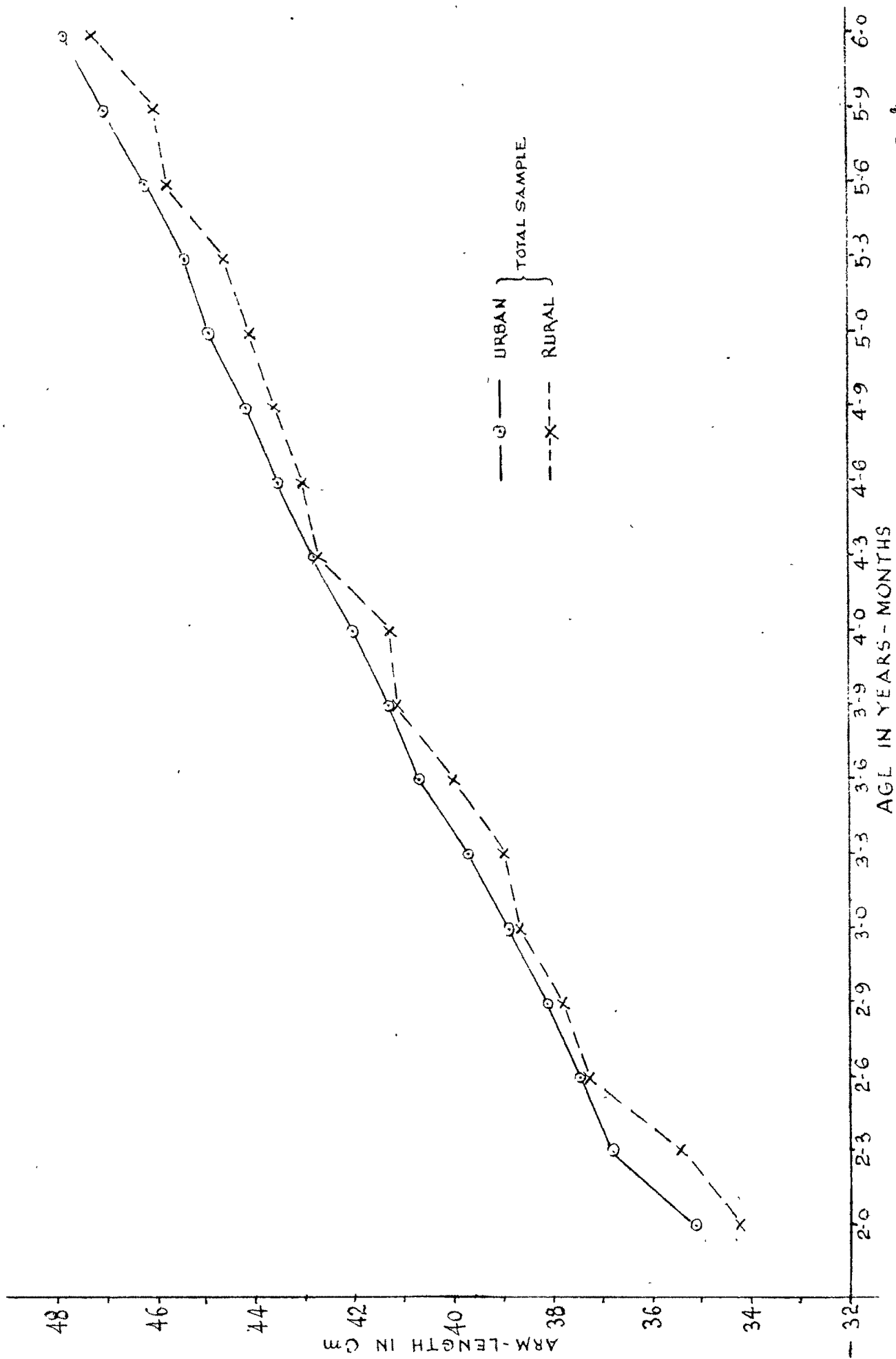


FIG. 4.33(i)

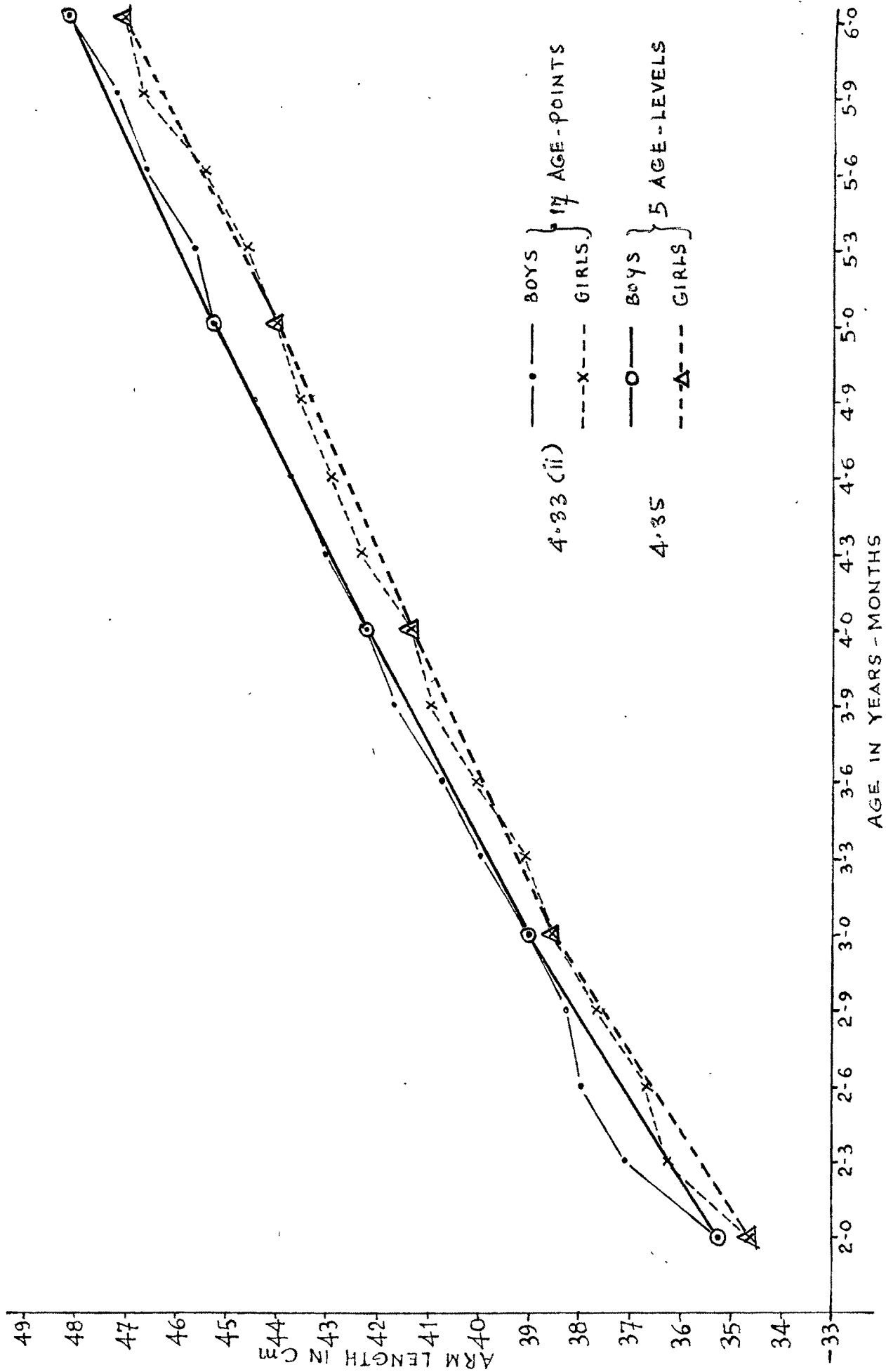


FIG. 4.33 (i) + 4.35

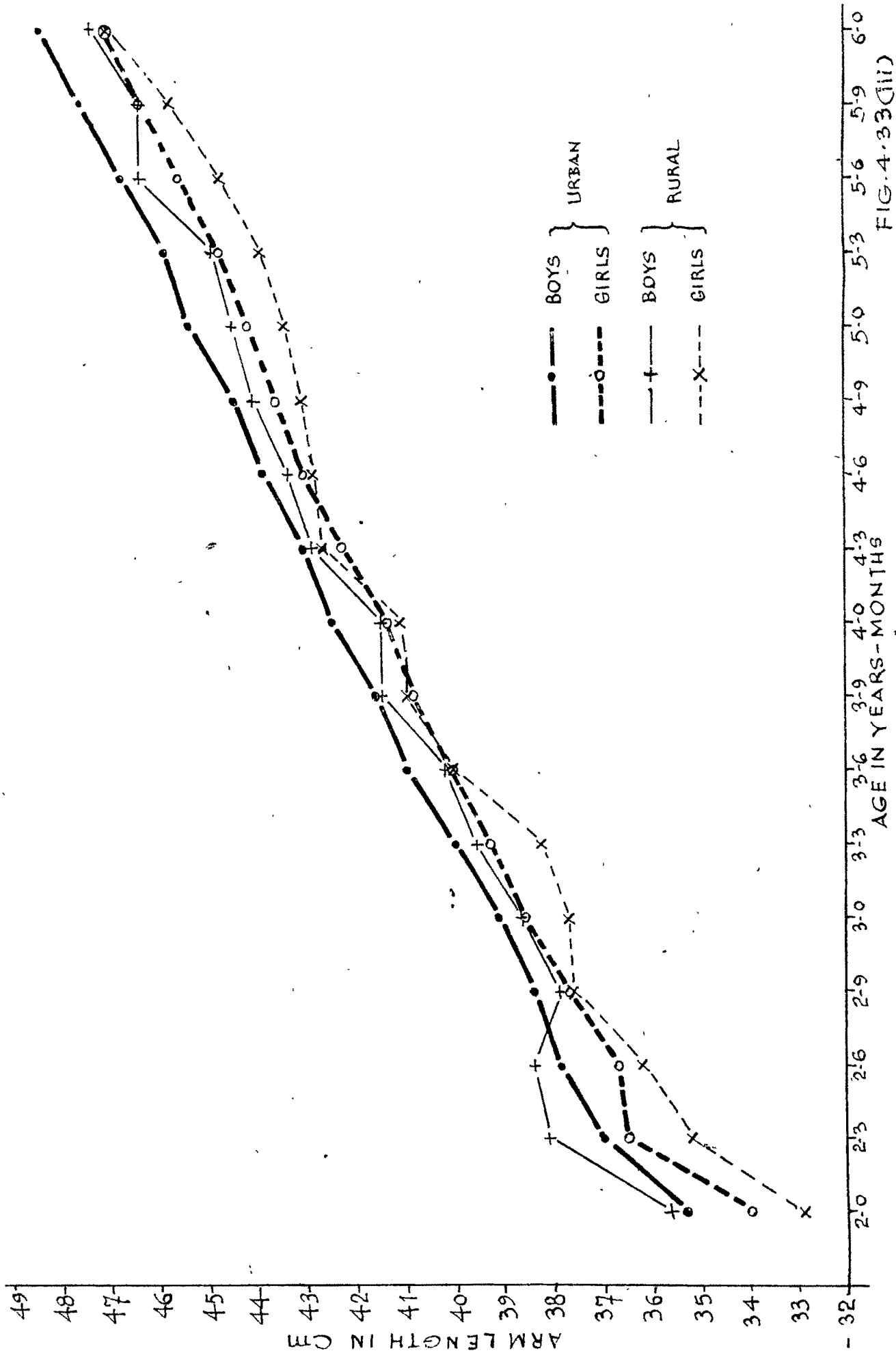
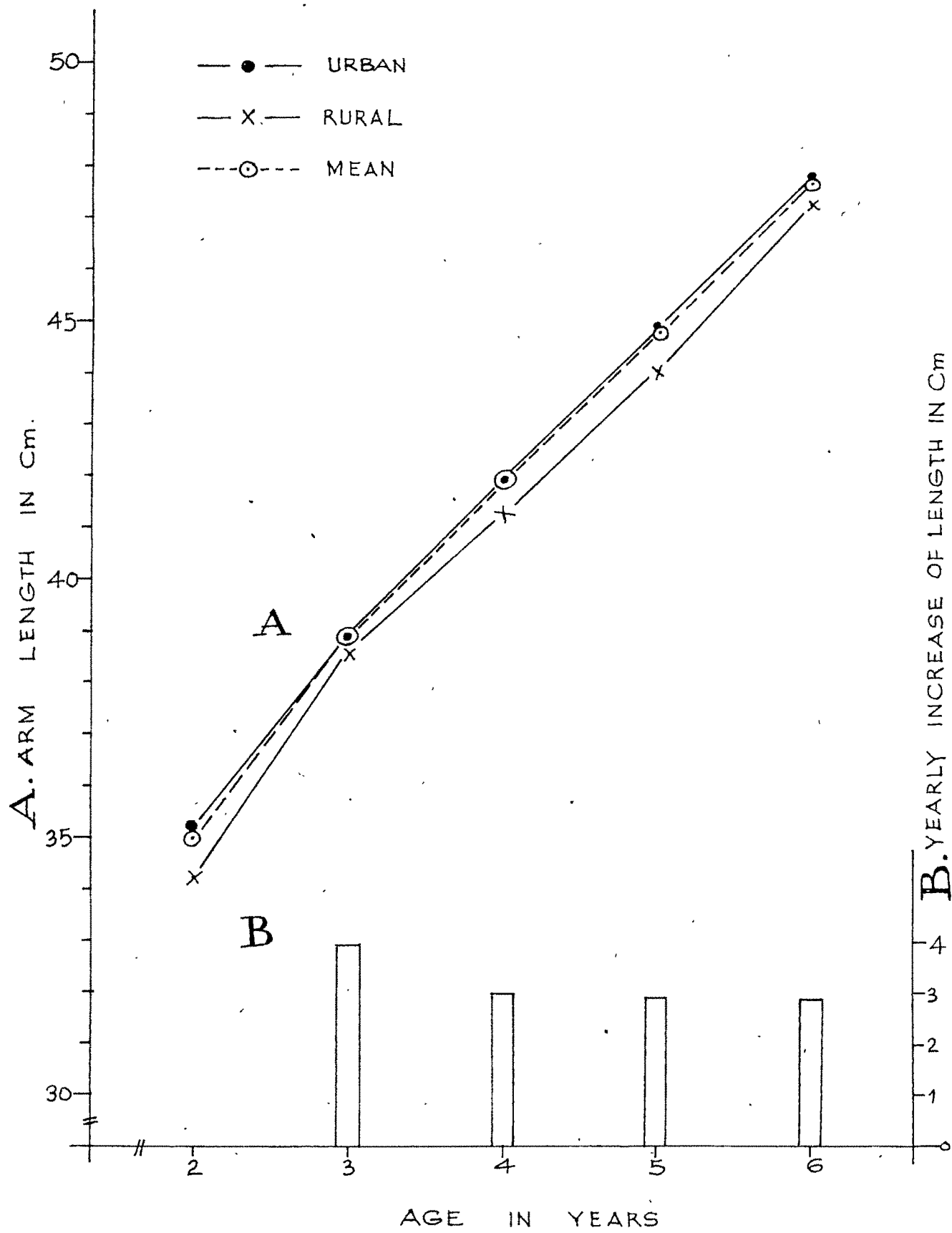


FIG. 4.33 (ii)

GRAPH NO.4.34



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Table 4.35(i)-showing Arm length in cm. area x sex-wise for the age level 2-0 years.
(cross-sectional study)

Milieu		Sex		Totals
		Boys	Girls	
Urban	M	35.276	35.047	35.171
	SD	2.797	1.761	2.367
	N	38	32	70
Rural		35.662	32.911	34.206
		2.973	2.082	2.835
		8	9	17
				M 34.983
				SD 2.478
				N 87

Table 4.35(ii)-showing Arm length in cm. area x sex-wise for the age level 3-0 years.
(cross-sectional study)

Milieu		Sex		Totals
		Boys	Girls	
Urban	M	39.145	38.608	38.906
	SD	2.035	1.966	2.018
	N	107	86	193
Rural		39.625	36.300	38.647
		3.619	4.102	3.956
		12	5	17
				M 38.885
				SD 2.223
				N 210

Table 4.35(iii)-showing Arm length in cm. area x sex-wise for the age level 4-0 years.
(cross-sectional study)

Milieu		Sex		Totals
		Boys	Girls	
Urban	M	42.535	41.442	41.982
	SD	2.002	2.166	2.154
	N	176	180	356
Rural		41.343	41.296	41.323
		2.546	2.439	2.480
		35	27	62
				M 41.884
				SD 2.215
				N 418

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Table 4.35(iv)- showing Arm length in cm. area x sex-wise for
the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	45.443	44.269
	SD	2.248	2.980
	N	283	256
Rural		44.565	43.564
		2.518	2.758
		46	39
			M 44.779
			SD 2.692
			N 624

Table 4.35(v)-showing Arm length in cm. area x sex-wise for
the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	48.410	47.146
	SD	2.202	2.235
	N	150	135
Rural		47.489	47.126
		2.887	3.059
		37	31
			M 47.717
			SD 2.444
			N 353

Table 4.36-showing Arm length in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Level in years	Socio-Economic levels (SE)										Totals
	Low	Low-middle		Middle		High-middle		High			
		SE 1	SE 2	SE 3	SE 4	SE 5					
2 - 0	M	33.667	34.612	34.997	35.700	36.000	34.983				
	SD	1.539	2.920	2.500	2.082	0.500	2.478				
	N	6	25	34	19	3	87				
3 - 0	M	38.583	38.166	39.244	39.632	37.500	38.885				
	SD	2.987	2.176	2.119	1.754	-	2.224				
	N	18	71	82	38	1	210				
4 - 0	M	41.294	41.361	41.966	42.792	44.071	41.884				
	SD	2.340	2.238	1.954	2.253	1.836	2.215				
	N	33	148	154	76	7	418				
5 - 0	M	44.231	44.291	45.006	45.480	46.893	44.779				
	SD	2.635	2.224	3.197	2.054	2.647	2.692				
	N	68	204	227	111	14	624				
6 - 0	M	46.947	47.140	47.907	48.539	48.625	47.717				
	SD	2.592	2.203	2.416	2.464	2.602	2.444				
	N	38	110	121	76	8	353				

Table 4.36 (i)- showing Arm length in cm. socio-economic (SE) level x sex-wise for the age level 2-0 years. (cross-sectional study)

S.E.Level		Sex		Totals
		Boys	Girls	
Low	M	33.750	33.625	33.667
	SD	1.061	1.887	1.539
	N	2	4	6
Low-middle		34.253	35.150	34.612
		3.260	2.381	2.920
		15	10	25
Middle		35.667	34.244	34.997
		2.787	1.950	2.500
		18	16	34
High-middle		36.813	34.891	35.700
		1.945	1.856	2.082
		8	11	19
High		36.000	-	36.000
		0.500	-	0.500
		3	0	3
				M 34.983
				SD 2.478
				N 87

Table 4.36(ii)-showing Arm length in cm. socio-economic (SE) level x sex-wise for the age level 3-0 years. (cross-sectional study)

S.E.Level		Sex		Totals
		Boys	Girls	
Low	M	37.875	40.000	38.583
	SD	3.076	2.429	2.987
	N	12	6	18
Low-middle		39.028	37.280	38.166
		2.087	1.916	2.176
		36	35	71
Middle		39.561	38.773	39.244
		2.233	1.873	2.119
		49	33	82
High-middle		39.452	39.853	39.632
		1.688	1.861	1.754
		21	17	38
High		37.500	-	37.500
		-	-	-
		1	0	1
				M 38.885
				SD 2.224
				N 210

Table 4.36(iii)-showing Arm length in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 41.167	41.400	41.294
	SD 2.193	2.513	2.340
	N 15	18	33
Low-middle	42.051	40.775	41.361
	2.250	2.067	2.238
	68	80	148
Middle	42.438	41.338	41.966
	1.892	1.867	1.954
	88	66	154
High-middle	42.966	42.618	42.792
	2.216	2.306	2.253
	38	38	76
High	44.500	43.900	44.071
	3.536	1.342	1.836
	2	5	7
			M 41.884
			SD 2.215
			N 418

Table 4.36(iv)-showing Arm length in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 44.868	43.397	44.231
	SD 2.468	2.654	2.635
	N 39	29	68
Low-middle	44.689	43.893	44.291
	2.291	2.090	2.224
	102	102	204
Middle	45.575	44.328	45.006
	2.213	3.920	3.197
	122	105	227
High-middle	45.869	45.006	45.480
	2.029	2.003	2.054
	61	50	111
High	48.167	45.938	46.893
	2.090	2.731	2.647
	6	8	14
			M 44.779
			SD 2.692
			N 624

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Table 4.36(v)-showing Arm length in cm. socio-economic (SE)
level x sex-wise for the age level 4-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	47.545	46.125
	SD	2.252	2.866
	N	22	16
Low-middle		47.905	46.287
		1.882	2.237
		58	52
Middle		48.052	47.766
		2.563	2.273
		60	61
High-middle		49.102	47.766
		2.524	2.189
		44	32
High		50.167	47.700
		2.754	2.281
		3	5
			M 47.717
			SD 2.444
			N 353

GRAPH NO. 4-36

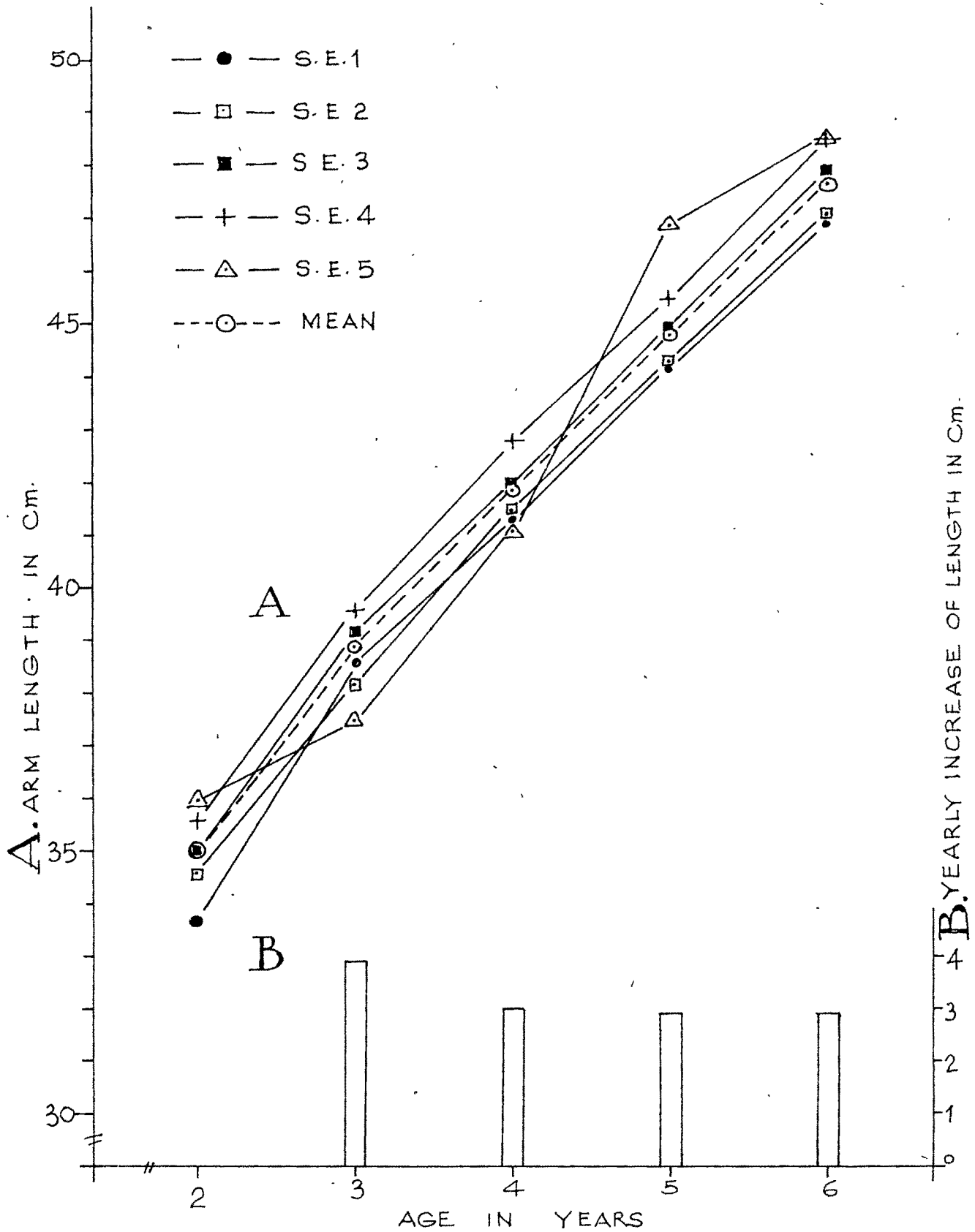


Table 4.37 - showing M and SD for Sitting Height in cm. at 17
age-points for whole sample area-wise, sex-wise and
area X sex-wise. (cross-sectional study)

Age-point Yrs./months	Milieu X sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
1	2	3	4	5
2 - 0	47.18 2.504	46.22 2.175	47.39 3.489	45.93 2.508
2 - 3	48.59 2.477	47.82 2.688	49.11 2.478	47.55 2.153
2 - 6	49.16 2.617	48.27 1.991	49.12 3.424	47.56 2.256
2 - 9	49.29 2.374	48.79 2.146	49.98 2.940	48.02 3.118
3 - 0	49.70 2.511	49.27 2.565	51.62 3.136	48.70 3.134
3 - 3	50.37 2.422	49.30 2.209	51.61 2.727	49.82 3.522
3 - 6	51.33 2.053	49.95 2.316	53.15 2.987	51.14 3.715
3 - 9	51.74 2.561	51.21 2.143	53.30 2.646	52.96 3.126
4 - 0	52.57 1.985	51.84 2.360	53.30 2.817	52.96 2.432
4 - 3	53.59 2.287	52.86 2.267	54.91 2.715	54.01 2.675
4 - 6	54.53 2.338	53.54 2.020	54.91 2.433	54.16 2.433
4 - 9	55.44 2.392	54.42 2.568	56.15 2.808	54.23 2.883
5 - 0	56.36 2.500	55.34 2.833	56.20 2.604	54.89 2.674
5 - 3	56.73 2.804	55.54 2.467	56.19 2.456	55.73 2.668
5 - 6	57.75 2.560	56.44 2.493	57.57 2.805	55.98 2.962
5 - 9	58.60 2.640	57.24 2.525	57.57 2.770	56.64 2.790
6 - 0	59.47 2.683	58.07 2.508	58.84 2.997	57.91 2.366

Table 4.37 - contd.

Sitting height in cm.

Age- point Yrs.Mo.	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	10
2-0	46.74 2.392	45.56 3.410	47.21	46.15	46.51 2.641
2-3	48.22 2.599	48.31 2.271	48.63	47.77	48.31 2.452
2-6	48.75 2.383	48.26 3.021	49.15	48.20	48.70 2.452
2-9	49.05 2.276	49.53 3.001	49.40	47.39	49.14 2.518
3-0	49.51 2.538	50.06 3.135	49.89	49.23	49.57 2.698
3-3	49.73 2.407	50.80 3.170	50.58	49.38	49.90 2.567
3-6	50.66 2.285	52.52 3.327	51.84	50.13	51.08 2.665
3-9	51.50 2.388	53.11 2.901	51.97	51.56	51.78 2.555
4-0	52.29 2.227	53.02 2.648	52.69	51.98	52.40 2.306
4-3	53.25 2.304	54.58 2.712	53.84	53.01	53.48 2.474
4-6	54.07 2.191	54.58 2.446	54.60	53.63	54.16 2.280
4-9	54.98 2.525	55.33 2.880	55.56	54.39	55.03 2.607
5-0	55.88 2.741	55.38 2.661	56.33	55.28	55.81 2.721
5-3	56.12 2.663	55.96 2.562	56.33	55.58	56.09 2.578
5-6	57.09 2.582	56.89 2.957	57.72	56.38	57.06 2.638
5-9	57.94 2.652	57.20 2.780	58.38	57.11	57.78 2.664
6-0	58.80 2.689	58.41 2.748	59.34	58.01	58.73 2.701

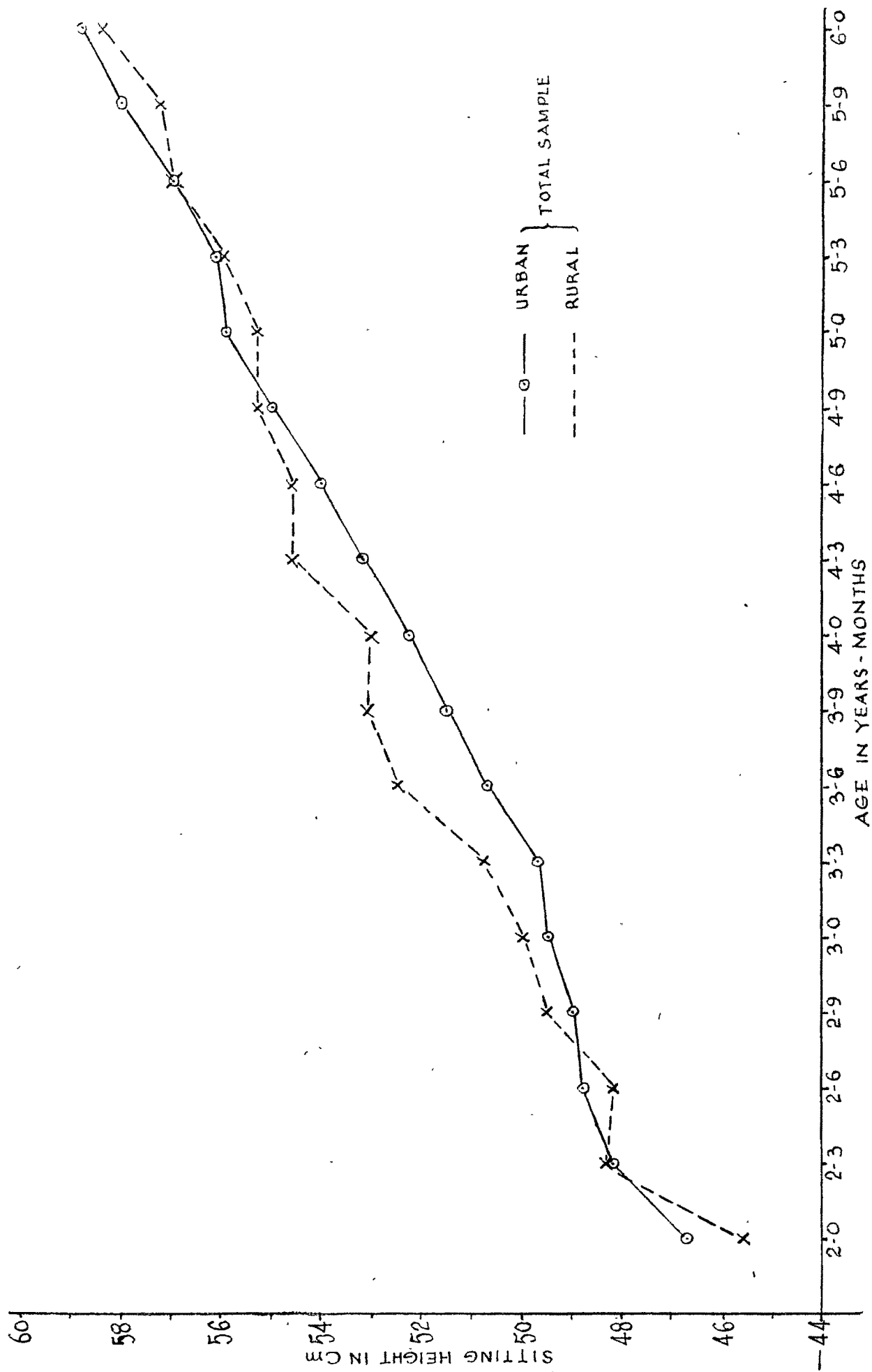


FIG. 4.37 (i.)

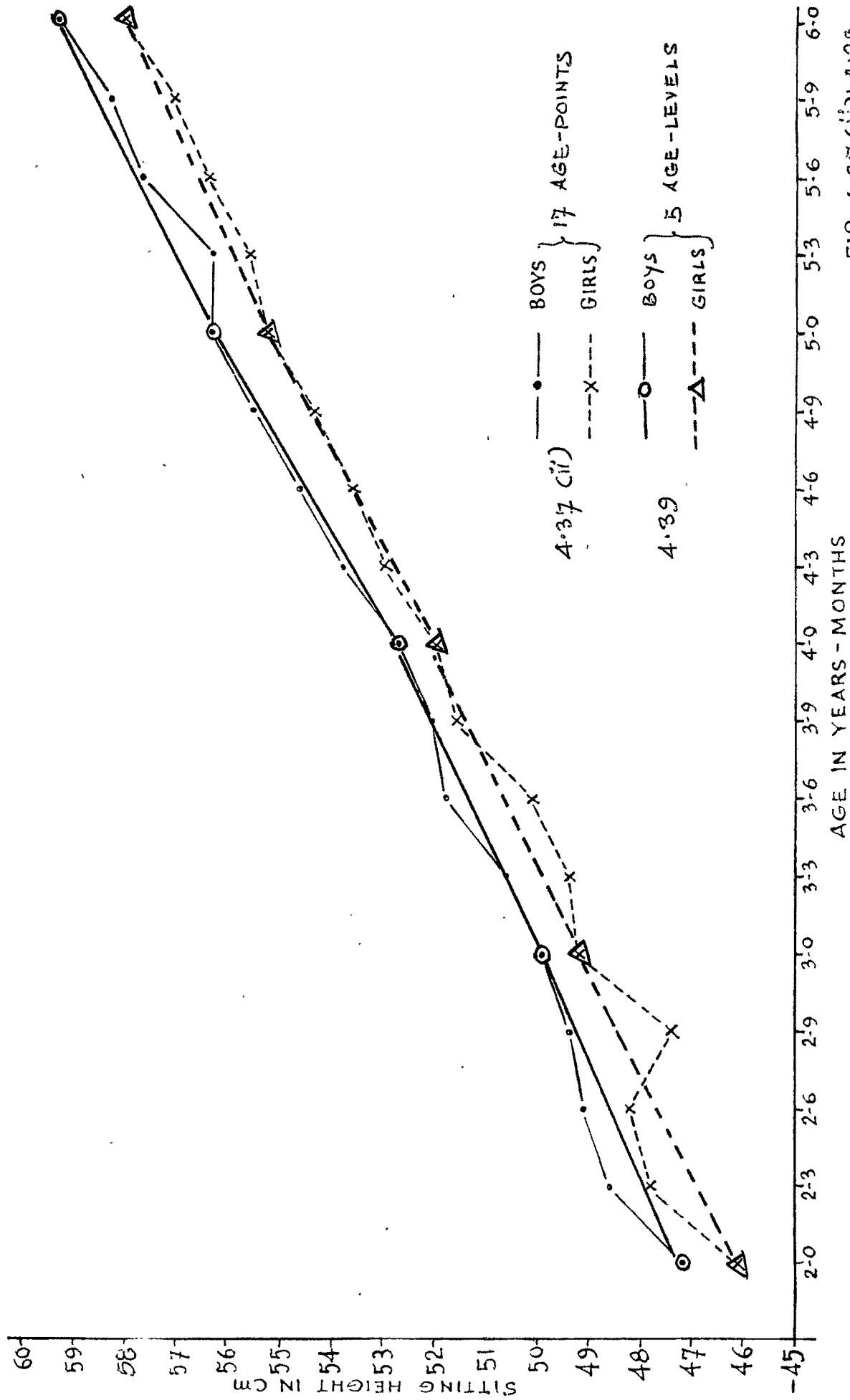
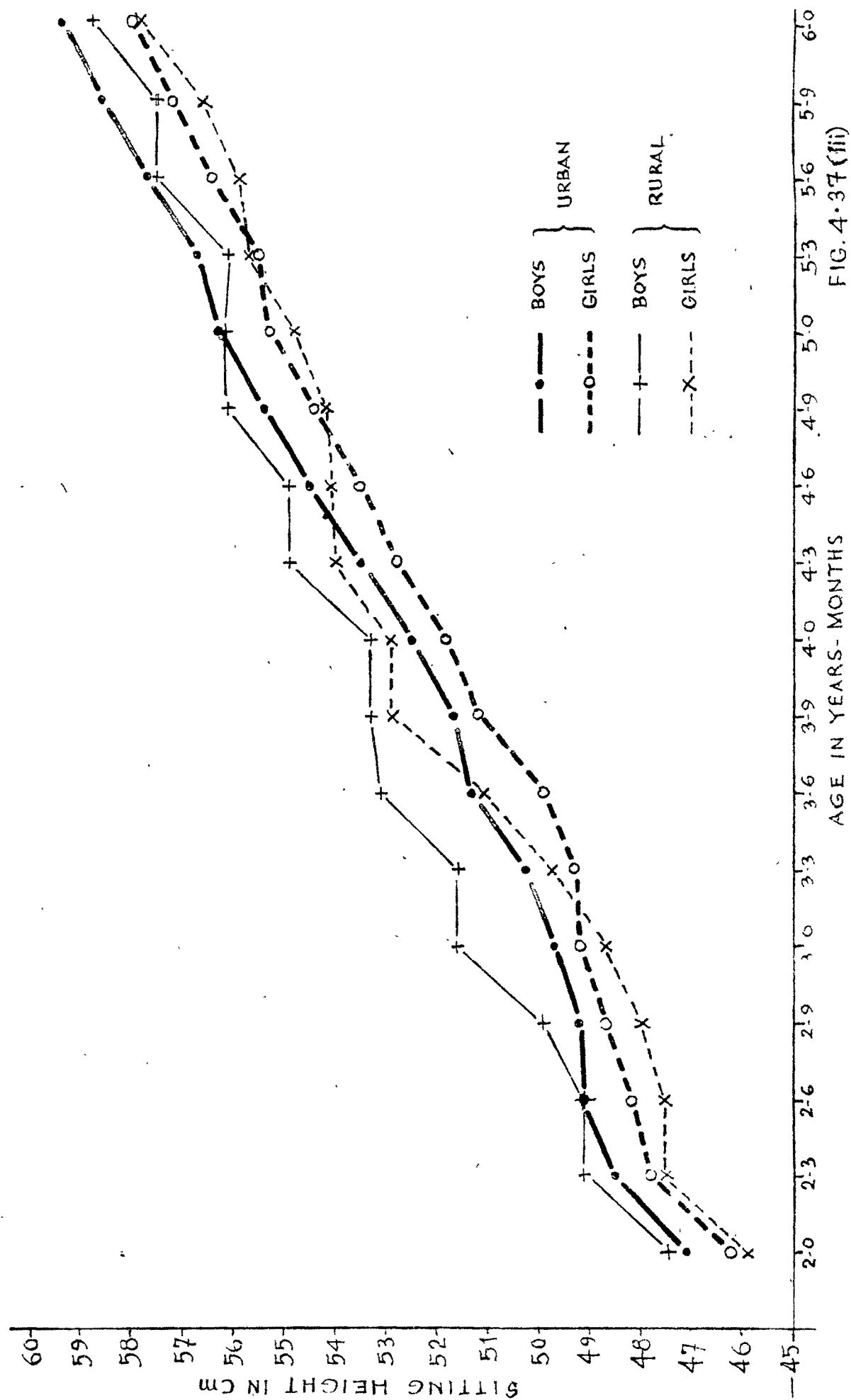
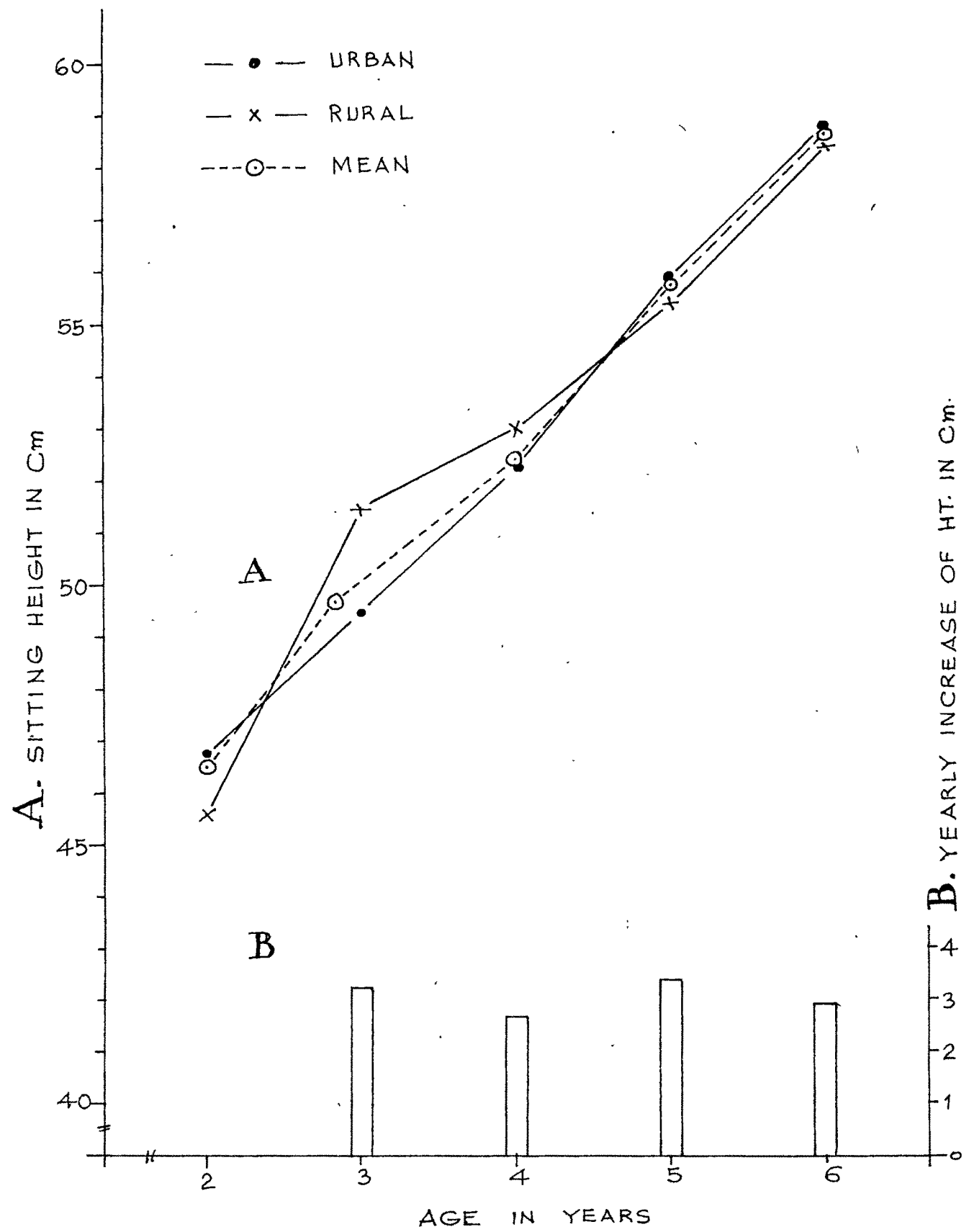


FIG. 4.37 (ii) + 4.39



GRAPH NO. 4.38



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Table 4.39(i)-showing Sitting height in cm. area x sex-wise
for the age level 2-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M 47.184	46.219	46.743
	SD 2.504	2.175	2.392
	N 38	32	70
Rural	47.387	43.933	45.559
	3.489	2.508	3.410
	8	9	17
			M 46.511
			SD 2.641
			N 87

Table 4.39(ii)-showing Sitting height in cm. area x sex-wise
for the age level 3-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M 49.703	49.271	49.510
	SD 2.511	2.565	2.538
	N 107	86	193
Rural	52.617	48.700	51.465
	3.136	3.958	3.750
	12	5	17
			M 49.668
			SD 2.698
			N 210

Table 4.39(iii)-showing Sitting height in cm. area x sex-wise
for the age level 4-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M 52.756	51.839	52.292
	SD 1.985	2.360	2.227
	N 176	180	356
Rural	53.248	52.722	53.019
	2.817	2.432	2.648
	35	27	62
			M 52.400
			SD 2.306
			N 418

Table 4.39(iv)-showing Sitting height in cm. area x sex-wise
for the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	56.366	55.344
	SD	2.500	3.833
	N	283	256
Rural		55.802	54.879
		2.604	2.674
		46	39
			M 55.812
			SD 3.171
			N 624

Table 4.39(v)-showing Sitting height in cm. area x sex-wise
for the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	59.468	58.074
	SD	2.683	2.508
	N	150	135
Rural		58.840	57.910
		2.997	2.366
		37	31
			M 58.732
			SD 2.701
			N 353

Table 4.40-showing Sitting height in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Level in years	Socio-Economic levels (SE)					Totals
	Low	Low-middle	Middle	High-middle	High	
	SE 1	SE 2	SE 3	SE 4	SE 5	
2 - 0	M 44.433	46.424	46.329	47.405	47.800	46.511
	SD 1.204	2.957	2.397	2.681	2.879	2.641
	N 6	25	34	19	3	87
3 - 0	49.339	48.793	49.928	50.900	49.700	49.668
	2.958	2.083	2.908	2.671	-	2.698
	18	71	82	38	1	210
4 - 0	51.848	52.034	52.626	52.721	54.300	52.400
	2.765	2.366	1.946	2.408	2.858	2.298
	33	148	154	76	7	418
5 - 0	55.031	55.561	55.694	56.326	57.021	55.720
	2.862	2.522	3.375	3.772	3.162	3.165
	68	204	227	111	14	624
6 - 0	58.237	58.479	58.759	59.343	58.387	58.733
	2.952	2.615	2.673	2.494	4.027	2.692
	38	110	121	76	8	353

Table 4.40(i)-showing Sitting height in cm. socio-economic (SE)
level x sex-wise for the age level 2-0 years.
(cross-sectional study)

S. E. Level	Sex		Totals
	Boys	Girls	
Low	M 44.650	44.325	44.433
	SD 2.616	0.286	1.204
	N 2	4	6
Low-middle	47.153	45.330	46.424
	3.275	2.103	2.957
	15	10	25
Middle	46.678	45.937	46.329
	2.047	2.754	2.397
	18	16	34
High-middle	48.987	46.255	47.405
	2.008	2.580	2.681
	8	11	19
High	47.800	-	47.800
	2.879	-	2.879
	3	0	3
			M 46.511
			SD 2.641
			N 87

Table 4.40(ii)-showing Sitting height in cm. socio-economic (SE)
level x sex-wise for the age level 3-0 years.
(cross-sectional study)

S. E. Level	Sex		Totals
	Boys	Girls	
Low	M 48.900	50.217	49.339
	SD 3.184	2.461	2.958
	N 12	6	18
Low-middle	49.019	48.560	48.793
	2.199	1.960	2.083
	36	35	71
Middle	50.541	49.018	49.928
	2.779	2.896	2.908
	49	33	82
High-middle	51.043	50.723	50.900
	2.542	2.892	2.671
	21	17	38
High	49.700	-	49.700
	-	-	-
	1	-	1
			M 49.668
			SD 2.698
			N 210

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Table 4.40(iii)-showing Sitting height in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	51.513	51.848
	SD	2.201	2.765
	N	15	33
Low-middle		52.521	52.034
		2.385	2.366
		68	148
Middle		53.158	52.626
		1.756	1.946
		88	154
High-middle		52.974	52.721
		2.002	2.408
		38	76
High		56.900	54.300
		4.101	2.858
		2	7
			M 52.400
			SD 2.298
			N 418

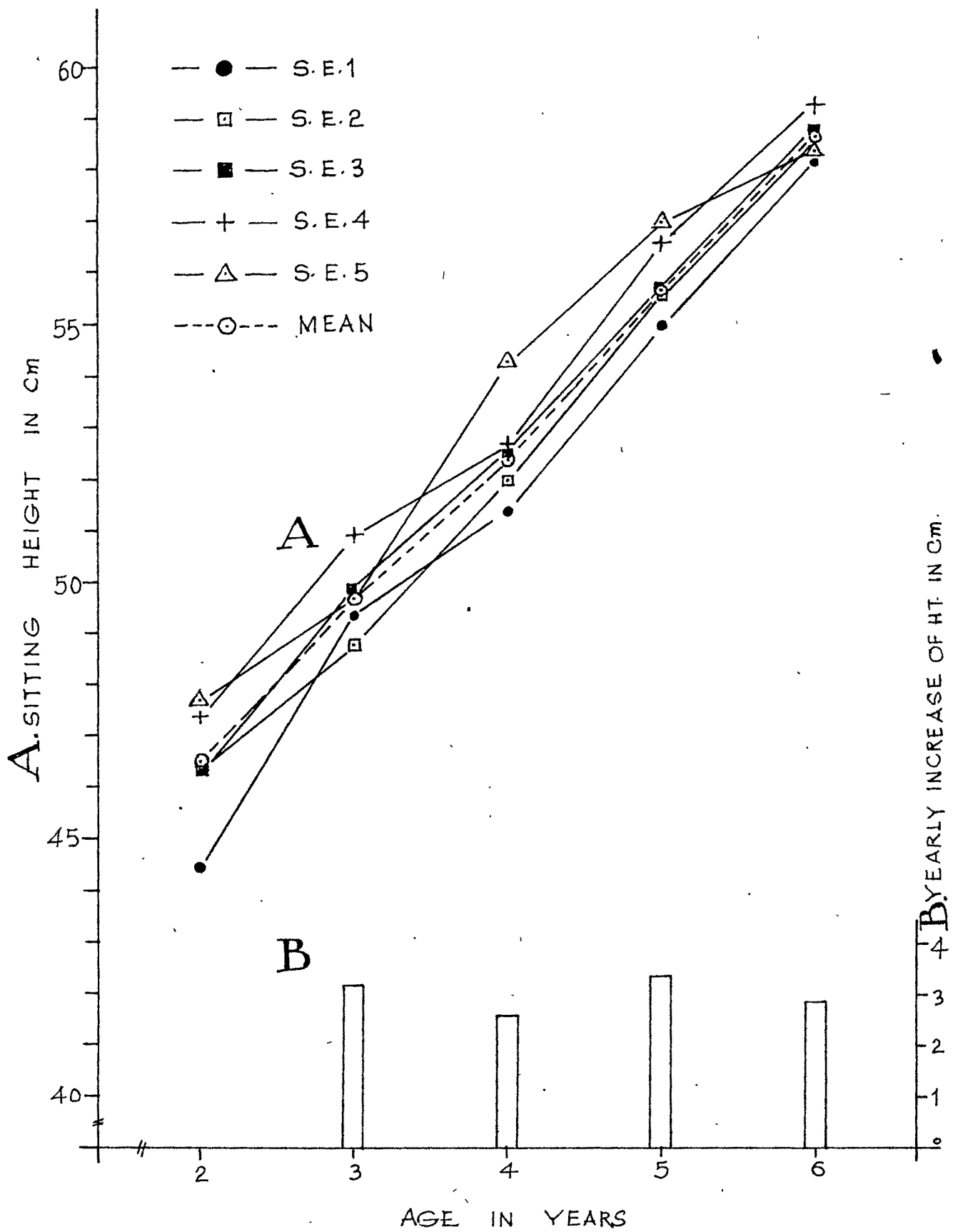
Table 4.40(iv)-showing Sitting height in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	56.047	55.031
	SD	2.317	2.862
	N	39	68
Low-middle		55.958	55.561
		2.362	2.522
		102	204
Middle		56.363	55.694
		2.736	3.375
		122	227
High-middle		56.543	56.326
		2.188	3.772
		61	111
High		59.283	57.021
		2.878	3.162
		6	14
			M 55.720
			SD 3.165
			N 624

Table 4.40(v)- showing Sitting height in cm. socio-economic (SE) level x sex-wise for the age level 6-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	59.409	56.625
	SD	2.691	2.563
	N	22	16
Low-middle		59.331	57.529
		2.264	2.672
		58	52
Middle		59.083	58.439
		2.990	2.300
		60	61
High-middle		59.770	58.756
		2.700	2.081
		44	32
High		58.100	58.560
		6.929	2.068
		3	5
			M 58.733
			SD 2.692
			N 353

GRAPH NO. 4.40



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Table 4.41 - showing M and SD for Upper arm circumference in cm.
at 17 age-points for whole sample area-wise, sex-
wise and area X sex-wise. (cross-sectional study)

Age-point Yrs./months	Milieu X sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
1	2	3	4	5
2 - 0	13.91 1.193	13.74 1.058	13.95 1.134	13.10 0.539
2 - 3	14.27 0.962	14.17 1.261	14.58 1.069	13.65 0.587
2 - 6	14.38 1.055	14.17 0.976	14.32 1.134	13.82 0.928
2 - 9	14.30 0.926	14.12 0.983	14.58 0.959	14.03 1.150
3 - 0	14.39 0.982	14.25 0.990	15.29 1.056	13.64 0.850
3 - 3	14.42 0.972	14.14 0.932	14.41 0.947	13.88 1.259
3 - 6	14.61 0.931	14.46 0.951	14.19 0.839	14.38 0.737
3 - 9	14.88 1.498	14.64 0.997	14.49 0.981	14.66 0.837
4 - 0	14.66 0.833	14.78 1.012	14.29 0.774	14.55 0.704
4 - 3	14.71 0.906	14.81 1.022	14.34 1.018	14.70 1.007
4 - 6	14.76 0.915	15.07 1.297	14.39 1.016	14.38 0.806
4 - 9	14.79 0.930	14.82 1.006	14.72 1.039	14.31 0.836
5 - 0	15.03 1.540	15.16 1.233	14.23 0.912	14.38 0.926
5 - 3	14.86 1.489	14.92 0.934	14.39 1.027	14.46 0.616
5 - 6	14.96 0.991	14.98 1.026	14.11 0.848	14.51 1.050
5 - 9	15.01 1.009	14.99 0.939	14.36 1.043	14.48 0.725
6 - 0	15.14 1.026	15.05 1.018	15.28 1.174	14.60 1.084

Note - The character is quite variable by its very nature; it can fluctuate in +ve and -ve direction.

Table 4.41 - contd.

Upper arm circumference in cm.

Age-point Yrs.Mo.	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	10
2-0	13.83 1.129	13.50 0.948	13.91	13.59	13.77 1.099
2-3	14.22 1.112	14.00 0.897	14.29	14.09	14.19 1.088
2-6	14.29 1.022	14.13 1.059	14.37	14.13	14.27 1.023
2-9	14.22 0.953	14.32 1.069	14.34	14.10	14.24 0.971
3-0	14.33 0.985	14.80 1.245	14.48	14.21	14.37 1.014
3-3	14.29 0.959	14.17 1.106	14.41	14.09	14.27 0.982
3-6	14.54 0.940	14.25 0.806	14.49	14.44	14.49 0.918
3-9	14.76 1.655	14.58 0.899	14.62	14.64	14.74 1.442
4-0	14.72 0.928	14.41 0.750	14.59	14.75	14.68 0.910
4-3	14.76 0.961	14.46 0.023	14.63	14.79	14.71 0.977
4-6	14.90 1.257	14.39 0.929	14.69	14.96	14.81 1.281
4-9	14.81 0.965	14.29 0.953	14.77	14.74	14.72 0.982
5-0	15.09 1.398	14.30 0.916	14.91	15.05	14.98 1.269
5-3	14.88 1.234	14.23 0.840	14.77	14.83	14.81 1.186
5-6	14.97 1.007	14.28 0.952	14.81	14.91	14.87 1.028
5-9	15.00 0.974	14.38 0.898	14.87	14.87	14.87 0.989
6-0	15.10 1.022	14.97 1.169	15.16	14.96	15.07 1.143

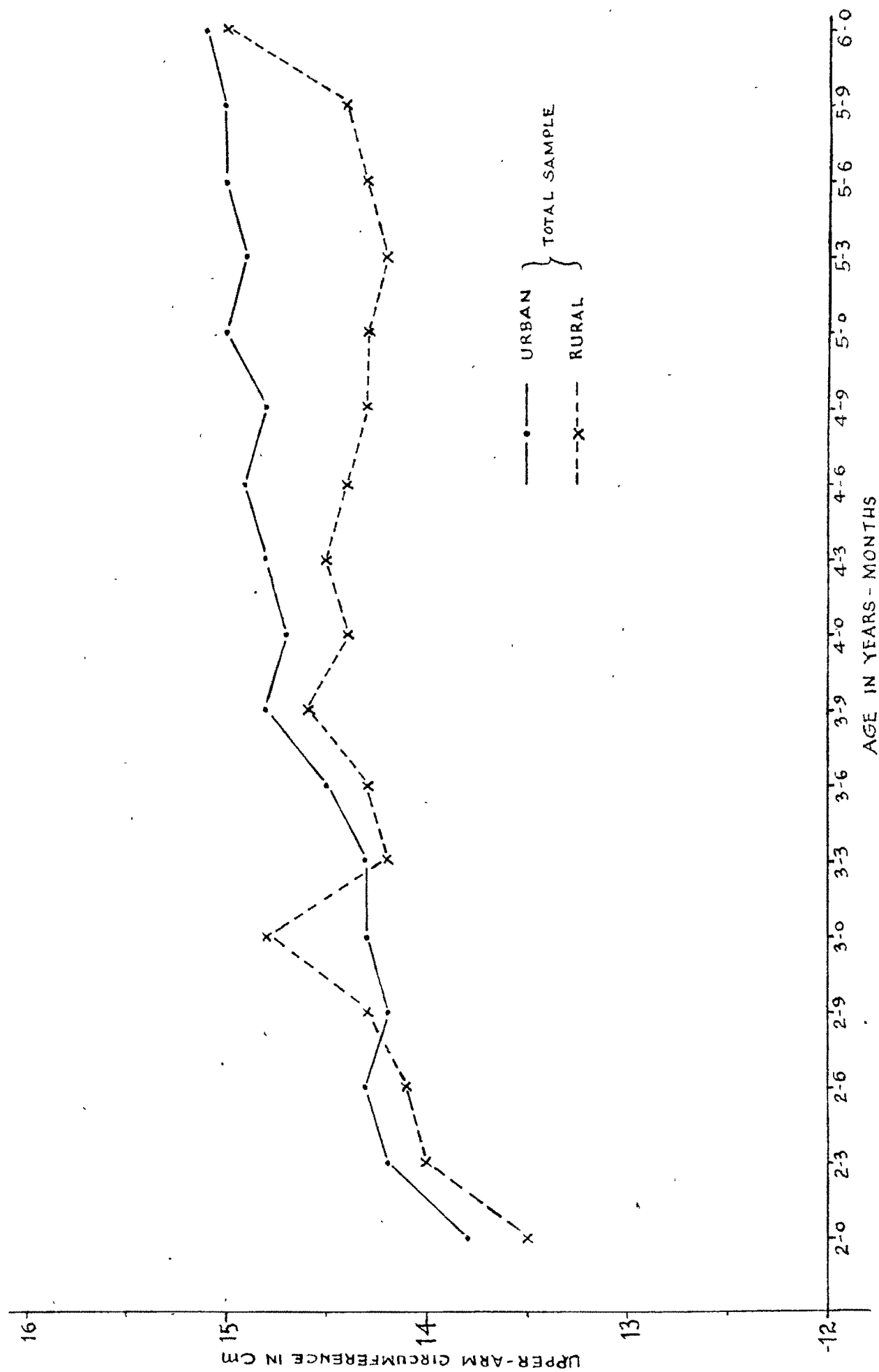


FIG. 4.4† (i.)

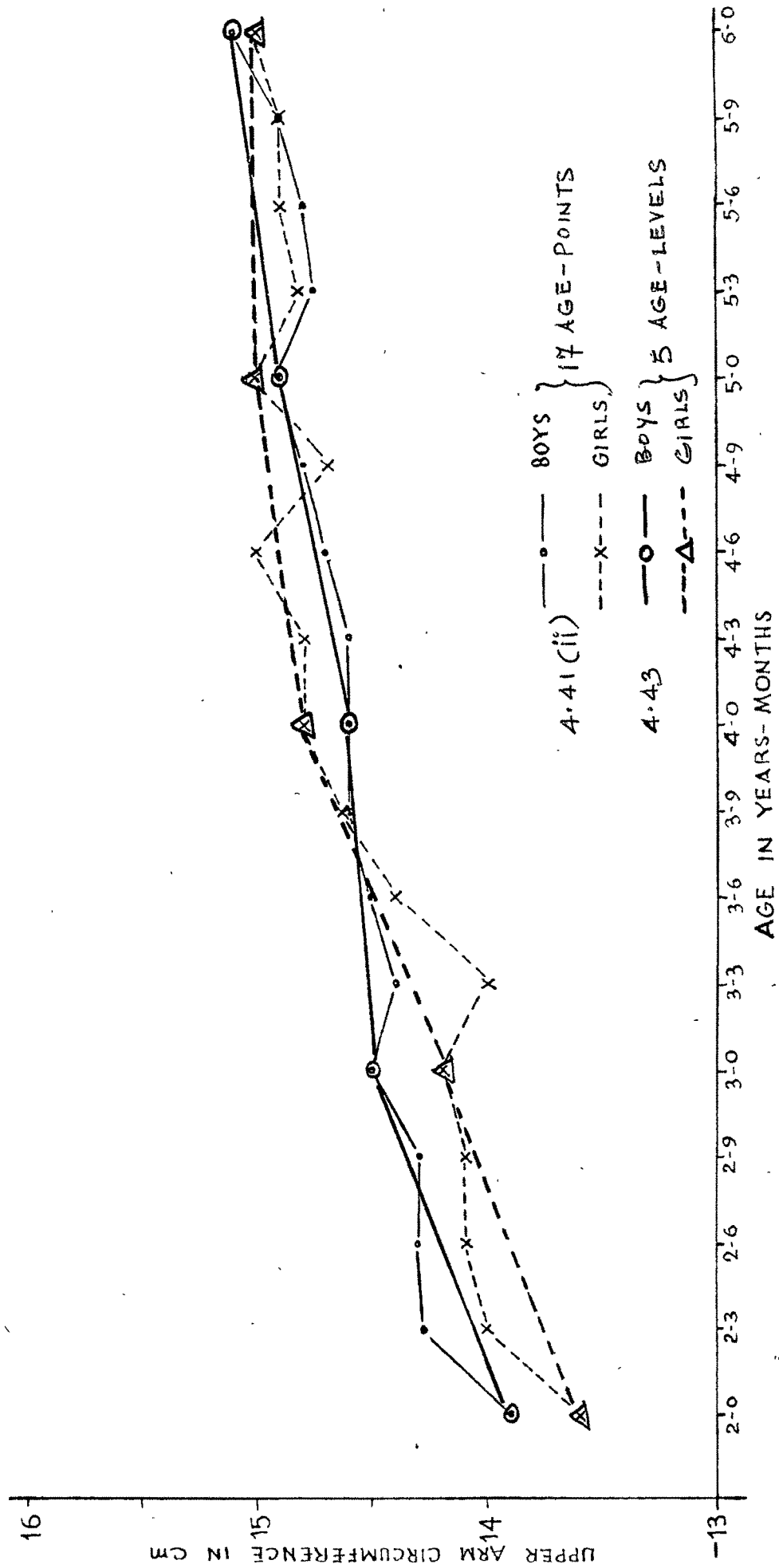


FIG. 4.41 (ii) + 4.43

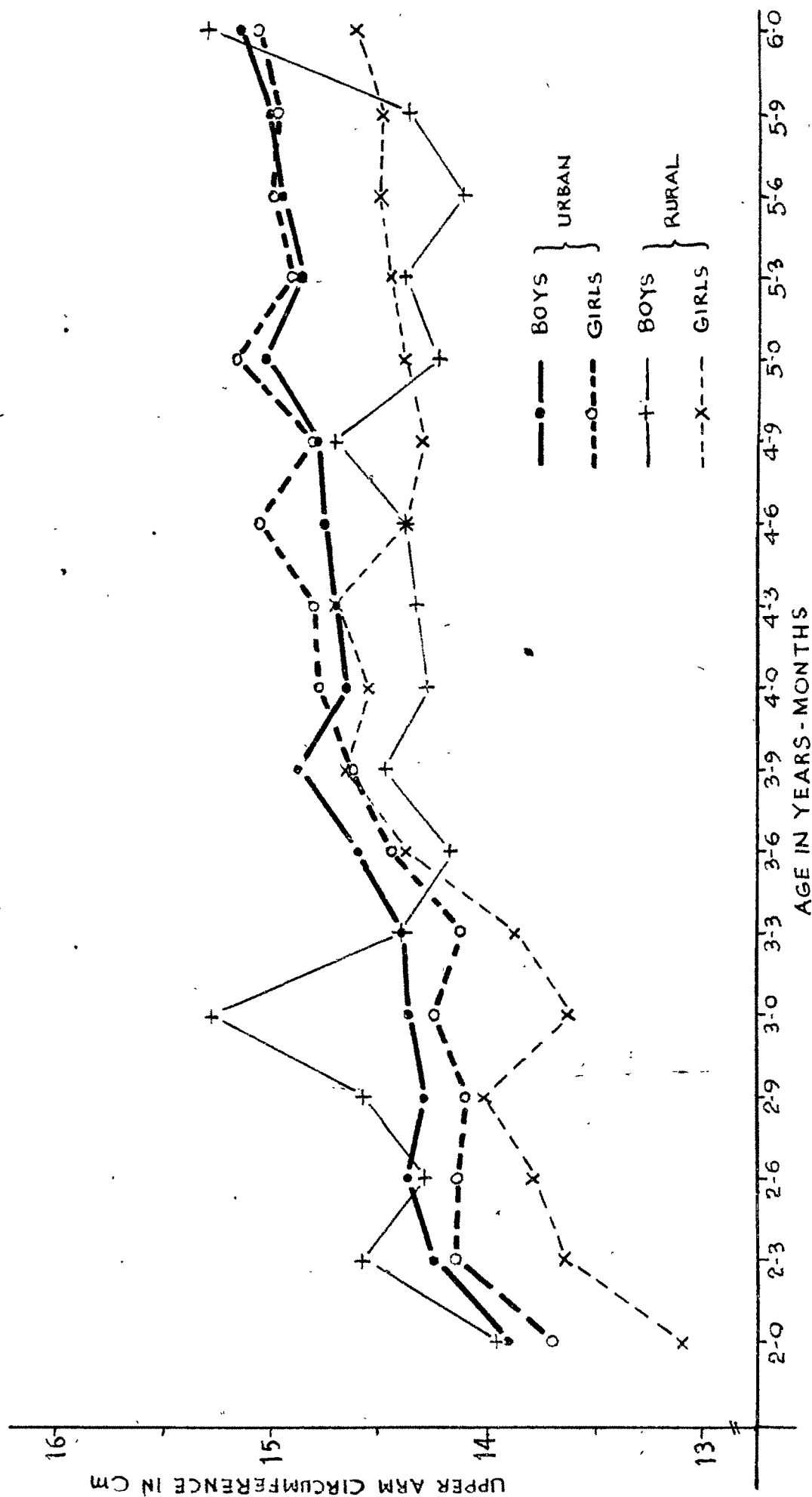


FIG. 4.41 (ii)

GRAPH NO. 4.42

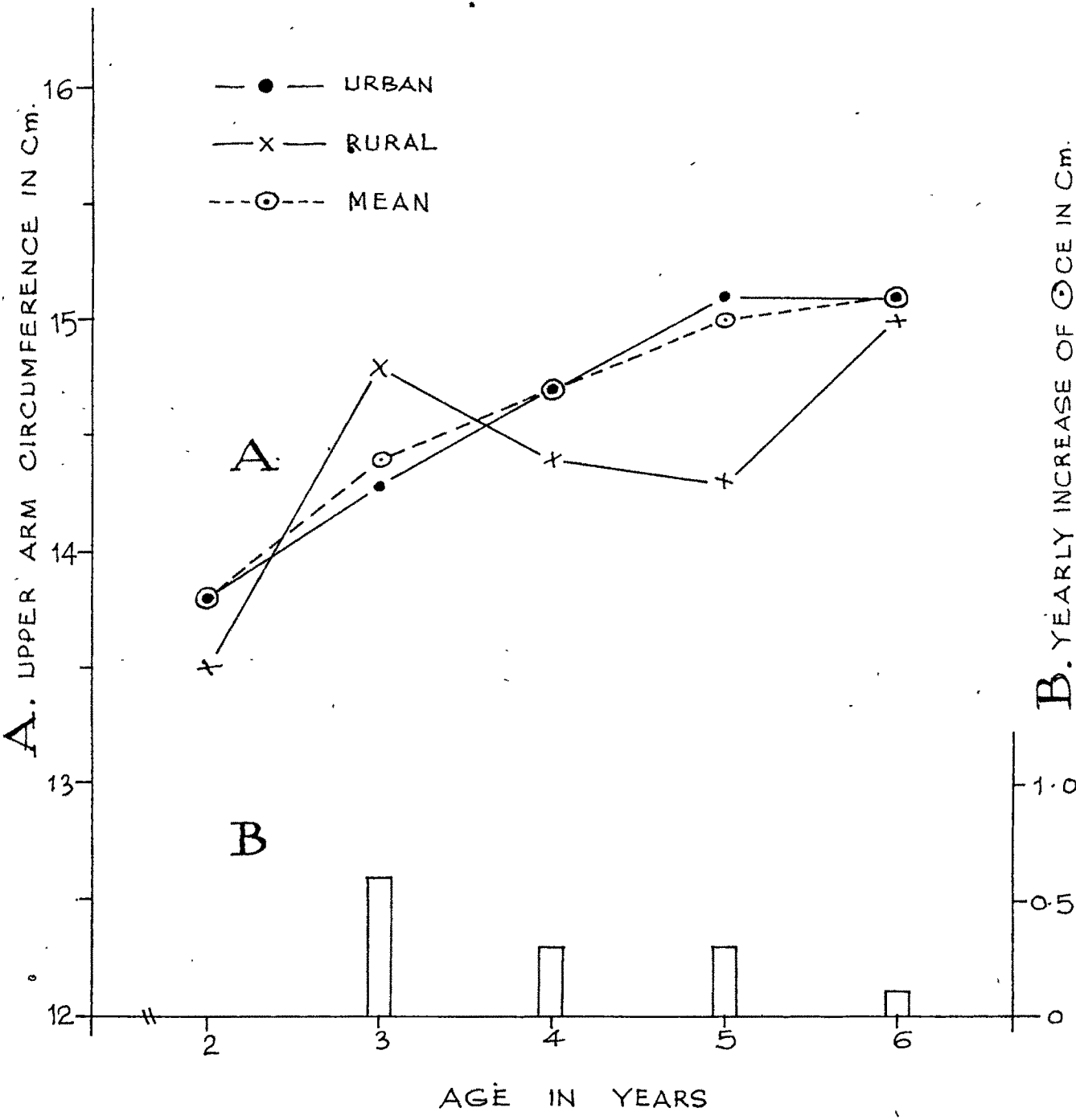


Table 4.43(i)-showing Upper arm circumference in cm. area x sex-wise for the age level 2-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	13.908	13.831
	SD	1.193	1.129
	N	38	70
Rural		13.950	13.500
		1.134	0.948
		8	17
			M 13.767
			SD 1.099
			N 87

Table 4.43(ii)-showing Upper arm circumference in cm. area x sex-wise for the age level 3-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	14.392	14.331
	SD	0.982	0.985
	N	107	193
Rural		15.292	14.806
		1.056	1.245
		12	17
			M 14.370
			SD 1.014
			N 210

Table 4.43(iii)-showing Upper arm circumference in cm. area x sexwise for the age level 4-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	14.662	14.722
	SD	0.833	0.928
	N	176	356
Rural		14.291	14.405
		0.774	0.750
		35	62
			M 14.675
			SD 0.910
			N 418

Table 4.43(iv)-showing Upper arm circumference in cm. area x sex-wise for the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	15.034	15.086
	SD	2.540	2.398
	N	283	539
Rural		14.230	14.299
		0.912	0.916
		46	85
			M 14.979
			SD 2.269
			N 624

Table 4.43(v)-showing Upper arm circumference in cm. area x sex-wise for the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	15.143	15.099
	SD	1.026	1.022
	N	150	285
Rural		15.281	14.972
		4.974	3.733
		37	68
			M 15.074
			SD 1.870
			N 353

Table 4.44--showing Upper-arm circumference in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Level in years	Socio-Economic levels (SE)										Totals
	Low	Low-middle	Middle	High-middle	High						
	SE 1	SE 2	SE 3	SE 4	SE 5						
2 - 0	M	12.583	13.600	13.832	14.295	13.433	13.767				
	SD	0.736	1.227	0.862	1.190	0.209	1.099				
	N	6	25	34	19	3	87				
3 - 0	M	14.389	13.982	14.504	14.805	14.000	14.370				
	SD	1.152	0.953	0.922	1.043	-	1.014				
	N	18	71	82	38	1	210				
4 - 0	M	14.348	14.551	14.768	14.808	15.357	14.675				
	SD	0.850	0.814	1.003	0.868	0.690	0.911				
	N	33	148	154	76	7	418				
5 - 0	M	14.412	14.722	15.078	15.080	15.429	14.939				
	SD	0.883	0.948	3.099	2.570	1.158	2.269				
	N	68	204	227	111	14	624				
6 - 0	M	15.253	14.844	15.097	15.259	15.312	15.074				
	SD	4.927	1.014	1.054	0.928	1.339	1.870				
	N	38	110	121	76	8	353				

Table 4.44(i)-showing Upper arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 2-0 years. (cross-sectional study)

S. E. Level	Sex		Totals
	Boys	Girls	
Low	M	12.250	12.583
	SD	1.061	0.736
	N	2	6
Low-middle		13.647	13.600
		1.202	1.227
		15	25
Middle		13.967	13.832
		0.957	0.862
		18	34
High-middle		14.900	14.295
		1.169	1.190
		8	19
High		13.433	13.433
		0.209	0.209
		3	3
			M 13.767
			SD 1.099
			N 87

Table 4.44(ii)-showing Upper arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 3-0 years. (cross-sectional study)

S. E. Level	Sex		Totals
	Boys	Girls	
Low	M	14.542	14.389
	SD	1.280	1.152
	N	12	18
Low-middle		14.089	13.982
		0.874	0.953
		36	71
Middle		14.639	14.504
		0.953	0.922
		49	82
High-middle		14.781	14.805
		1.142	1.043
		21	38
High		14.000	14.000
		-	-
		1	1
			M 14.370
			SD 1.014
			N 210

Table 4.44(iii)-showing Upper arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 14.040	14.606	14.348
	SD 0.814	0.813	0.850
	N 15	18	33
Low-middle	14.554	14.549	14.551
	0.792	0.838	0.814
	68	80	148
Middle	14.632	14.950	14.768
	0.852	1.156	1.002
	88	66	154
High-middle	14.774	14.842	14.808
	0.780	0.958	0.868
	38	38	76
High	15.750	15.202	15.357
	0.354	0.758	0.690
	2	5	7
			M 14.675
			SD 0.911
			N 418

Table 4.44(iv)-showing Upper arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 14.189	14.703	14.412
	SD 0.926	0.740	0.883
	N 39	29	68
Low-middle	14.741	14.703	14.722
	1.003	0.894	0.948
	102	102	204
Middle	15.201	14.902	15.078
	3.706	2.212	3.099
	122	105	227
High-middle	15.070	15.146	15.080
	0.893	3.696	2.570
	61	50	111
High	15.417	15.438	15.429
	0.801	1.425	1.158
	6	8	14
			M 14.979
			SD 2.269
			N 624

Table 4.44(v)- showing Upper arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 6-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	15.614	14.756
	SD	6.479	0.815
	N	22	16
Low-middle		14.971	14.702
		1.074	0.932
		58	52
Middle		15.097	15.097
		0.923	1.177
		60	61
High-middle		15.291	15.216
		0.923	0.947
		44	32
High		15.500	15.200
		1.732	1.263
		3	5
			M 15.074
			SD 1.870
			N 353

GRAPH NO. 4.44

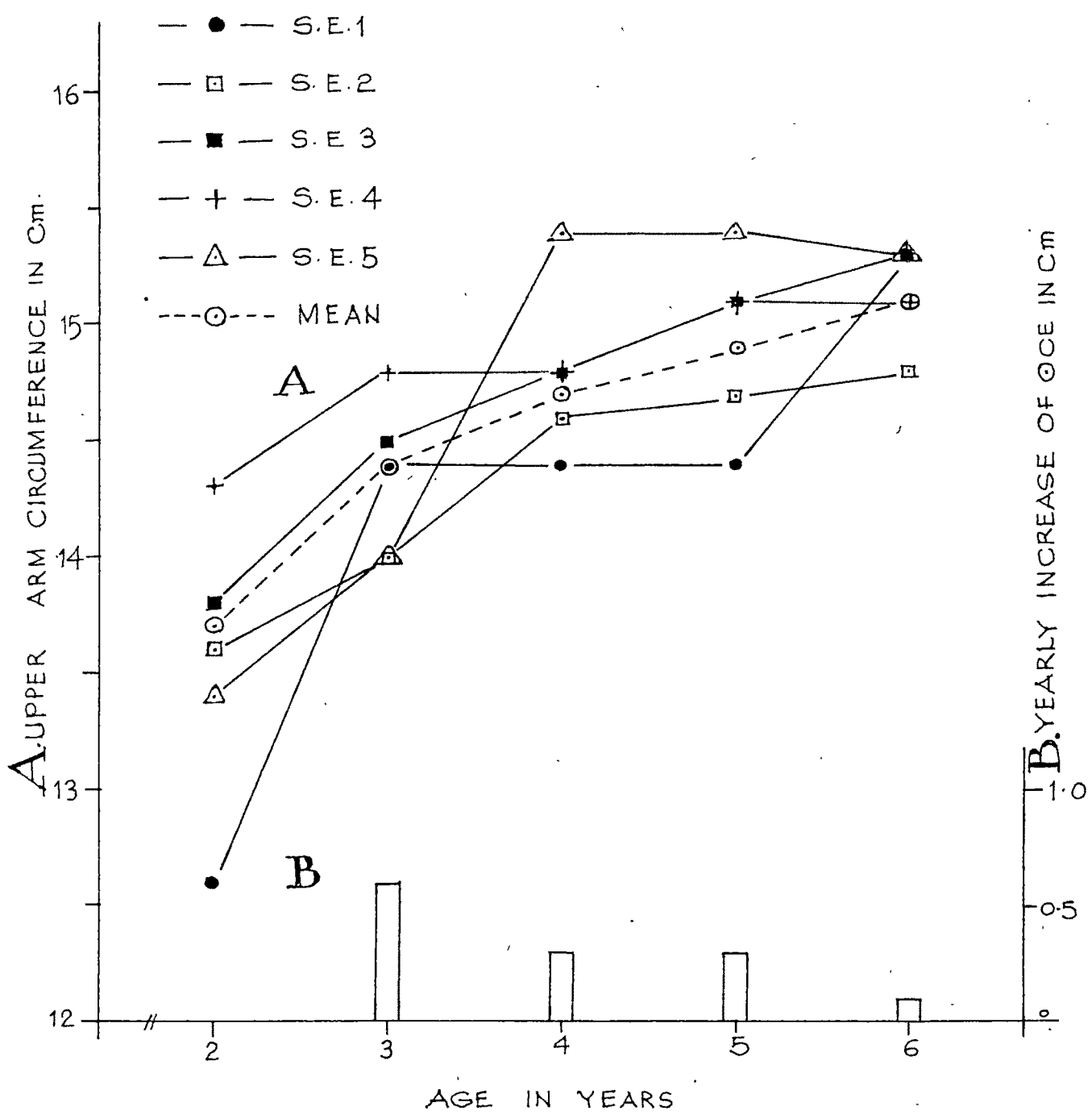


Table 4.45 - showing M and SD for Fore-arm circumference in cm. at 17 age-points for whole sample area-wise, sex-wise and area X sex-wise. (cross-sectional study).

Age-point Yrs./months	Milieu X sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
	1	2	3	4
2 - 0	13.93 0.957	13.73 0.925	13.57 1.413	13.52 0.691
2 - 3	14.43 0.916	14.20 1.098	14.11 1.625	13.68 0.744
2 - 6	14.55 0.964	14.15 0.848	13.42 1.433	13.80 1.105
2 - 9	14.53 0.765	14.22 0.870	14.13 1.322	14.16 0.983
3 - 0	14.62 0.844	14.38 0.861	14.94 1.551	13.94 1.137
3 - 3	14.68 0.825	14.35 0.871	14.28 1.203	13.95 1.106
3 - 6	14.81 0.780	14.52 0.825	14.70 0.899	14.45 0.988
3 - 9	15.31 1.457	14.68 0.831	14.76 1.200	14.85 0.857
4 - 0	14.96 0.769	14.81 0.854	14.59 0.960	14.60 0.835
4 - 3	15.09 0.815	14.91 0.831	14.82 0.952	14.91 0.893
4 - 6	15.12 0.803	15.19 1.140	14.94 0.844	14.86 0.696
4 - 9	15.19 0.819	15.01 0.826	14.94 0.843	14.72 0.891
5 - 0	15.35 0.805	15.214 1.046	14.95 0.579	14.68 0.742
5 - 3	15.35 1.424	15.11 0.815	15.09 0.755	14.76 0.622
5 - 6	15.48 0.789	15.17 0.827	14.90 0.859	14.85 0.873
5 - 9	15.64 0.828	15.21 0.863	15.08 0.829	14.95 0.694
6 - 0	15.73 0.856	15.31 0.866	15.38 0.883	15.13 0.778

Table 4.45 - contd.

Fore-arm circumference in cm.

Age- point Yrs.Mo.	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	10
2-0	13.84 0.942	13.54 0.550	13.86	13.68	13.79 0.966
2-3	14.32 1.009	13.84 1.122	14.40	14.12	14.26 1.030
2-6	14.37 0.931	13.56 1.295	14.41	14.11	14.28 1.002
2-9	14.39 0.826	14.14 1.156	14.46	14.20	14.35 0.891
3-0	14.51 0.857	14.65 1.482	14.65	14.35	14.52 0.919
3-3	14.53 0.859	14.13 1.145	14.61	14.28	14.56 0.920
3-6	14.68 0.813	14.62 0.924	14.77	14.50	14.66 0.837
3-9	14.92 1.547	14.81 1.024	15.07	14.71	14.90 1.406
4-0	14.89 0.815	14.60 0.900	14.89	14.78	14.85 0.833
4-3	15.00 0.826	14.85 0.927	15.03	14.91	14.98 0.844
4-6	15.15 0.989	14.90 0.782	15.08	15.13	15.11 0.907
4-9	15.11 0.827	14.84 0.835	15.14	14.96	15.07 0.834
5-0	15.285 0.997	14.83 0.759	15.29	15.13	15.28 0.912
5-3	15.23 1.156	14.93 0.706	15.30	15.04	15.18 1.095
5-6	15.32 0.822	14.88 0.859	15.38	15.12	15.26 0.842
5-9	15.43 0.872	15.01 0.743	15.52	15.13	15.35 0.863
6-0	15.54 0.884	15.27 0.840	15.66	15.27	15.48 0.880

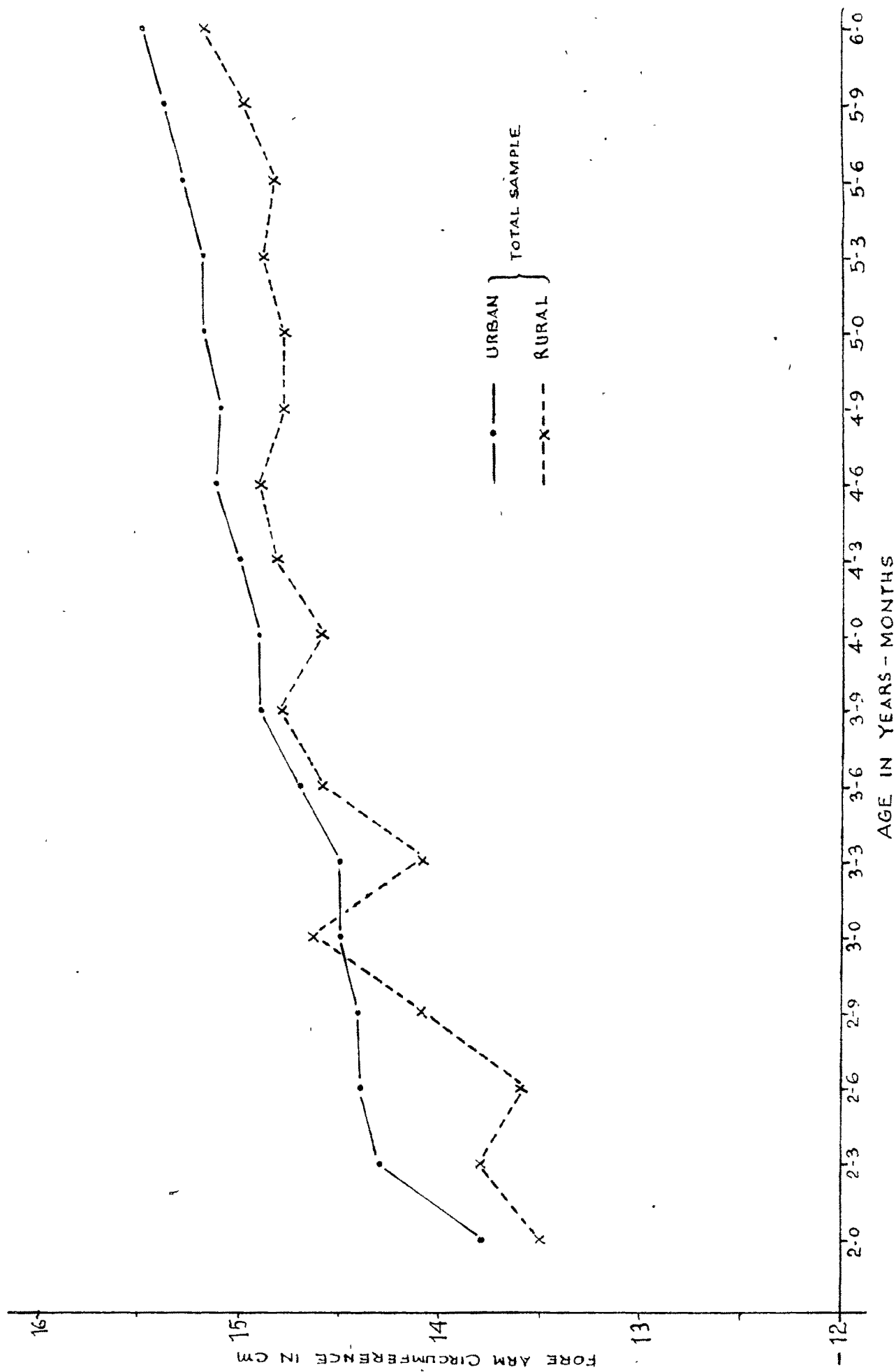


FIG. 4.45 (i)

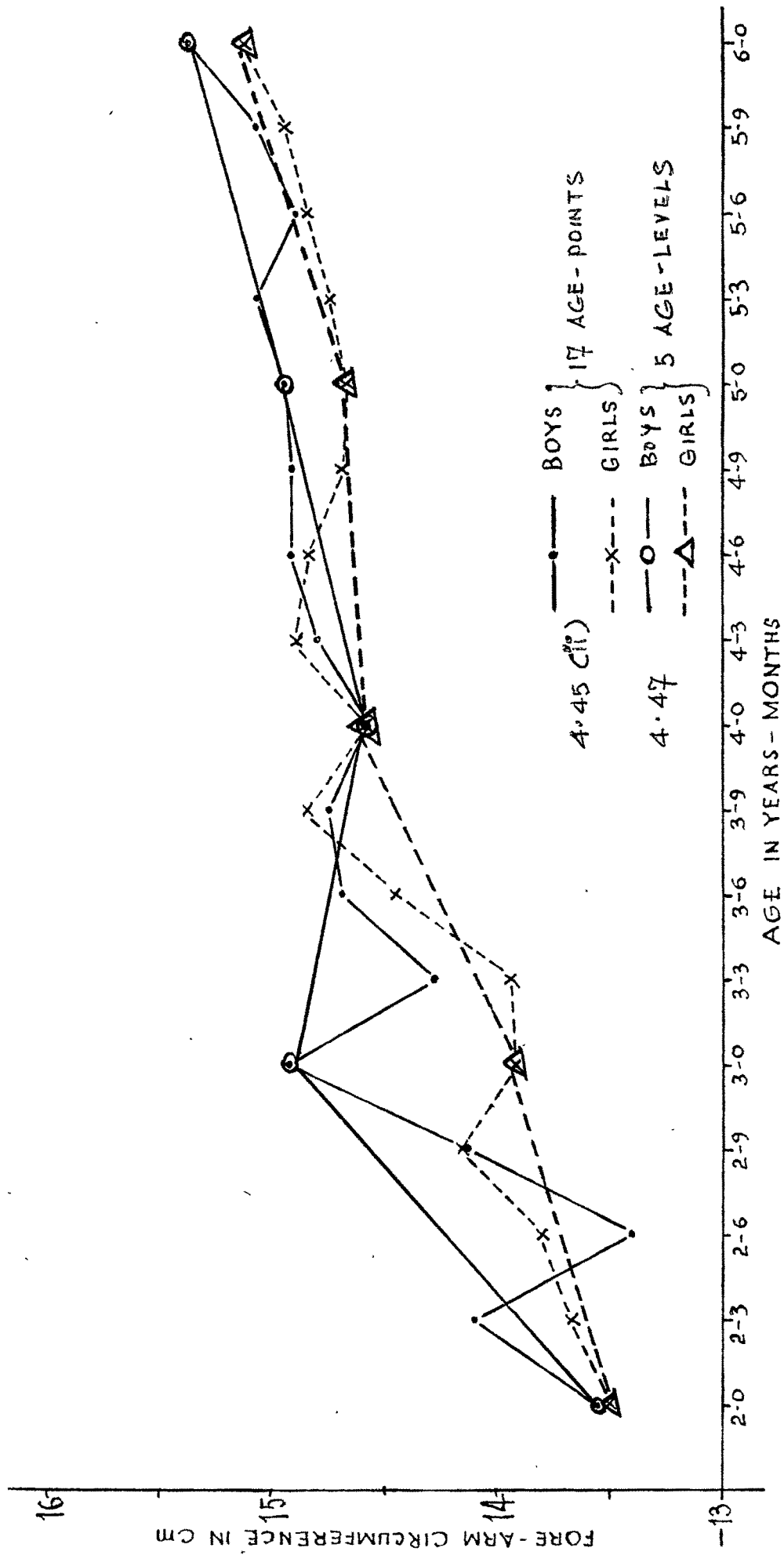


FIG. 4.45(ii.) + 4.47

Table 4.47(i)-showing Fore-arm circumference in cm. area x sex-wise for the age level 2-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	13.939	13.731
	SD	0.957	0.925
	N	38	32
Rural		13.575	13.522
		1.413	0.691
		8	9
			M
			SD
			N
			87

Table 4.47(ii)-showing Fore-arm circumference in cm. area x sex-wise for the age level 3-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	14.619	14.380
	SD	0.844	0.861
	N	107	86
Rural		14.942	13.940
		1.551	1.137
		12	5
			M
			SD
			N
			219

Table 4.47(iii)-showing Fore-arm circumference in cm. area x sex-wise for the age level 4-0 years.
(cross-sectional study).

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	14.964	14.814
	SD	0.769	0.854
	N	176	180
Rural		14.597	14.604
		0.960	0.835
		35	27
			M
			SD
			N
			418

Table 4.47(iv)-showing Fore-arm circumference in cm. area x sex-wise for the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	15.355	15.214
	SD	0.805	3.046
	N	283	256
Rural		14.954	14.685
		0.759	0.742
		46	39
			M 15.283
			SD 2.050
			N 624

Table 4.47(v)-showing Fore-arm circumference in cm. area x sex-wise for the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	15.731	15.319
	SD	0.856	0.866
	N	150	135
Rural		15.381	15.135
		0.883	0.778
		37	31
			M 15.484
			SD 0.880
			N 353

Table 4.48-showing Fore-arm circumference in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Level in years	Socio-Economic levels (SE)						Totals
	Low	Low-middle	Middle	High-middle	High		
	SE 1	SE 2	SE 3	SE 4	SE 5		
2 - 0	M 12.750 SD 0.758 N 6	13.504 1.172 25	13.882 0.674 34	14.321 0.906 19	13.733 0.462 3	13.786 0.966 87	
3 - 0	14.406 0.786 18	14.138 0.883 71	14.680 0.909 82	14.974 0.800 38	14.000 - 1	14.523 0.919 210	
4 - 0	14.488 0.750 33	14.741 0.802 148	14.945 0.884 154	14.954 0.767 76	15.357 0.748 7	14.845 0.833 418	
5 - 0	14.769 1.243 67	15.067 0.812 204	15.218 2.155 227	15.441 3.387 111	15.714 1.032 14	15.283 2.050 624	
6 - 0	15.137 0.853 38	15.349 0.909 110	15.551 0.877 121	15.737 0.746 76	15.587 1.170 8	15.484 0.880 353	

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Table 4.48(i)- showing Fore-arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 2-0 years. (cross-sectional study)

S. E. Level	Sex		Totals
	Boys	Girls	
Low	M	12.500	12.750
	SD	0.707	0.758
	N	2	6
Low-middle		13.447	13.504
		1.236	1.172
		15	25
Middle		14.039	13.882
		0.708	0.674
		18	34
High-middle		14.712	14.321
		0.863	0.906
		8	19
High		13.733	13.733
		0.462	0.462
		3	3
			M 13.786
			SD 0.966
			N 87

Table 4.48(ii)-showing Fore-arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 3-0 years. (cross-sectional study)

S. E. Level	Sex		Totals
	Boys	Girls	
Low	M	14.517	14.406
	SD	0.844	0.786
	N	12	18
Low-middle		14.258	14.138
		0.919	0.883
		36	71
Middle		14.829	14.680
		0.946	0.909
		49	82
High-middle		15.019	14.974
		0.777	0.800
		21	38
High		14.000	14.000
		-	-
		1	1
			M 14.523
			SD 0.919
			N 210

Table 4.48(iii)-showing Fore-arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years. (cross-sectional study)

S.E. Level	Sex		Totals
	Boys	Girls	
Low	M 14.327	14.622	14.488
	SD 0.838	0.663	0.750
	N 15	18	33
Low-middle	14.865	14.636	14.741
	0.791	0.801	0.802
	68	80	148
Middle	14.950	14.939	14.945
	0.857	0.925	0.884
	88	66	154
High-middle	15.045	14.863	14.954
	0.644	0.872	0.767
	38	38	76
High	15.750	15.200	15.357
	0.354	0.837	0.748
	2	5	7
			M 14.845
			SD 0.833
			N 418

Table 4.48(iv)-showing Fore-arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 14.887	14.614	14.769
	SD 0.727	1.703	1.243
	N 39	29	68
Low-middle	15.220	14.914	15.067
	0.829	0.769	0.812
	102	102	204
Middle	15.352	15.059	15.218
	0.815	3.053	2.155
	122	105	227
High-middle	15.523	15.308	15.441
	0.711	5.001	3.387
	61	50	111
High	15.917	15.563	15.714
	0.736	1.237	1.032
	6	8	14
			M 15.283
			SD 2.050
			N 624

Table 4.48(v)-showing Fore-arm circumference in cm. socio-economic (SE) level x sex-wise for the age level 6-0 years.

(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	15.191	15.062
	SD	0.945	0.731
	N	22	16
Low-middle		15.667	14.994
		0.927	0.749
		58	52
Middle		15.685	15.420
		0.796	0.939
		60	61
High-middle		15.834	15.603
		0.802	0.651
		44	32
High		16.000	15.340
		0.866	1.348
		3	5
			M 15.484
			SD 0.880
			N 353

GRAPH NO. 4-48

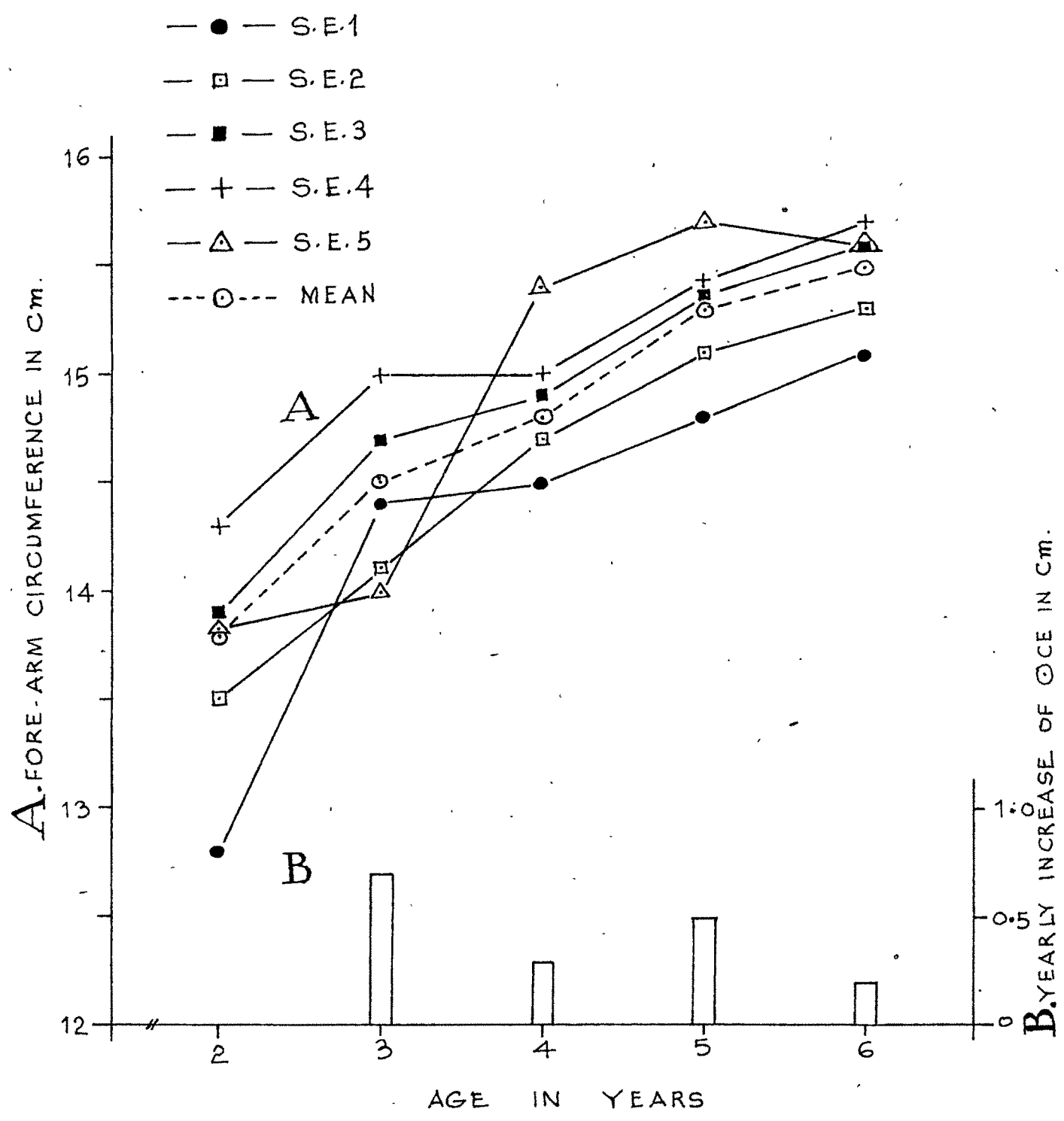


Table 4.49 - showing M and SD for Thigh circumference in cm. at 17 age-points for whole sample area-wise, sex-wise and area X sex-wise. (cross-sectional study)

Age-point Yrs./months	Milieu X sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
1	2	3	4	5
2 - 0	25.72 2.088	25.56 1.831	24.24 2.949	23.99 1.633
2 - 3	26.58 1.772	26.58 2.638	26.33 2.563	25.86 2.175
2 - 6	26.76 2.066	26.91 2.077	25.31 3.376	26.00 2.387
2 - 9	26.92 1.866	27.05 1.950	25.25 3.473	26.67 2.978
3 - 0	27.01 1.977	27.21 2.169	28.33 2.783	27.00 2.915
3 - 3	26.88 1.656	27.45 1.763	26.64 1.915	26.55 2.891
3 - 6	27.46 1.582	27.88 1.873	27.51 1.818	28.60 2.301
3 - 9	27.76 1.943	28.22 1.859	27.58 1.911	28.66 1.670
4 - 0	27.93 1.711	28.66 1.941	27.61 1.666	28.08 1.443
4 - 3	28.10 1.821	29.10 1.897	27.02 1.987	28.63 1.589
4 - 6	28.39 1.675	29.54 1.684	28.16 1.913	28.52 2.025
4 - 9	28.74 1.764	29.43 1.955	28.15 1.769	28.28 1.940
5 - 0	29.11 1.785	29.79 1.784	28.25 1.313	28.53 1.902
5 - 3	29.14 1.908	29.89 1.892	28.08 1.815	28.58 1.475
5 - 6	29.46 1.903	30.16 1.936	28.30 2.129	28.63 2.023
5 - 9	29.81 1.808	30.51 1.920	28.35 2.034	29.06 1.489
6 - 0	30.20 1.993	30.80 2.060	29.20 2.184	29.34 2.306

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Table 4.49 - contd.

Thigh circumference in cm.

Age-point Yrs.Mo.	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	8	7	8	9	10
2-0	25.65 1.962	24.10 2.270	25.46	25.21	25.35 2.105
2-3	26.58 2.219	26.04 2.255	26.55	26.47	26.52 2.222
2-6	26.83 2.042	25.57 2.976	26.71	26.82	26.69 2.182
2-9	26.97 1.899	25.88 3.266	27.23	26.98	26.79 2.216
3-0	27.10 2.062	27.94 2.800	26.85	27.19	27.17 2.135
3-3	27.16 1.725	26.60 2.347	27.46	27.30	27.07 1.844
3-6	27.66 1.737	27.86 2.021	27.70	27.99	27.70 1.802
3-9	27.97 1.192	28.17 1.845	27.88	28.30	28.01 1.188
4-0	28.31 1.863	27.81 1.578	27.92	28.99	28.24 1.831
4-3	28.57 1.962	28.24 1.867	28.34	29.03	28.52 1.949
4-6	28.93 1.693	28.31 1.958	28.63	29.37	28.82 1.726
4-9	29.07 1.886	28.12 1.835	28.95	29.25	28.92 1.093
5-0	29.43 1.749	28.38 1.606	28.99	29.62	29.253 1.652
5-3	29.25 1.902	28.34 1.661	29.25	29.66	29.31 1.184
5-6	29.81 1.950	28.44 2.075	29.56	29.96	29.60 2.026
5-9	30.15 1.917	28.71 1.808	29.50	30.19	29.84 1.982
6-0	30.48 2.043	29.27 2.225	30.00	30.52	30.25 2.131

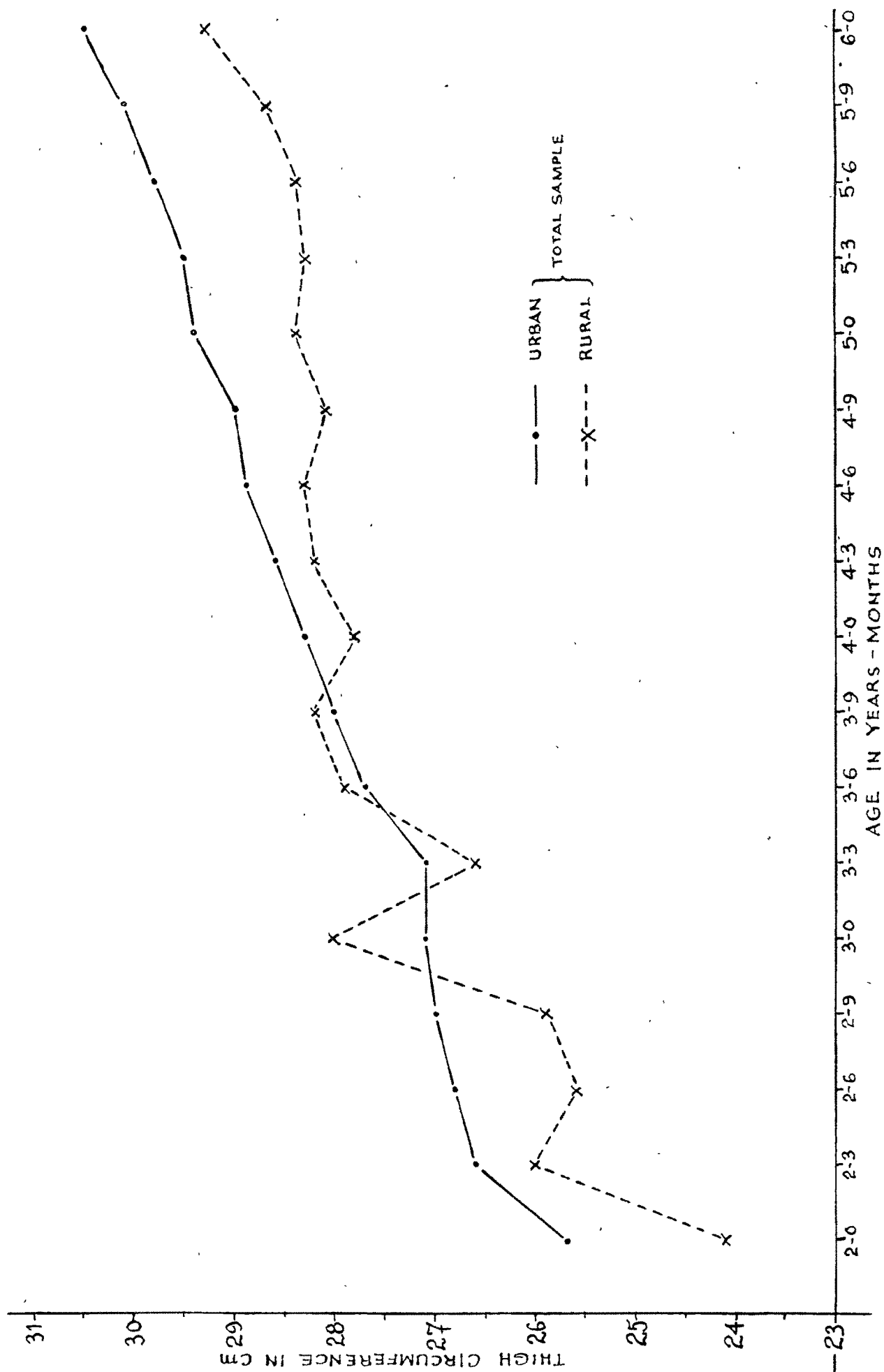


FIG. 4'49(j.)

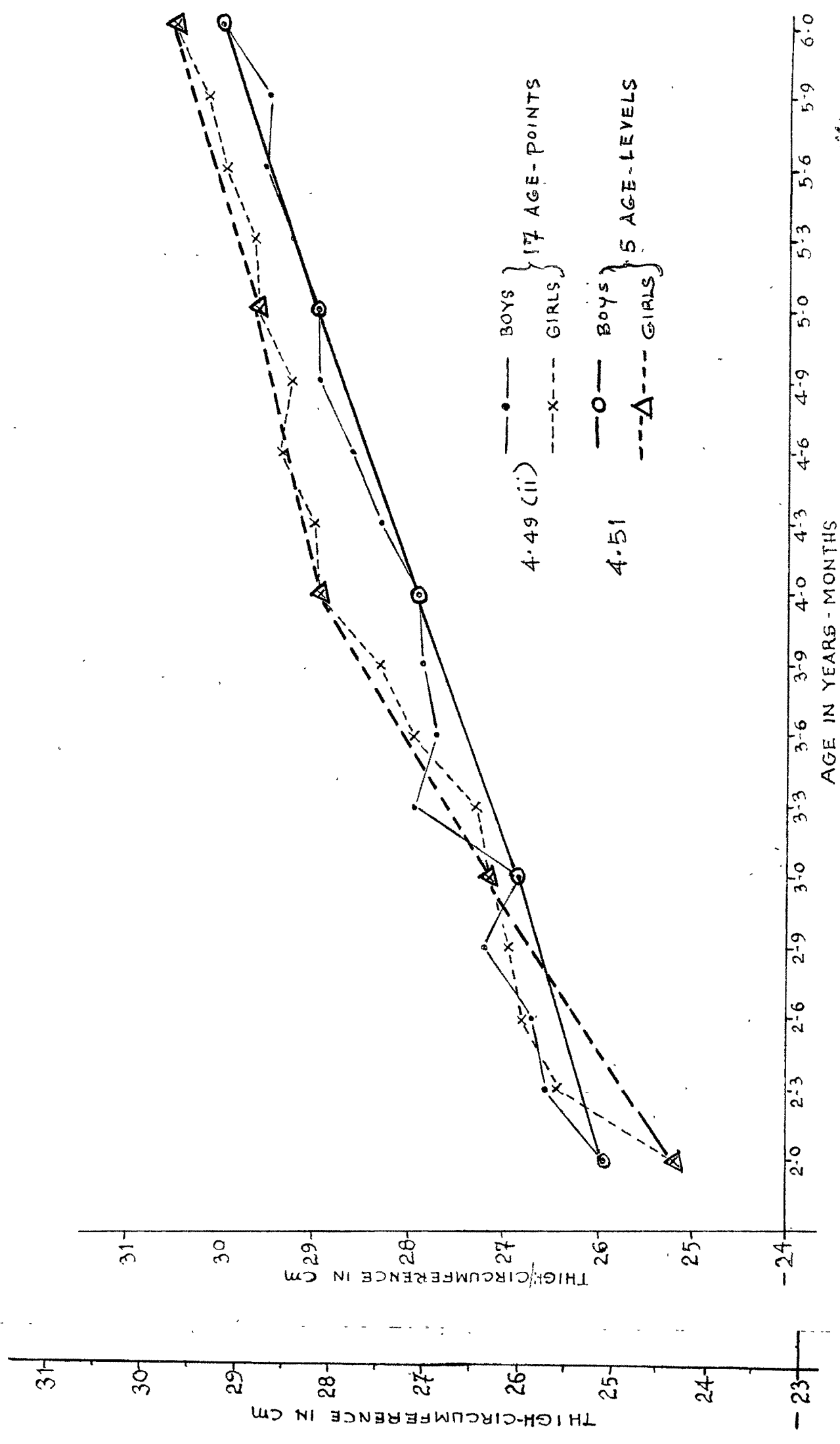


FIG. 4.49(ii)+4.51

Table 4.51(i)-showing Thigh circumference in cm. area x sex-wise
for the age level 2-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	25.729	25.563
	SD	2.088	1.831
	N	38	32
Rural		24.237	23.989
		2.949	1.633
		8	9
			M 25.351
			SD 2.105
			N 87

Table 4.51(ii)-showing Thigh circumference in cm. area x sex-wise
for the age level 3-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	27.010	27.216
	SD	1.977	2.169
	N	107	86
Rural		28.333	27.000
		2.783	2.915
		12	5
			M 27.170
			SD 2.135
			N 210

Table 4.51(iii)-showing Thigh circumference in cm. area x sex-wise
for the age level 4-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	27.953	28.669
	SD	1.711	1.941
	N	176	180
Rural		27.614	28.081
		1.666	1.443
		35	27
			M 28.242
			SD 1.831
			N 418

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Table 4.51(iv)-showing Thigh circumference in cm. area x sex-wise
for the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	29.110	29.430
	SD	1.785	2.749
	N	283	539
Rural		28.252	28.380
		1.313	1.606
		46	85
			M 29.253
			SD 2.652
			N 624

Table 4.51(v)-showing Thigh circumference in cm. area x sex-wise
for the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	30.203	30.488
	SD	1.993	2.043
	N	150	285
Rural		29.205	29.271
		2.184	2.225
		37	68
			M 30.253
			SD 2.131
			N 353

Table 4.52-showing Thigh-circumference in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Level in years	Socio-Economic Levels (SE)								Totals	
	Low	Low-middle	Middle	High-middle	High					
	SE 1	SE 2	SE 3	SE 4	SE 5					
2 - 0	M	23.333	24.880	25.418	26.516	25.167				25.351
	SD	1.126	2.402	1.656	2.222	0.578				2.105
	N	6	28	34	19	3				87
3 - 0		26.728	26.545	27.294	28.271	27.500				27.170
		1.965	1.867	2.105	2.358	-				2.135
		18	71	82	38	1				210
4 - 0		27.424	27.907	28.369	28.821	30.017				28.242
		1.650	1.678	1.796	2.019	1.058				1.830
		33	148	154	76	7				418
5 - 0		28.458	29.058	29.423	29.791	30.571				29.373
		1.638	1.783	3.595	2.034	1.940				2.652
		67	204	227	111	14				624
6 - 0		29.589	29.844	30.436	30.829	30.813				30.253
		1.927	2.050	2.284	1.953	1.850				2.131
		38	110	121	76	8				353

2-60

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Table 4.52(i)-showing Thigh circumference in cm. socio-economic (SE) level x sex-wise for the age level 2-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	23.500	23.333
	SD	1.414	1.126
	N	2	6
Low-middle		24.667	24.880
		2.701	2.402
		15	25
Middle		25.622	25.418
		1.680	1.656
		18	34
High-middle		27.237	26.576
		2.419	2.222
		8	19
High		25.167	25.167
		0.578	0.578
		3	3
			M 25.351
			SD 2.105
			N 87

Table 4.52(ii)-showing Thigh circumference in cm. socio-economic (SE) level x sex-wise for the age level 3-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	26.550	26.728
	SD	2.292	1.965
	N	12	18
Low-middle		26.450	26.545
		1.868	1.867
		36	71
Middle		27.237	27.294
		2.098	2.105
		49	82
High-middle		28.229	28.271
		1.989	2.358
		21	38
High		27.500	27.500
		-	-
		1-	1
			M 27.170
			SD 2.135
			N 210

Table 4.52(iii)-showing Thigh circumference in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 26.833	27.917	27.424
	SD 1.611	1.556	1.650
	N 15	18	33
Low-middle	27.709	28.075	27.907
	SD 1.736	1.619	1.678
	N 68	80	148
Middle	28.050	28.795	28.369
	SD 1.686	1.861	1.796
	N 88	66	154
High-middle	28.229	29.413	28.821
	SD 1.591	2.238	2.019
	N 38	38	76
High	29.250	30.400	30.071
	SD 1.061	0.962	1.058
	N 2	5	7
			M 28.242
			SD 1.830
			N 418

Table 4.52(iv)-showing Thigh circumference in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 28.329	28.628	28.458
	SD 1.608	1.690	1.638
	N 38	29	67
Low-middle	28.734	29.381	29.058
	SD 1.696	1.817	1.783
	N 102	102	204
Middle	29.186	29.674	29.423
	SD 1.849	4.855	3.595
	N 122	105	227
High-middle	29.329	30.354	29.791
	SD 1.619	2.344	2.034
	N 61	50	111
High	30.083	30.938	30.571
	SD 1.115	2.397	1.940
	N 6	8	14
			M 29.373
			SD 2.652
			N 624

Table 4.52(v)- showing Thigh circumference in cm. socio-economic (SE) level x sex-wise for the age level 6-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	29.273	30.025
	SD	2.092	1.638
	N	22	16
Low-middle		29.774	29.921
		2.173	1.921
		58	52
Middle		30.045	30.820
		2.306	2.461
		60	61
High-middle		30.557	31.203
		1.884	2.014
		44	32
High		31.000	30.700
		1.323	2.253
		3	5
			M 30.253
			SD 2.131
			N 353

GRAPH NO. 4.52

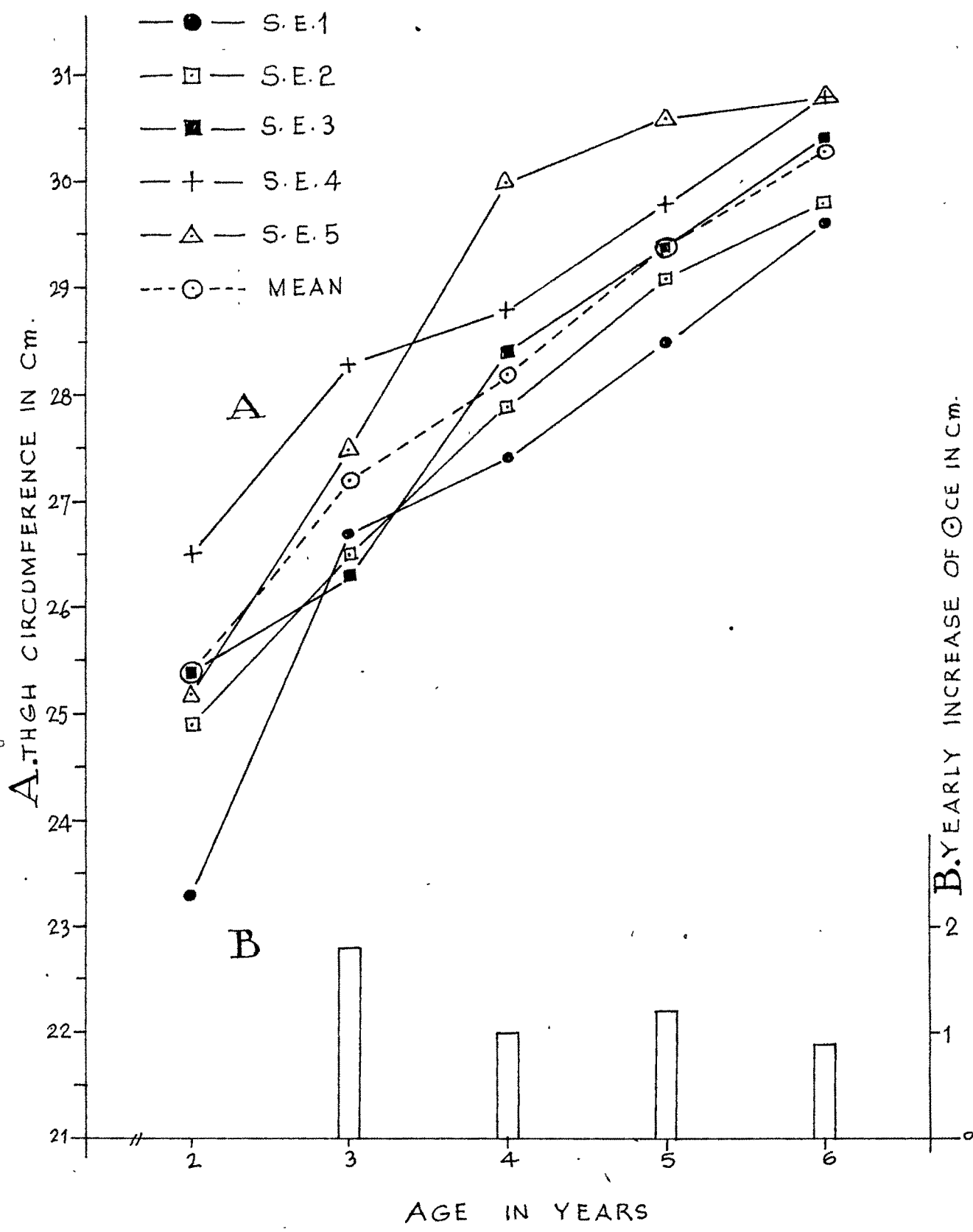


Table 4.53 - showing M and SD for Calf circumference in cm. at 17 age-points for whole sample area-wise, sex-wise and area-X sex-wise. (cross-sectional study)

Age-point Yrs./months	Milieu X sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
1	2	3	4	5
2 - 0	17.61 1.403	17.40 1.666	16.55 1.467	16.43 0.664
2 - 3	18.21 1.232	17.99 1.543	17.33 1.723	17.47 1.090
2 - 6	18.34 1.466	18.06 1.002	17.07 1.679	17.12 1.386
2 - 9	18.40 1.161	18.14 1.122	17.26 1.585	17.88 1.260
3 - 0	18.49 1.360	18.44 1.175	18.95 2.015	17.22 1.835
3 - 3	18.69 1.138	18.59 1.295	18.08 1.412	17.32 1.677
3 - 6	19.11 1.134	18.73 1.249	18.50 0.933	18.47 1.455
3 - 9	19.62 1.444	18.97 1.169	18.62 1.142	18.84 1.089
4 - 0	19.27 1.269	19.19 1.192	18.60 1.037	18.34 1.090
4 - 3	19.45 1.154	19.46 1.227	18.98 1.323	18.79 1.189
4 - 6	19.61 1.164	19.89 1.165	19.03 1.121	18.72 1.871
4 - 9	19.80 1.193	19.65 1.183	18.89 1.171	18.59 1.395
5 - 0	20.02 1.255	19.83 1.251	19.12 1.037	18.73 1.224
5 - 3	20.09 1.965	19.81 1.157	19.07 0.986	18.97 1.058
5 - 6	20.37 1.261	20.03 1.164	19.06 1.215	19.04 1.203
5 - 9	20.50 1.272	20.19 1.142	19.45 1.452	19.46 0.985
6 - 0	20.69 1.324	20.31 1.207	19.85 1.405	19.76 1.488

2.64

Table 4.53 - contd.

Calf circumference in cm.

Age-point Yrs.Mo.	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	10
2-0	17.52 1.295	16.48 1.080	17.42	17.18	17.32 1.315
2-3	18.10 1.388	17.42 1.306	18.13	17.91	18.02 1.392
2-6	18.22 1.277	17.09 1.527	18.18	17.97	18.09 1.346
2-9	18.28 1.146	17.55 1.452	18.20	18.09	18.16 1.230
3-0	18.47 1.278	18.44 2.072	18.53	18.37	18.47 1.352
3-3	18.65 1.211	17.73 1.549	18.58	18.38	18.49 1.312
3-6	18.93 1.203	18.49 1.106	18.93	18.68	18.83 1.194
3-9	19.32 1.342	18.74 1.108	19.47	18.94	19.22 1.262
4-0	19.20 1.230	18.49 1.060	19.15	19.07	19.12 1.233
4-3	19.46 1.187	18.91 1.272	19.36	19.37	19.37 1.217
4-6	19.74 1.164	18.94 1.153	19.50	19.70	19.60 1.159
4-9	19.73 1.190	18.81 1.279	19.63	19.48	19.58 1.251
5-0	19.920 1.252	18.95 1.154	18.89	19.68	19.77 1.225
5-3	19.95 1.612	19.02 1.018	19.99	19.66	19.78 1.564
5-6	20.02 1.223	19.05 1.200	20.14	19.90	20.03 1.285
5-9	20.35 1.218	19.46 1.233	20.27	20.03	20.16 1.274
6-0	20.51 1.282	19.81 1.434	20.52	20.20	20.38 1.339

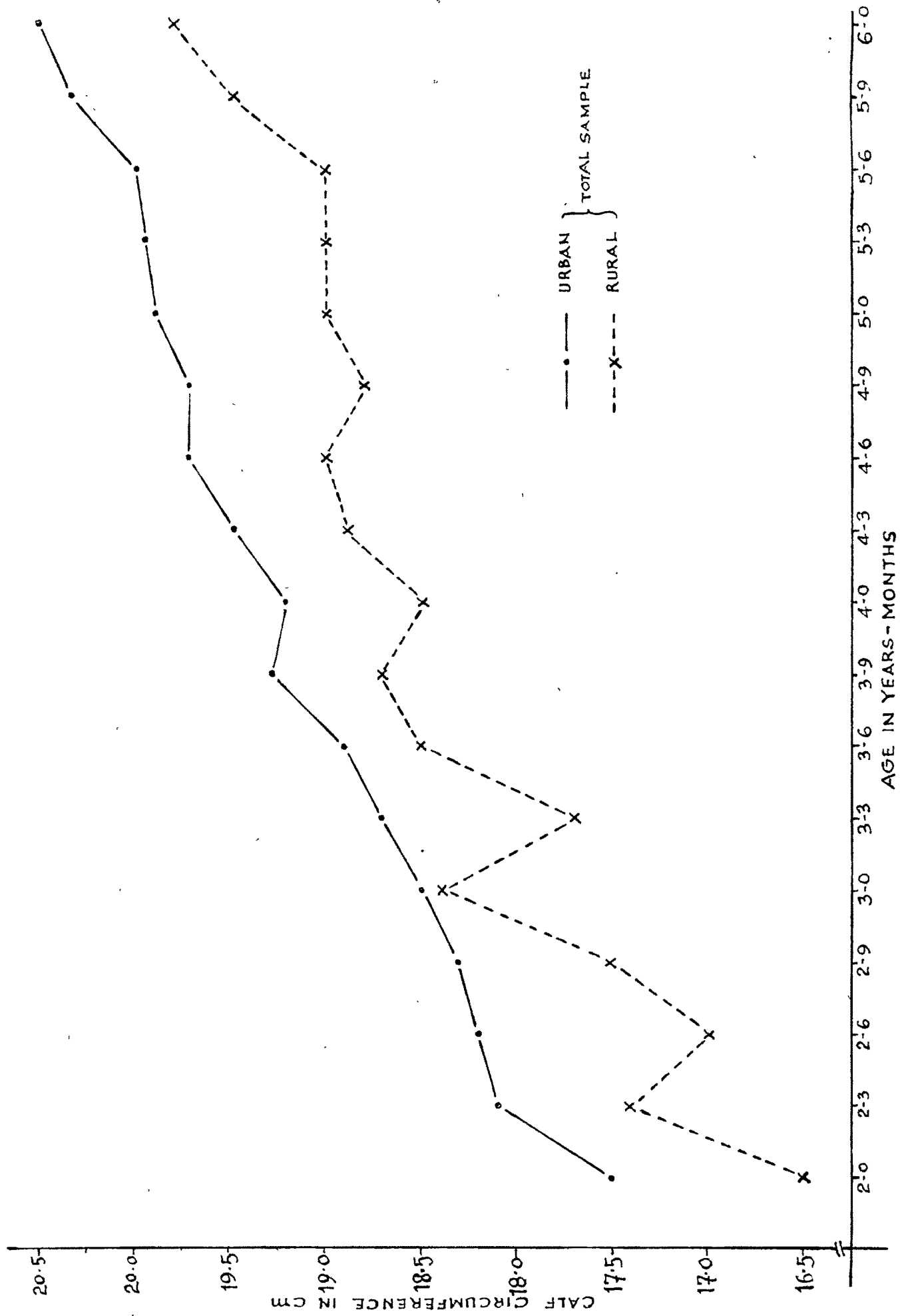


FIG. 4.53 (1)

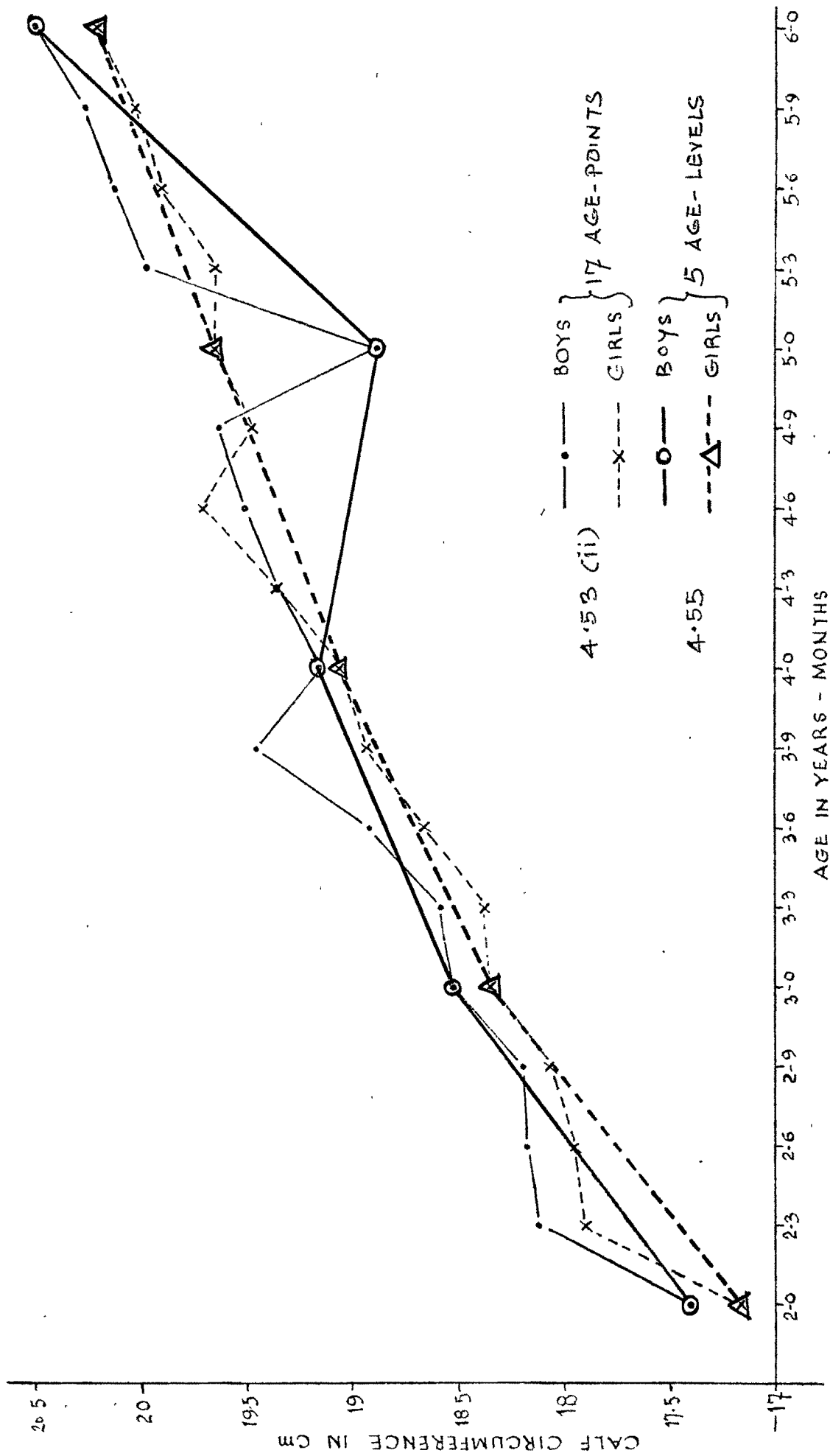


FIG. 4.53. (ii.) + 4.55

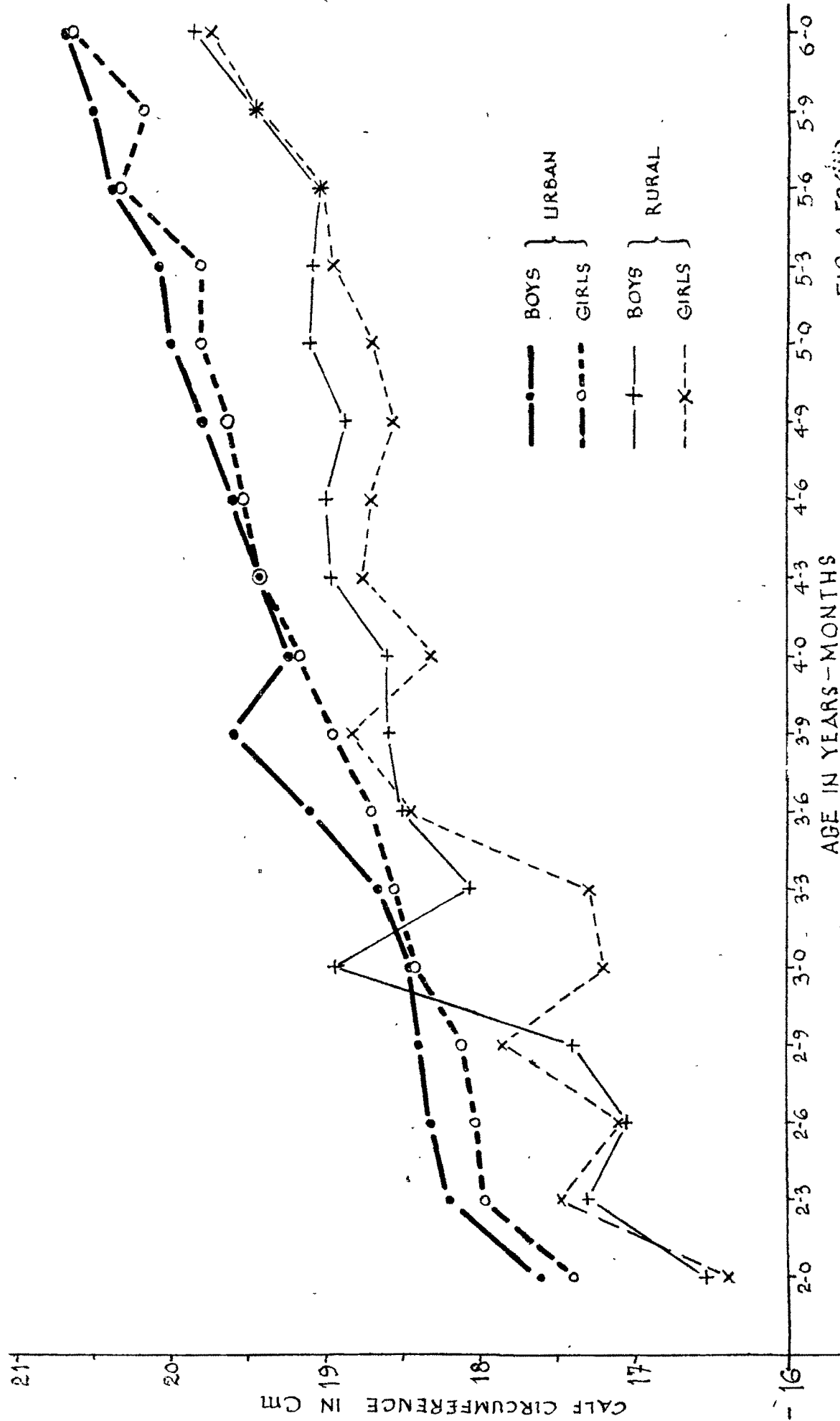


FIG. 4-53 (iii)

GRAPH NO. 4.54

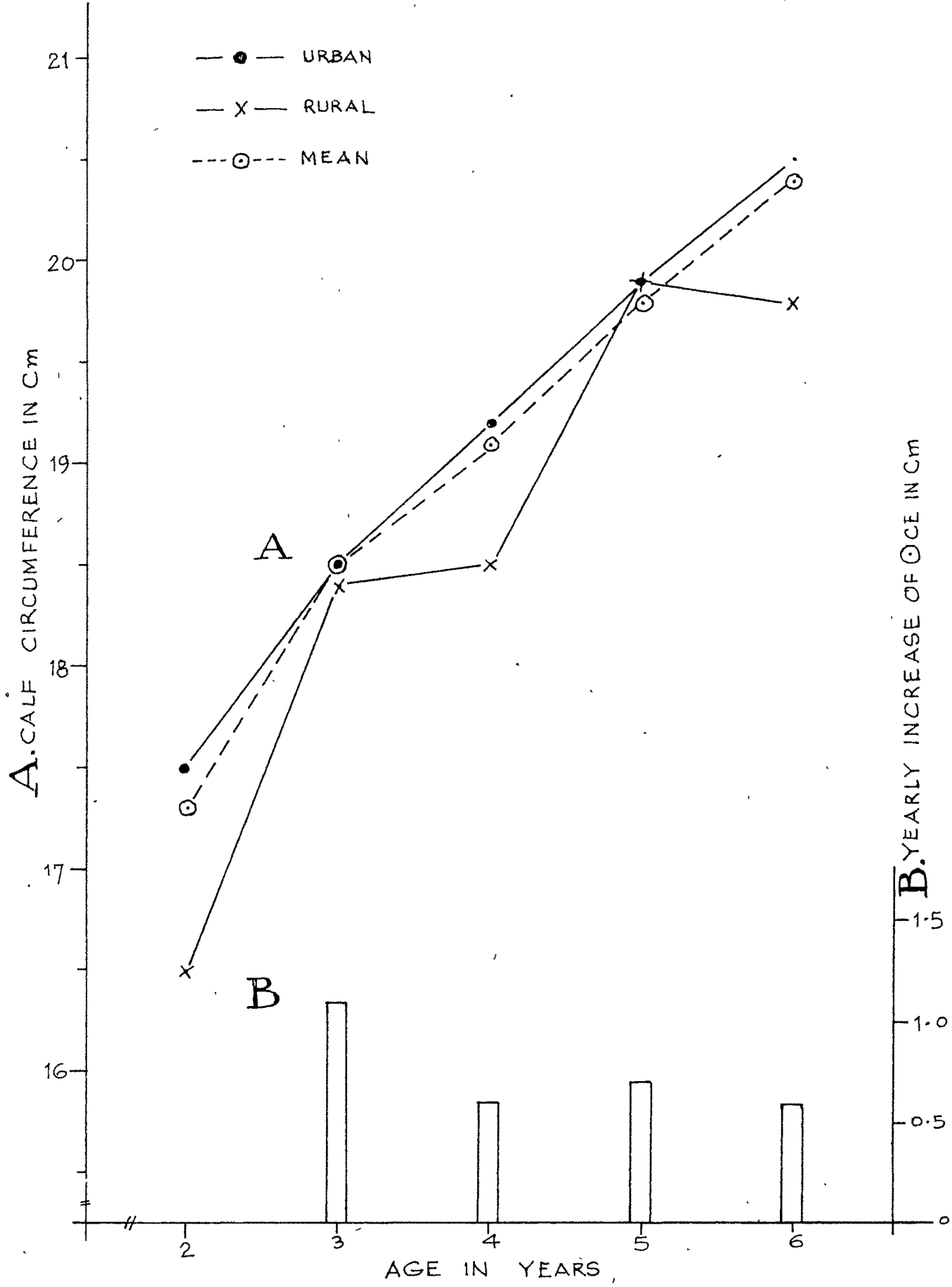


Table 4.55(i)-showing Calf-circumference in cm. area x sex-wise
for the age level 2-0 years.
(cross-sectional study)

Milieu		Sex		Totals
		Boys	Girls	
Urban	M	17.611	17.403	17.516
	SD	1.403	1.166	1.295
	N	38	32	70
Rural		16.550	16.433	16.488
		1.467	0.664	1.080
		8	9	17
				M 17.315
				SD 1.315
				N 87

Table 4.55(ii)-showing Calf-circumference in cm. area x sex-wise
for the age level 3-0 years.
(cross-sectional study)

Milieu		Sex		Totals
		Boys	Girls	
Urban	M	18.497	18.445	18.474
	SD	1.360	1.175	1.278
	N	107	86	193
Rural		18.950	17.220	18.441
		2.015	1.835	2.072
		12	5	17
				M 18.471
				SD 1.352
				N 210

Table 4.55(iii)-showing Calf-circumference in cm. area x sex-wise
for the age level 4-0 years.
(cross-sectional study)

Milieu		Sex		Totals
		Boys	Girls	
Urban	M	19.271	19.191	19.230
	SD	1.269	1.192	1.230
	N	176	180	356
Rural		18.609	18.341	18.492
		1.037	1.090	1.060
		35	27	62
				M 19.121
				SD 1.233
				N 418

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Table 4.55(iv)-showing Calf-circumference in cm. area x sex-wise
for the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	20.024	19.828
	SD	1.255	1.251
	N	283	256
Rural		19.124	18.736
		1.073	1.224
		46	39
			M 19.771
			SD 2.725
			N 624

Table 4.55(v)-showing Calf-circumference in cm. area x sex-wise
for the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	20.692	20.316
	SD	1.324	1.207
	N	150	135
Rural		19.857	19.764
		1.405	1.488
		37	31
			M 20.379
			SD 1.339
			N 353

Table 4.56--showing Calf-circumference in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Level in years	Socio-Economic levels (SE)							Totals
	Low	Low-middle	Middle	High-middle	High			
	SE 1	SE 2	SE 3	SE 4	SE 5			
2 - 0	M	16.033	16.908	17.465	17.947	17.567	17.315	
	SD	0.766	1.536	0.997	1.289	1.401	1.315	
	N	6	25	34	19	3	87	
3 - 0		18.106	18.023	18.716	18.955	18.500	18.471	
		1.223	1.140	1.287	1.653	-	1.352	
		18	71	82	38	1	210	
4 - 0		18.536	18.888	19.312	19.367	19.929	19.121	
		1.011	1.127	1.158	1.512	0.787	1.233	
		33	148	154	76	7	418	
5 - 0		19.288	19.582	19.907	20.138	20.500	19.791	
		1.203	1.213	4.194	1.163	1.544	2.724	
		68	204	227	111	14	624	
6 - 0		19.795	20.191	20.520	20.718	20.387	20.379	
		1.278	1.336	1.385	1.170	1.479	1.339	
		38	110	121	76	8	353	

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Table.4.56(i)- showing Calf-circumference in cm. socio-economic
(SE) level x sex-wise for the age level 2-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	15.500	16.300
	SD	0.707	0.726
	N	2	4
Low-middle		16.993	16.780
		1.701	1.327
		15	10
Middle		17.439	17.494
		0.932	1.096
		18	16
High-middle		18.637	17.445
		1.392	0.988
		8	11
High		17.567	-
		1.401	-
		3	0
			M 17.315
			SD 1.315
			N 87

Table 4.56(ii)-showing Calf-circumference in cm. socio-economic
(SE) level x sex-wise for the age level 3-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	18.075	18.167
	SD	1.432	0.753
	N	12	6
Low-middle		18.106	17.937
		1.220	1.063
		36	35
Middle		18.843	18.527
		1.256	1.329
		49	33
High-middle		18.862	19.071
		1.955	1.232
		21	17
High		18.500	-
		-	-
		1	0
			M 18.471
			SD 1.352
			N 210

Table 4.56(iii)-showing Calf-circumference in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 18.513	18.556	18.536
	SD 0.916	1.110	1.011
	N 15	18	33
Low-middle	19.044	18.755	18.888
	1.184	1.066	1.127
	68	80	148
Middle	19.324	19.295	19.312
	1.071	1.273	1.158
	88	66	154
High-middle	19.192	19.542	19.367
	1.752	1.227	1.512
	38	38	76
High	20.250	19.800	19.929
	0.354	0.909	0.787
	2	5	7
			M 19.121
			SD 1.233
			N 418

Table 4.56(iv)-showing Calf-circumference in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 19.263	19.321	19.288
	SD 1.176	1.257	1.203
	N 39	29	68
Low-middle	19.691	19.473	19.582
	1.327	1.084	1.213
	102	102	204
Middle	20.100	19.719	19.907
	1.238	6.034	4.194
	122	105	227
High-middle	20.152	20.120	20.138
	1.091	1.256	1.163
	61	50	111
High	20.750	20.313	20.500
	1.332	1.751	1.544
	6	8	14
			M 19.791
			SD 2.724
			N 624

Table 4.56(v)-showing Calf-circumference in cm. socio-economic
(SE) level x sex-wise for the age level 6-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	19.873	19.688
	SD	1.514	0.892
	N	22	16
Low-middle		20.483	19.865
		1.388	1.207
		58	52
Middle		20.562	20.479
		1.408	1.372
		60	61
High-middle		20.832	20.562
		1.175	1.164
		44	32
High		21.000	20.020
		1.500	1.501
		3	5
			M 20.379
			SD 1.339
			N 353

GRAPH NO. 456

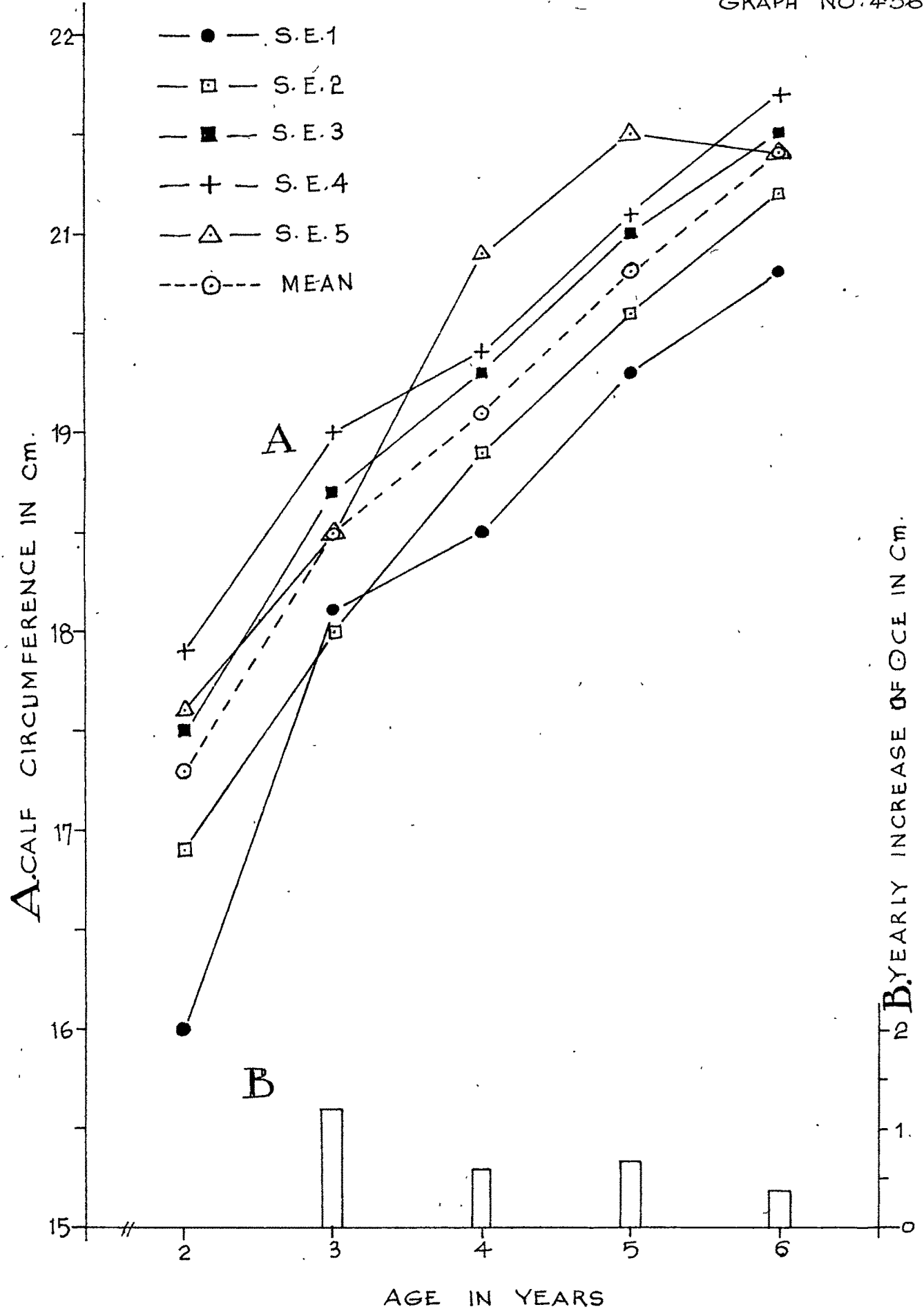


Table 4.57 - showing M and SD for Foot-length in cm. at 17 age points for whole sample area-wise, sex-wise and area X sex-wise. (cross-sectional study)

Age-point Yrs./months	Milieu X sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
	1	2	3	4
2 - 0	13.45 0.870	13.00 0.703	13.62 1.341	12.85 0.472
2 - 3	13.89 0.927	13.56 0.863	14.68 1.167	13.15 1.216
2 - 6	14.20 0.882	13.80 0.690	14.25 1.761	13.20 0.716
2 - 9	14.43 0.902	14.12 0.716	14.58 1.594	13.97 1.401
3 - 0	14.73 0.870	14.40 0.818	14.75 1.799	14.34 1.452
3 - 3	15.08 0.796	14.72 0.663	14.87 1.444	14.77 1.257
3 - 6	15.47 0.740	15.08 0.820	15.03 0.920	14.98 0.825
3 - 9	15.95 0.793	15.39 0.766	15.36 0.998	15.54 0.878
4 - 0	15.98 0.834	15.58 0.807	15.22 0.833	15.24 0.685
4 - 3	16.19 0.853	15.88 0.831	15.85 1.037	15.69 0.813
4 - 6	16.48 0.892	16.30 0.893	16.30 0.894	15.35 0.921
4 - 9	16.70 0.921	16.39 0.866	16.43 0.929	15.50 0.979
5 - 0	17.00 0.926	16.75 0.936	16.39 0.844	15.74 1.039
5 - 3	17.13 1.521	16.73 0.820	16.55 0.991	16.06 1.154
5 - 6	17.55 0.869	17.04 0.879	16.75 0.901	16.11 0.837
5 - 9	17.83 0.852	17.32 0.900	16.72 1.278	16.42 0.891
6 - 0	18.12 0.920	17.59 0.844	17.11 1.074	16.93 1.063

Table 4.57 - contd.

Foot-length in cm.

Age-point Yrs.Mo.	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	10
2-0	13.25 0.824	13.22 1.027	13.47	12.96	13.24 0.861
2-3	13.73 0.909	13.72 1.389	13.95	13.49	13.73 0.972
2-6	14.02 0.822	13.85 1.519	14.20	13.74	14.00 0.915
2-9	14.29 0.833	14.30 1.511	14.45	14.09	14.29 0.975
3-0	14.58 0.861	14.62 1.670	14.73	14.39	14.59 0.946
3-3	14.91 0.754	14.82 1.331	15.04	14.72	14.89 0.870
3-6	15.28 0.820	15.01 0.888	15.34	15.06	15.22 0.826
3-9	15.69 0.785	15.46 0.929	15.86	15.42	15.65 0.812
4-0	15.78 0.844	15.23 0.766	15.85	15.53	15.69 0.854
4-3	16.05 0.857	15.77 0.959	16.12	15.85	16.00 0.879
4-6	16.39 0.892	15.75 0.951	16.44	16.14	16.28 0.894
4-9	16.53 0.912	16.04 1.053	16.65	16.25	16.45 0.954
5-0	16.88 0.932	16.10 0.985	16.91	16.61	16.78 0.965
5-3	16.92 1.227	16.30 1.100	17.02	16.61	16.81 1.228
5-6	17.30 0.909	16.48 0.925	17.41	16.92	17.17 0.956
5-9	17.58 0.911	16.57 1.106	17.59	17.12	17.37 1.041
6-0	17.87 0.923	17.03 1.064	17.92	17.46	17.71 1.006

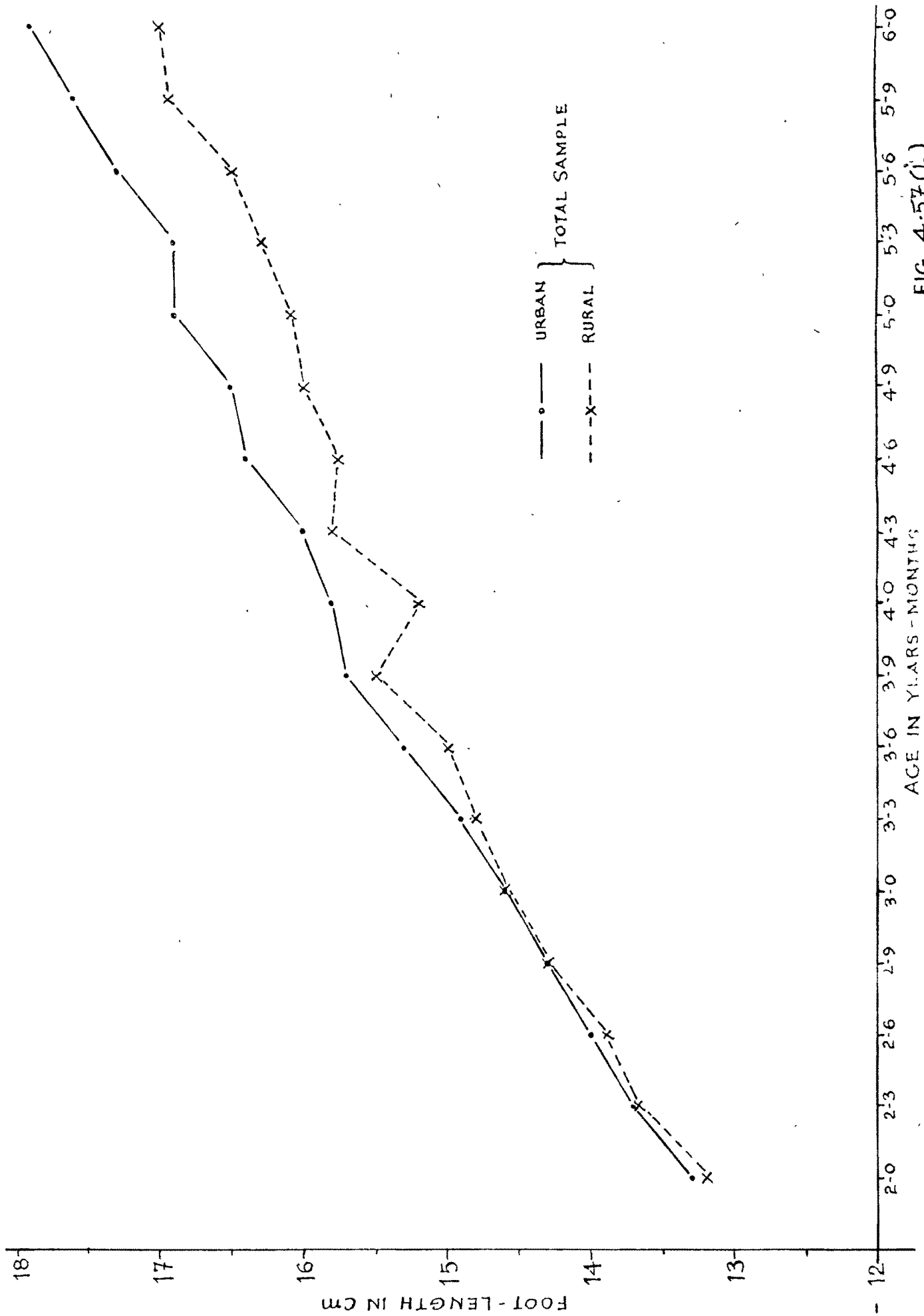


FIG. 4.57(i.)

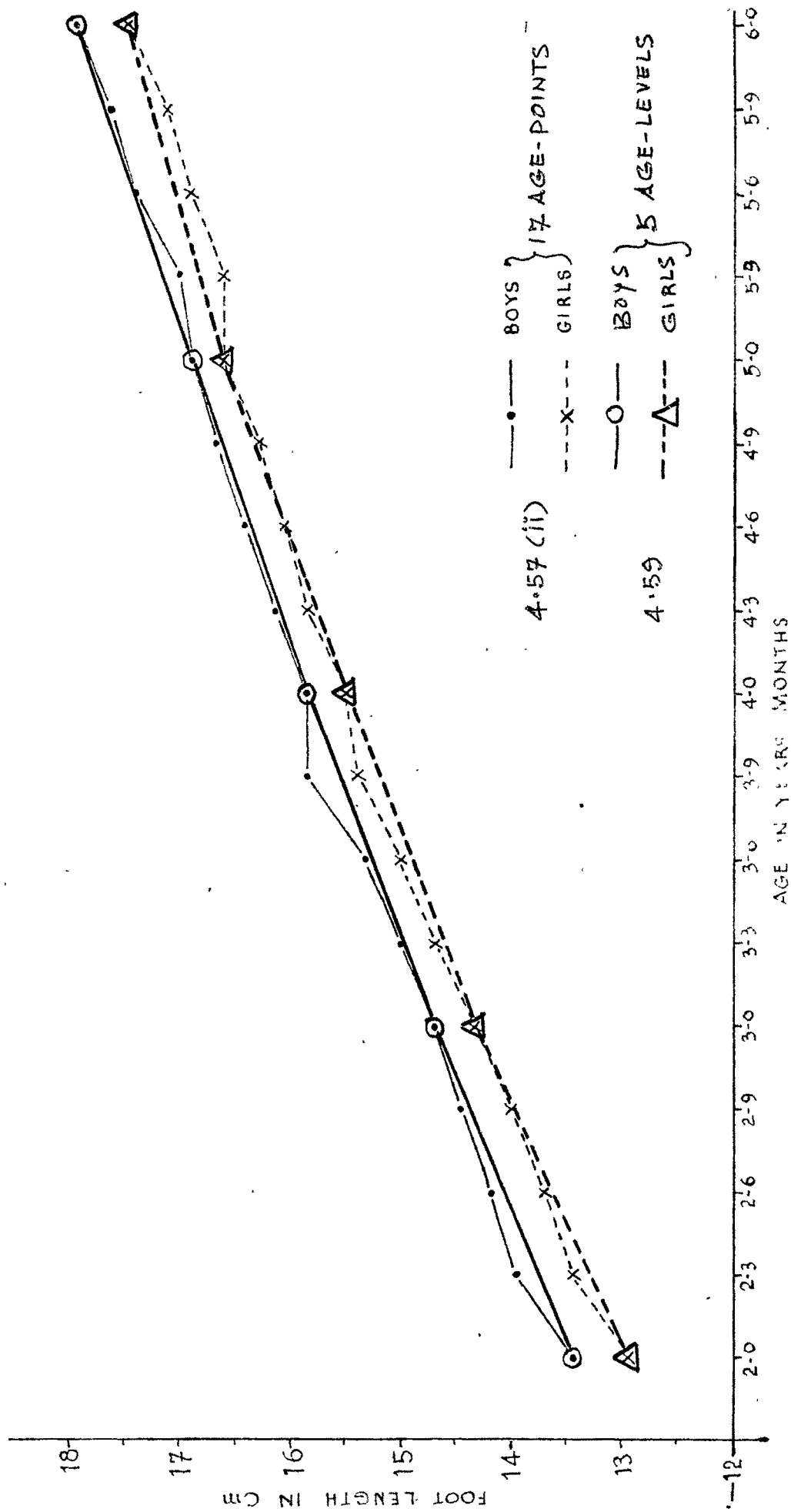


FIG. 4.57(ii)+4.59

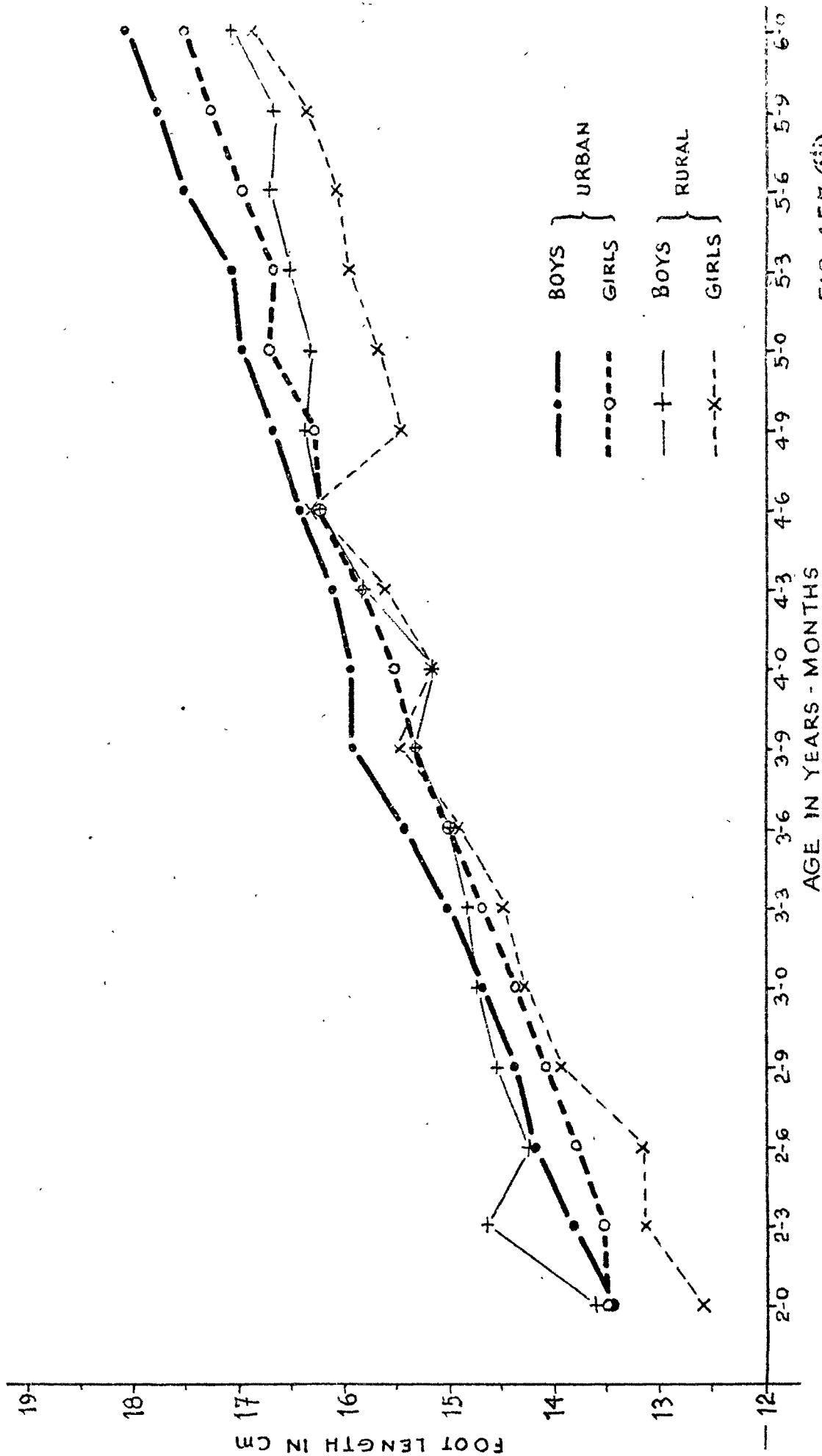


FIG. 4-57 (iii)

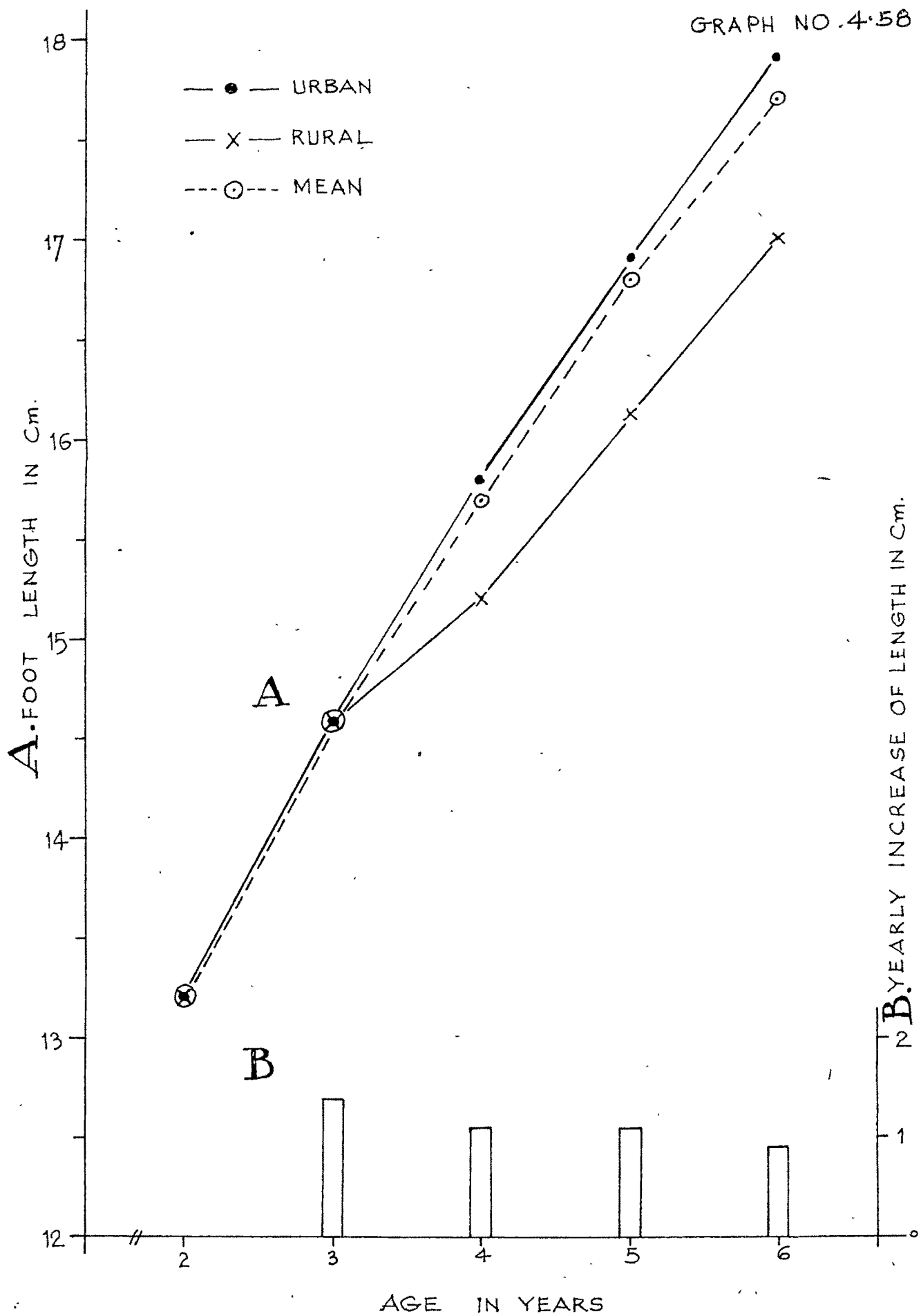


Table 4.59(i)-showing Foot-length in cm. area x sex-wise
for the age level 2-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	13.455	13.003
	SD	0.870	0.703
	N	38	32
Rural		13.625	12.856
		1.341	0.472
		8	9
			M 13.243
			SD 0.861
			N 87

Table 4.59(ii)-showing Foot-length in cm. area x sex-wise for
the age level 3-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	14.732	14.400
	SD	0.870	0.818
	N	107	86
Rural		14.750	14.340
		1.799	1.452
		12	5
			M 14.588
			SD 0.946
			N 210

Table 4.59(iii)-showing Foot-length in cm. area x sex-wise for
the age level 4-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	15.982	15.584
	SD	0.834	0.807
	N	176	180
Rural		15.220	15.244
		0.833	0.685
		35	27
			M 15.699
			SD 0.854
			N 418

Table 4.59(iv)-showing Foot-length in cm. area x sex-wise for
the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	17.000	16.751
	SD	0.926	1.935
	N	283	256
Rural		16.398	15.746
		0.844	1.039
		46	39
			M 16.776
			SD 1.853
			N 624

Table 4.59(v) - showing Foot-length in cm. area x sex-wise for
the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	18.125	17.594
	SD	0.920	0.844
	N	150	135
Rural		17.113	16.935
		1.074	1.063
		37	31
			M 17.711
			SD 1.006
			N 353

Table 4.60—showing Foot-length in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

Age Levels in years	Socio-Economic levels (SE)							
	Low		Low-middle		Middle		High-middle	
	SE 1	SE 2	SE 3	SE 4	SE 5	SE 6	SE 7	Totals
2 - 0	M 12.483 SD 0.542 N 6	13.304 1.094 25	13.197 0.708 34	13.426 0.802 19	13.600 0.625 3	13.243 0.861 87		
3 - 0	14.428 1.278 18	14.396 0.748 171	14.668 1.005 82	14.874 0.912 38	13.600 - 1	14.588 0.946 210	275	
4 - 0	15.573 0.918 33	15.582 0.860 148	15.729 0.855 154	15.888 0.762 76	16.071 1.048 7	15.699 0.855 418		
5 - 0	16.457 1.057 68	16.604 0.959 204	16.730 2.791 227	16.948 0.858 111	17.268 0.972 14	16.716 1.853 624		
6 - 0	17.416 1.053 38	17.591 1.035 110	17.727 1.021 121	17.999 0.878 76	17.800 0.804 8	17.711 1.006 353		

Table 4.60(i)-showing Foot-length in cm. socio-economic (SE) level x sex-wise for the age level 2-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	12.600	12.483
	SD	1.131	0.542
	N	2	6
Low-middle		13.500	13.304
		1.259	1.094
		15	25
Middle		13.389	13.197
		0.779	0.708
		18	34
High-middle		13.850	13.426
		0.691	0.802
		8	19
High		13.600	13.600
		0.625	0.625
		3	3
			M 13.243
			SD 0.861
			N 87

Table 4.60(ii)-showing Foot-length in cm. socio-economic (SE) level x sex-wise for the age level 3-0 years.
(cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M	14.358	14.428
	SD	1.435	1.278
	N	12	18
Low-middle		14.581	14.396
		0.799	0.748
		36	71
Middle		14.810	14.668
		1.057	1.005
		49	82
High-middle		15.086	14.874
		0.725	0.912
		21	38
High		13.600	13.600
		-	-
		1	1
			M 14.588
			SD 0.946
			N 210

Table 4.60(iii)-showing Foot-length in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 15.607	15.544	15.573
	SD 0.884	0.970	0.918
	N 15	18	33
Low-middle	15.813	15.386	15.582
	0.895	0.783	0.860
	68	80	148
Middle	15.832	15.592	15.729
	0.900	0.777	0.855
	88	66	154
High-middle	16.013	15.763	15.888
	0.739	0.775	0.762
	38	38	76
High	17.250	15.600	16.071
	1.061	0.629	1.048
	2	5	7
			M 15.699
			SD 0.855
			N 418

Table 4.60(iv)-showing Foot-length in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 16.687	16.155	16.457
	SD 0.936	1.144	1.057
	N 39	29	68
Low-middle	16.763	16.445	16.604
	0.975	0.920	0.959
	102	102	204
Middle	16.968	16.443	16.730
	0.919	3.992	2.791
	122	105	227
High-middle	17.123	16.734	16.948
	0.803	0.883	0.858
	61	50	111
High	17.800	16.900	17.286
	1.051	0.754	0.972
	6	8	14
			M 16.716
			SD 1.853
			N 624

Table 4.60(v)-showing Foot-length in cm. socio-economic (SE) level x sex-wise for the age level 6-0 years.
(cross-sectional study)

S. E. Level	Sex		Totals
	Boys	Girls	
Low	M	17.632	17.119
	SD	1.063	0.994
	N	22	16
Low-middle		17.857	17.294
		0.991	1.011
		58	52
Middle		17.837	17.620
		1.095	0.938
		60	61
High-middle		18.259	17.641
		0.937	0.644
		44	32
High		18.233	17.540
		1.002	0.635
		3	5
			M 17.711
			SD 1.006
			N 353

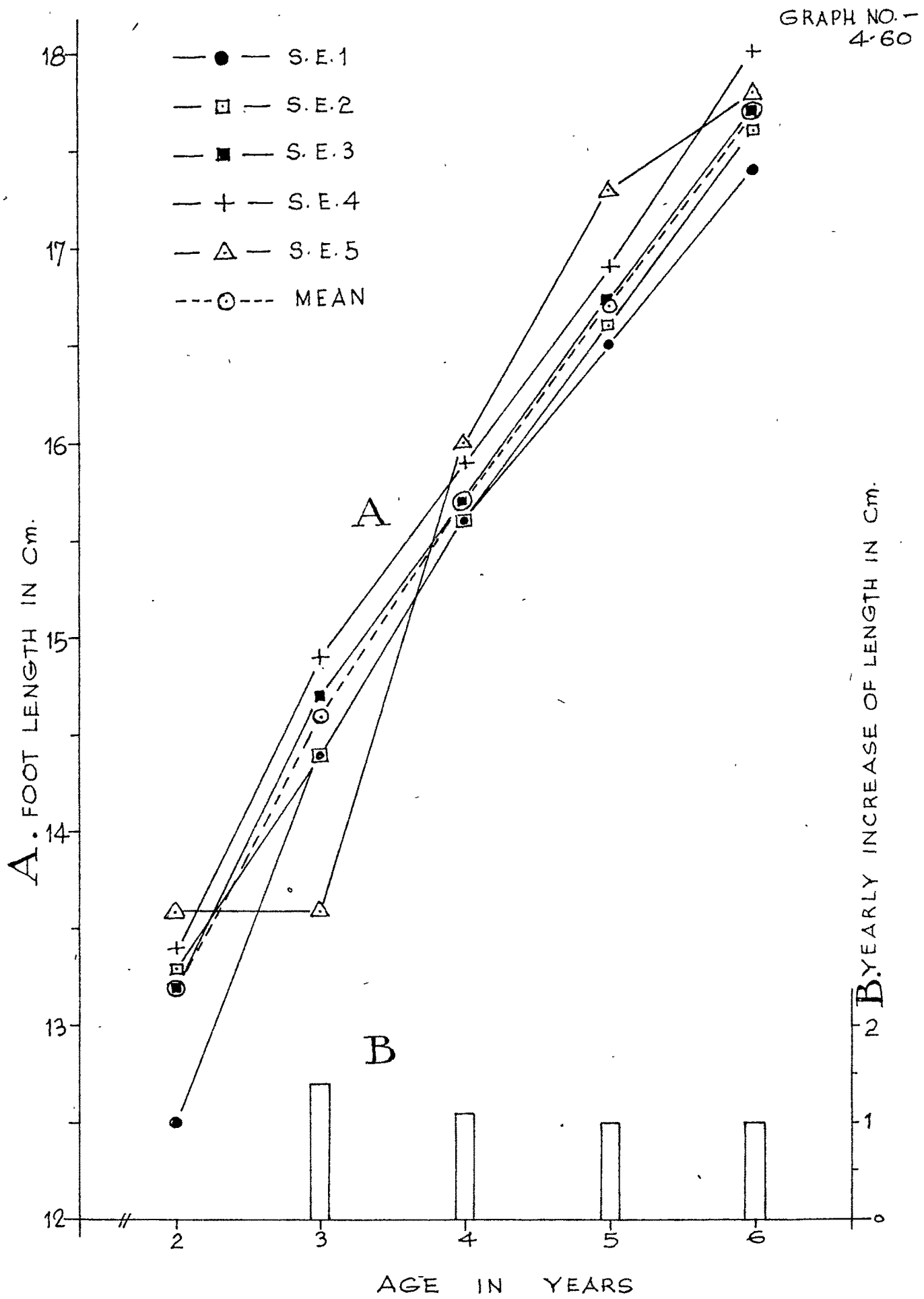


Table 4.61 - showing M and SD for Lower-limb (leg) length in cm.
at 17 age-points for whole sample area-wise, sex-wise
and area X sex-wise. (cross-sectional study)

Age-point Yrs./months	Milieu X sex-wise			
	U R B A N		R U R A L	
	BOYS	GIRLS	BOYS	GIRLS
1	2	3	4	5
2 - 0	33.61 2.586	32.69 2.116	35.56 4.414	32.04 3.568
2 - 3	34.14 2.842	33.18 2.842	36.00 4.464	32.22 3.277
2 - 6	35.89 2.835	34.95 2.697	38.31 6.142	34.25 2.069
2 - 9	37.13 2.807	36.56 2.748	39.18 6.010	37.54 4.572
3 - 0	38.58 3.064	37.83 2.747	40.63 4.661	36.94 3.252
3 - 3	40.22 2.629	39.75 2.446	39.80 3.046	38.40 3.004
3 - 6	41.56 2.638	41.04 2.473	38.68 3.514	39.06 3.124
3 - 9	41.15 2.435	41.82 2.532	39.74 3.316	41.00 3.125
4 - 0	43.15 2.373	42.58 2.581	39.43 2.636	40.01 3.474
4 - 3	43.99 2.444	43.64 2.463	40.98 2.797	41.03 4.024
4 - 6	44.72 2.591	44.50 3.574	41.67 3.315	41.84 3.315
4 - 9	45.38 2.551	44.89 2.419	42.99 3.341	42.15 3.199
5 - 0	46.16 2.606	45.77 2.291	43.25 2.713	42.56 2.507
5 - 3	46.87 4.398	46.58 2.452	43.89 3.236	43.39 3.766
5 - 6	47.95 2.656	47.94 2.543	45.28 3.291	43.85 3.208
5 - 9	48.58 2.613	47.49 2.294	45.39 2.684	45.86 2.513
6 - 0	49.12 2.574	48.68 2.555	47.09 3.121	47.51 4.426

Table 4.61 - contd.

Lower limb (leg) length in cm.

Age-point Yrs.Mo.	Milieu-wise		Sex-wise		Total Children
	Total Urban	Total Rural	Total Boys	Total Girls	
	6	7	8	9	10
2-0	33.19 2.410	34.76 3.937	33.95	32.54	33.49 2.817
2-3	34.10 2.843	36.53 3.978	34.30	33.03	33.69 2.923
2-6	35.46 2.803	36.79 5.308	36.18	34.88	35.60 3.163
2-9	36.87 2.784	37.96 5.461	37.47	36.72	37.05 3.389
3-0	38.25 2.943	40.25 4.381	38.78	37.78	36.40 3.075
3-3	39.99 2.542	39.16 3.040	40.14	39.53	39.86 2.637
3-6	41.28 2.532	39.80 3.134	40.75	40.72	40.76 2.643
3-9	40.44 2.483	39.84 3.263	40.94	41.65	40.06 2.641
4-0	42.86 2.493	39.68 3.017	42.53	42.24	42.39 2.811
4-3	43.83 2.455	40.99 3.264	43.41	43.29	43.36 2.807
4-6	44.62 3.082	41.73 3.384	44.16	44.08	44.05 3.370
4-9	45.15 2.500	42.63 3.290	44.96	44.47	44.74 2.804
5-0	45.98 2.426	43.15 2.154	45.75	45.34	45.52 2.220
5-3	46.72 3.533	43.64 3.502	46.33	46.02	46.17 3.715
5-6	47.72 2.607	44.68 3.309	47.50	47.41	47.27 2.926
5-9	48.04 2.435	45.53 2.162	47.91	47.13	47.56 2.223
6-0	48.92 2.570	47.28 3.749	48.72	48.46	48.60 2.902

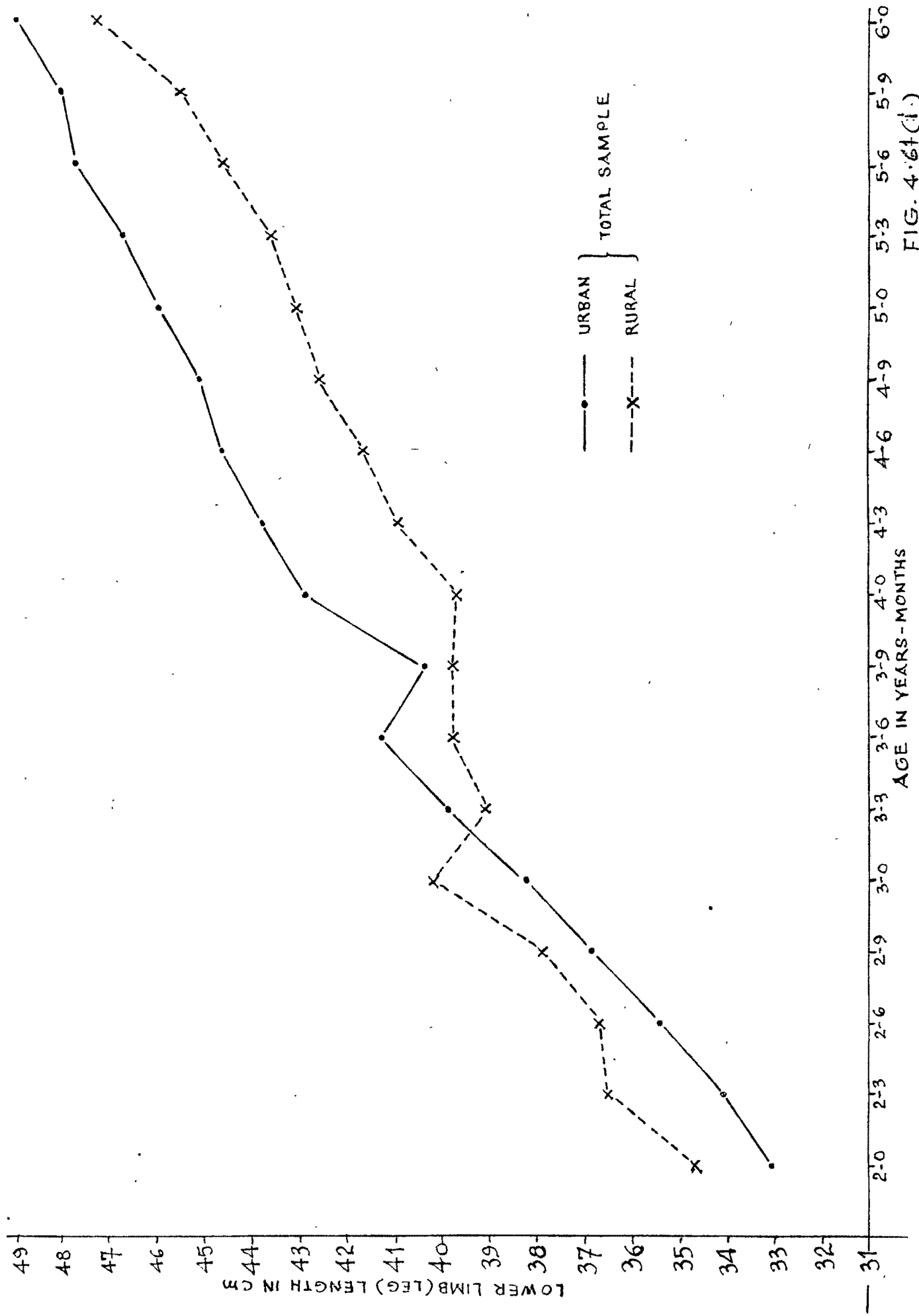


FIG. 4.64(d)

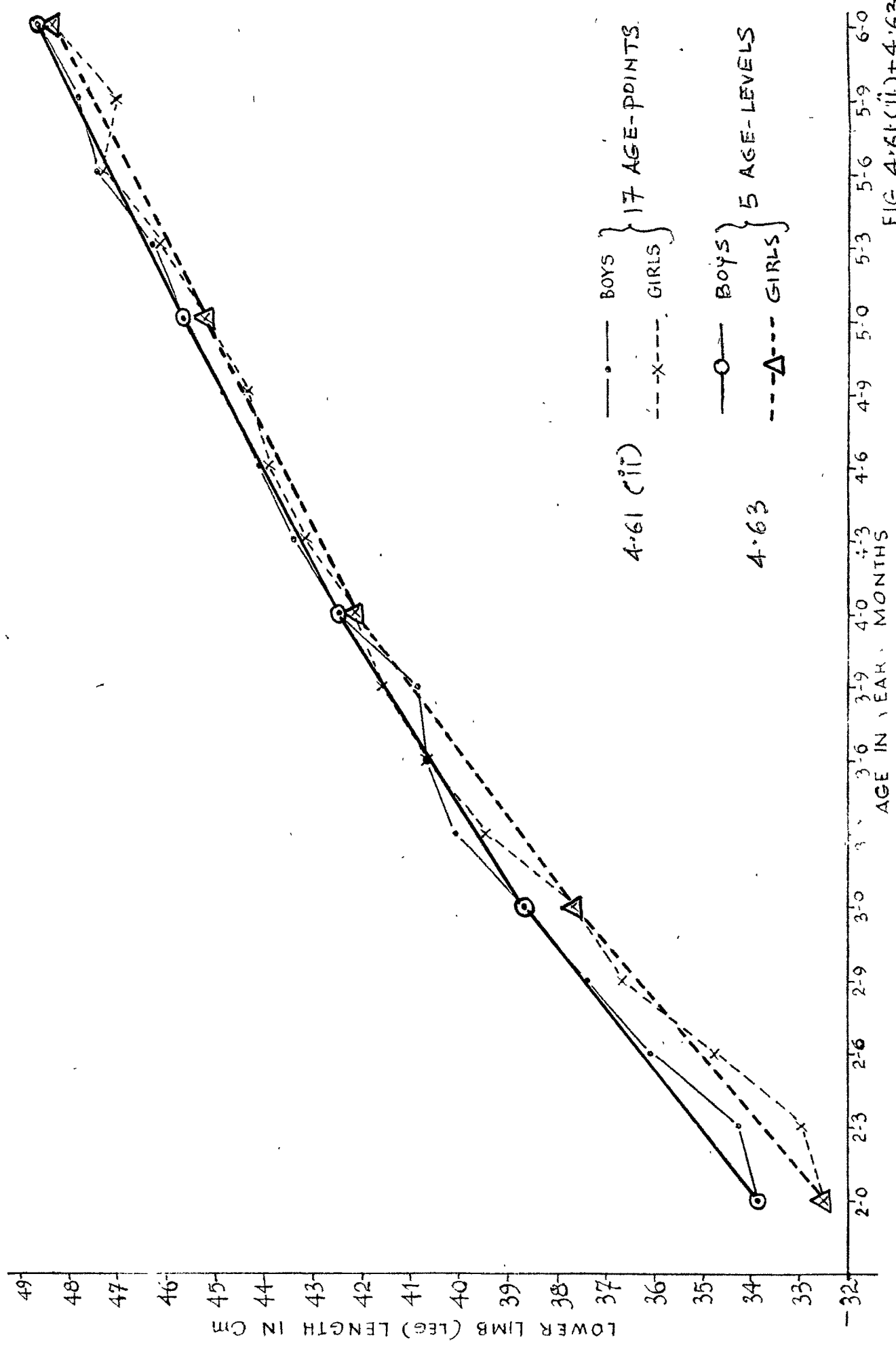


FIG. 4.61 (ii) + 4.63

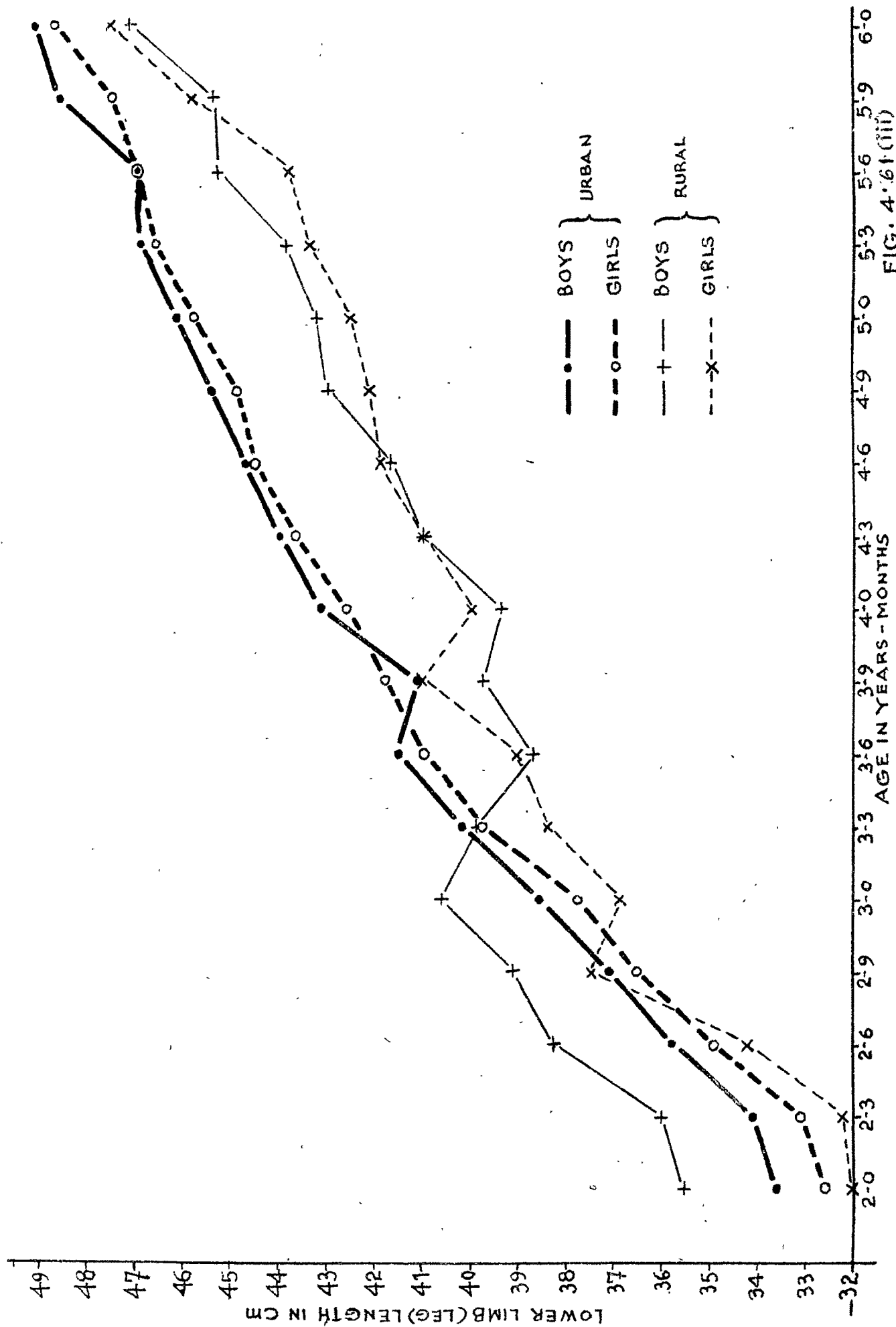
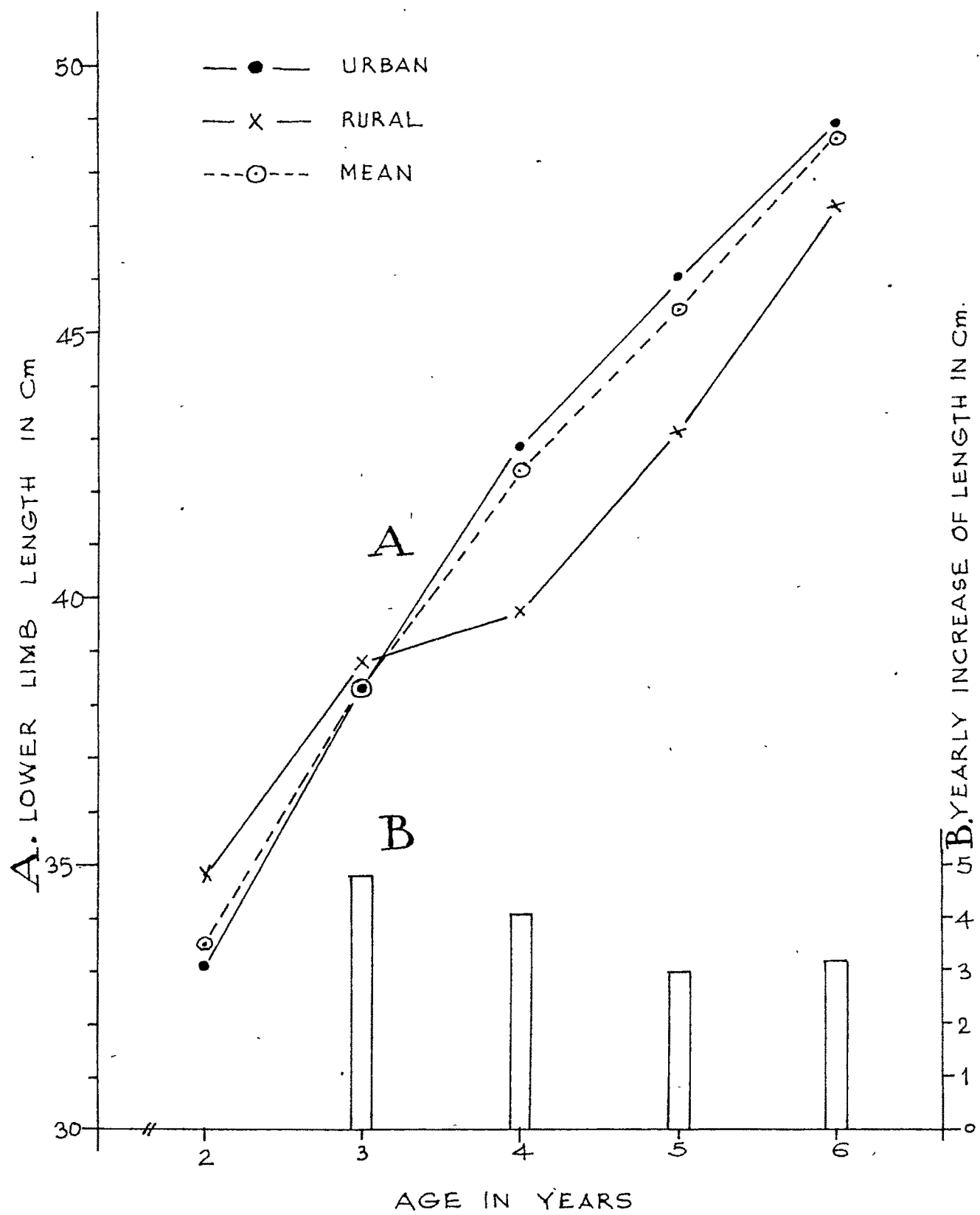


FIG. 4.61 (iii)

GRAPH NO. 4.62



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Table 4.63(i)-showing Lower-limb length in cm. area x sex-wise
for the age level 2-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	33.608	33.190
	SD	2.586	2.410
	N	38	70
Rural		35.562	34.759
		4.414	3.937
		8	17
			M 33.496
			SD 2.817
			N 87

Table 4.63(ii)-showing Lower-limb length in cm. area x sex-wise
for the age level 3-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	38.585	38.251
	SD	3.064	2.943
	N	107	193
Rural		39.642	38.847
		4.661	4.381
		12	17
			M 38.299
			SD 3.075
			N 210

Table 4.63(iii)-showing Lower-limb length in cm. area x sex-wise
for the age level 4-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	43.150	42.863
	SD	2.373	2.493
	N	176	356
Rural		39.431	39.685
		2.636	3.017
		35	62
			M 42.391
			SD 2.811
			N 418

Table 4.63(iv)-showing Lower-limb length in cm. area x sex-wise
for the age level 5-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	46.164	45.769
	SD	2.606	2.291
	N	283	256
Rural		43.25	42.561
		2.713	2.507
		46	39
			85
			M 45.519
			SD 2.220
			N 624

Table 4.63(v)-showing Lower-limb length in cm. area x sex-wise
for the age level 6-0 years.
(cross-sectional study)

Milieu	Sex		Totals
	Boys	Girls	
Urban	M	49.124	48.685
	SD	2.574	2.555
	N	150	135
Rural		47.089	47.513
		3.121	4.426
		37	31
			68
			M 48.601
			SD 2.902
			N 353

Table 4.64- showing Lower-limb (leg) length in cm. socio-economic (SE) level-wise for the five age levels.
(cross-sectional study)

		Socio-Economic levels (SE)					Totals
		Low	Low-middle	Middle	High-middle	High	
		SE 1	SE 2	SE 3	SE 4	SE 5	
2 - 0	M	30.167	34.156	33.709	33.268	33.700	33.497
	SD	2.248	3.356	2.584	2.186	0.459	2.816
	N	6	25	34	19	3	87
3 - 0	M	38.372	37.851	38.548	38.639	35.500	38.299
	SD	5.124	2.663	2.917	2.910	-	3.076
	N	18	71	82	38	1	210
4 - 0	M	41.885	41.626	42.482	43.645	45.386	42.392
	SD	3.209	2.866	2.626	2.303	1.475	2.806
	N	33	148	154	76	7	418
5 - 0	M	44.415	44.976	45.832	46.458	47.836	45.669
	SD	3.463	2.930	3.265	7.264	2.154	4.215
	N	68	204	227	111	14	624
6 - 0	M	47.195	47.955	48.928	49.571	50.037	48.602
	SD	2.998	2.784	2.810	2.692	2.960	2.896
	N	38	110	121	76	8	353

Table 4.64(i)-showing Lower-limb length in cm. socio-economic (SE) level x sex-wise for the age level 2-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 29.600	30.450	30.167
	SD 2.687	2.387	2.248
	N 2	4	6
Low-middle	34.633	33.440	34.156
	3.879	2.382	3.356
	15	10	25
Middle	34.056	33.319	33.709
	2.236	2.951	2.584
	18	16	34
High-middle	33.600	33.027	33.268
	2.914	1.582	2.186
	8	11	19
High	33.700	-	33.700
	0.459	-	0.459
	3	0	3
			M 33.497
			SD 2.816
			N 87

Table 4.64(ii)-showing Lower-limb length in cm. socio-economic (SE) level x sex-wise for the age level 3-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 37.850	39.417	38.372
	SD 5.436	4.719	5.124
	N 12	6	18
Low-middle	38.836	36.837	37.851
	2.536	2.428	2.663
	36	35	71
Middle	38.831	38.127	38.548
	3.366	2.201	2.917
	49	33	82
High-middle	38.752	38.500	38.639
	2.755	3.172	2.910
	21	17	38
High	35.500	-	35.500
	-	-	-
	1	0	1
			M 38.299
			SD 3.076
			N 210

Table 4.64(iii)-showing Lower-limb length in cm. socio-economic (SE) level x sex-wise for the age level 4-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 41.287	42.383	41.885
	SD 2.956	3.407	3.209
	N 15	18	33
Low-middle	42.260	41.086	41.626
	2.868	2.770	2.866
	68	80	148
Middle	42.516	42.438	42.482
	2.771	2.439	2.626
	88	66	154
High-middle	43.405	43.884	43.645
	2.273	2.338	2.303
	38	38	76
High	45.450	45.360	45.386
	3.182	0.854	1.475
	2	5	7
			M 42.392
			SD 2.806
			N 418

Table 4.64(iv)-showing Lower-limb length in cm. socio-economic (SE) level x sex-wise for the age level 5-0 years. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 44.853	43.841	44.415
	SD 2.895	4.073	3.463
	N 39	29	68
Low-middle	45.071	44.880	44.976
	3.141	2.716	2.930
	102	102	204
Middle	46.130	45.452	45.832
	2.716	3.805	3.265
	122	105	227
High-middle	46.749	46.048	46.458
	2.522	10.390	7.264
	61	50	111
High	48.600	47.262	47.836
	1.937	2.250	2.154
	6	8	14
			M 45.669
			SD 4.215
			N 624

Table 4.64(v) - showing Lower-limb length in cm. socio-economic (SE) level x sex-wise for the age level 6-0 yrsrs. (cross-sectional study)

S.E.Level	Sex		Totals
	Boys	Girls	
Low	M 47.441	46.856	47.195
	SD 3.084	2.940	2.998
	N 22	16	38
Low-middle	48.246	47.631	47.955
	2.429	3.125	2.784
	58	52	110
Middle	48.633	49.218	48.928
	2.806	2.806	2.810
	60	61	121
High-middle	49.843	49.197	49.571
	2.634	2.768	2.692
	44	32	76
High	52.633	48.480	50.037
	1.457	2.486	2.960
	3	5	8
			M 48.602
			SD 2.896
			N 353

