Chapter - IV

ANALYSIS AND INTERPRETATION
OF THE DATA

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The purpose of this study was to compare the physical fitness of the rural and urban high school girls of Chikmagalur district. To achieve this purpose, the data collected in this study were put to statistical analysis and the results of which are presented in this chapter.

For this study, 400 subjects in all, 200 rural and 200 urban high school girls of Chikmagalur district were selected.

They were subjected to five different tests to assess five physical fitness components. The tests were conducted on standard procedure.

Mean, standard deviation and 't' values of all five components are presented in different tables.

Table -1. Showing the mean value ± standard deviation and '*t*' value of speed (50 Yard Dash, Strength (modified push-ups), Endurance (600 yard Run/Walk), Agility (Shuttle run 4 x 10 mts), Leg power (standing broad jump).

Sl. No.	Physical Fitness Components	Name of the Game	Sample Size	Mean ± S.D.	'*t*' value
1.	Speed	Rural	200	12.48 ± 1.5860	2.2483*
		Urban	200	12.76 ± 1.0865	
2.	Strength	Rural	200	6.40 ± 1.7274	2.4076*
		Urban	200	6.74 ± 0.01696	
3.	Endurance	Rural	200	2.82 ± 0.4779	2.3587*
		Urban	200	2.93 ± 0.4799	
4.	Agility	Rural	200	19.93 ± 1.3998	2.3203*
		Urban	200	20.21 ± 1.3799	
5.	Leg Power	Rural	200	157.07 ± 28.5252	2.1008*
		Urban	200	161.63 ± 28.9650	

* Significant at 0.05 level.

Table – 2: Showing the Mean value ± Standard deviation and 't' score of the Speed (50 Yard Dash).

Sl. No.	High school girls	Sample Size	Mean ± Standard deviation	't' value
1.	Rural	200	12.48 ± 1.5860	2.2483*
2.	Urban	200	12.76 ± 1.0865	

* Significant at 0.05 level.

Table-2 shows the mean value and standard deviation of the two groups i.e., rural and urban high school girls with 't' score.

The 't' score on calculation is 2.2483 which is greater than table value i.e., 1.9719 and is significant at 0.05 level.

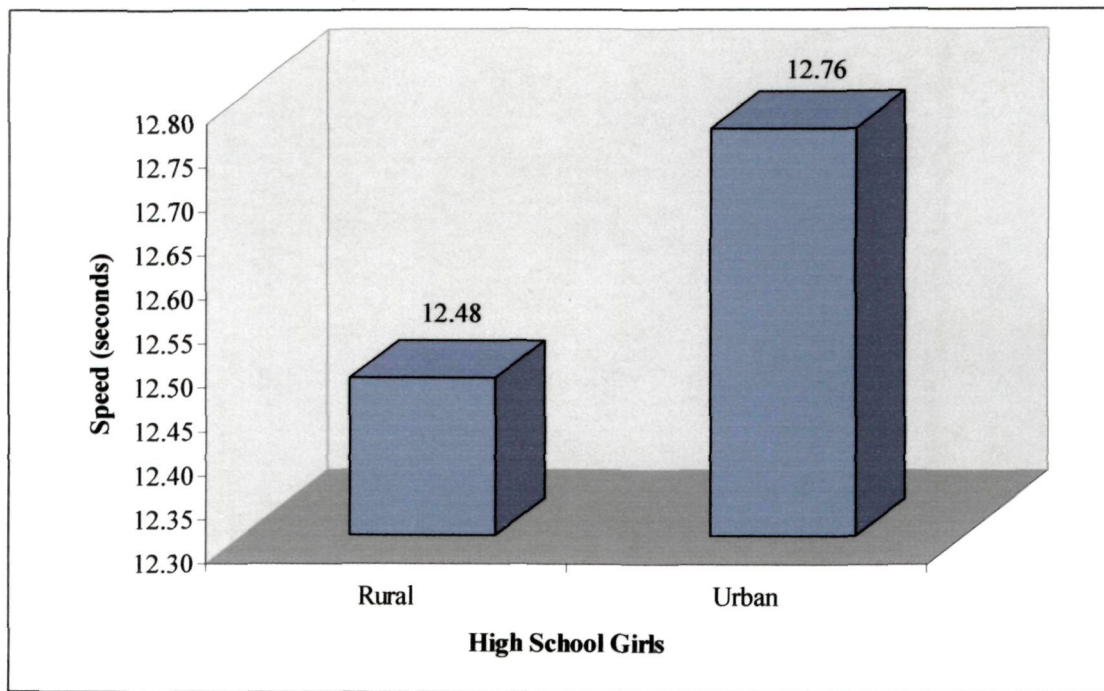The result is in agreement with the hypothesis of the researcher.

Fig-1. Graphical representation of mean value of Speed (50 Yard Dash).

Table – 3: Showing the Mean value ± Standard deviation and 't' score of the Strength (Modified Push-Ups).

Sl. No.	High school girls	Sample Size	Mean ± Standard deviation	't' value
1.	Rural	200	6.40 ± 1.7274	2.4076*
2.	Urban	200	6.74 ± 0.01696	

* Significant at 0.05 level.

Table-3 shows the mean value and standard deviation of the two groups i.e., rural and urban high school girls with 't' score.

The 't' score on calculation is 2.4076 which is greater than table value i.e., 1.9719 and is significant at 0.05 level.

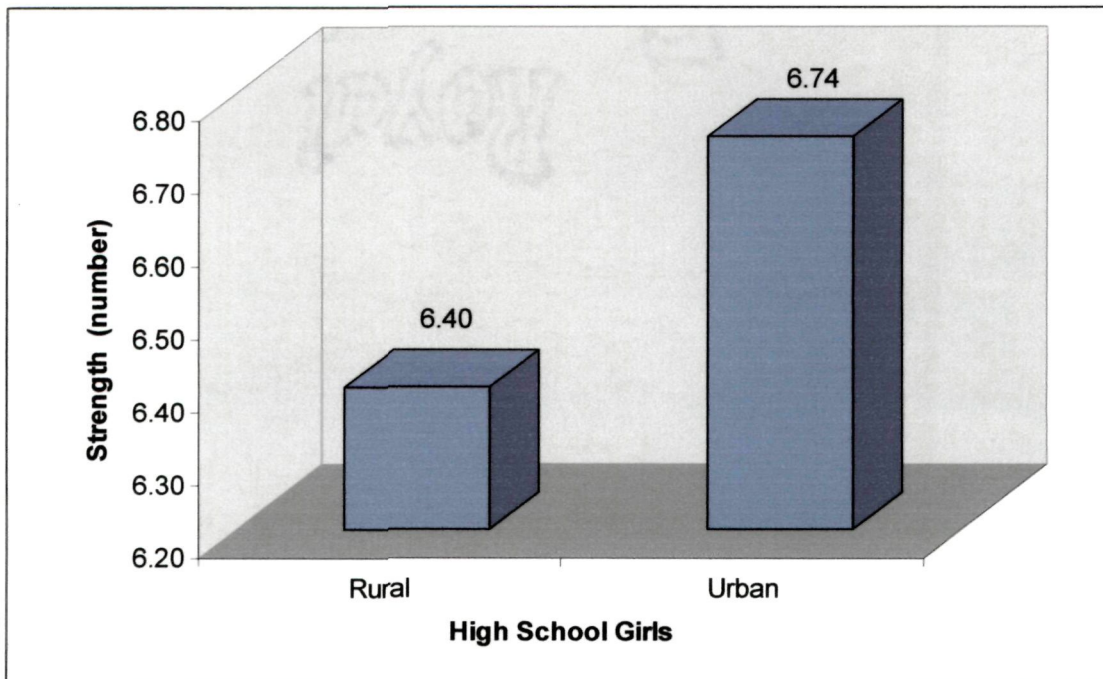The result is in agreement with the hypothesis of the researcher.

Fig-2. Graphical representation of mean value of Strength (Modified Push-Ups).

Table–4: Showing the Mean value ± Standard deviation and 't' score of the Endurance (600yard Run/Walk).

Sl. No.	High school girls	Sample Size	Mean ± Standard deviation	't' value
1.	Rural	200	2.82 ± 0.4779	2.3587*
2.	Urban	200	2.93 ± 0.4799	

* Significant at 0.05 level.

Table-4 shows the mean value and standard deviation of the two groups i.e., rural and urban high school girls with 't' score.

The 't' score on calculation is 2.3587 which is greater than table value i.e., 1.9719 and is significant at 0.05 level.

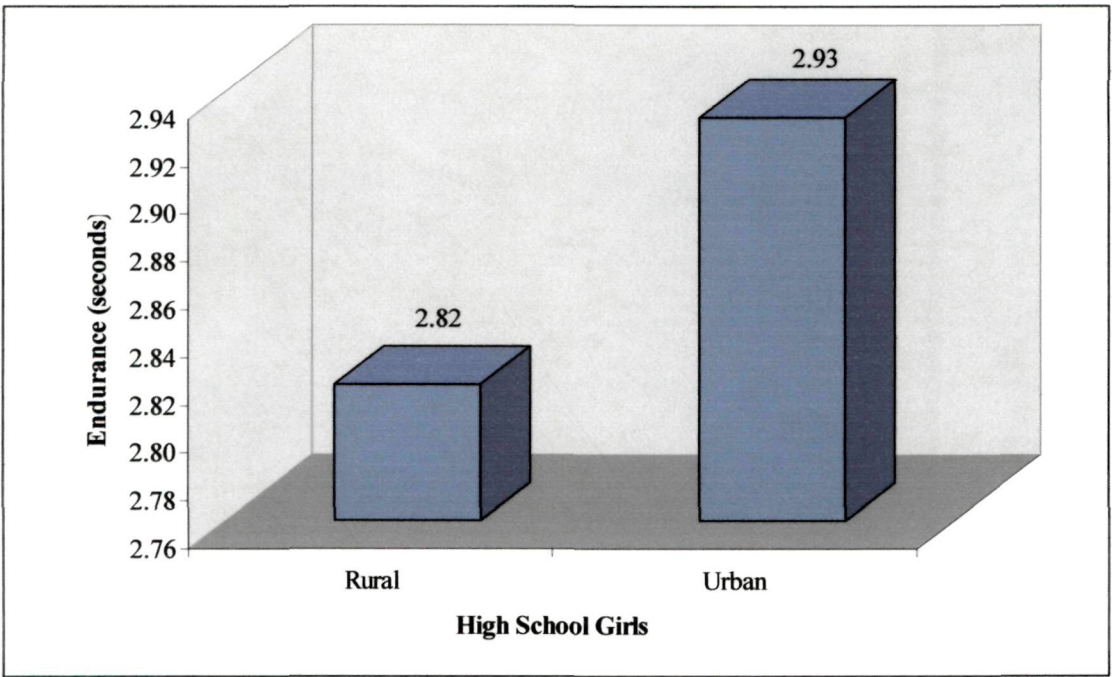The result is in agreement with the hypothesis of the researcher.

Fig-3. Graphical representation of mean value of Endurance (600yard Run/Walk).

Table-5: Showing the Mean value ± Standard deviation and '*t*' score of the Agility (Shuttle Run 4 x 10 mts).

Sl. No.	High school girls	Sample Size	Mean ± Standard deviation	'*t*' value
1.	Rural	200	19.93 ± 1.3998	2.3203*
2.	Urban	200	20.21 ± 1.3799	

* Significant at 0.05 level.

Table-5 shows the mean value and standard deviation of the two groups i.e., rural and urban high school girls with '*t*' score.

The '*t*' score on calculation is 2.3203 which is greater than table value i.e., 1.9719 and is significant at 0.05 level.

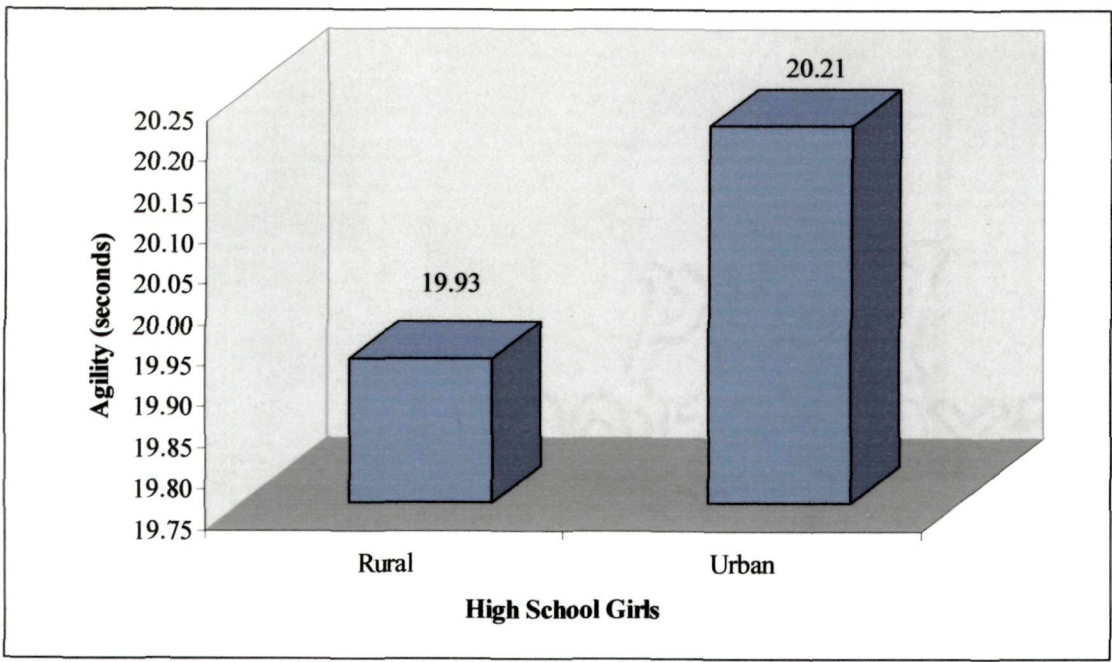The result is in agreement with the hypothesis of the researcher.

Fig-4. Graphical representation of mean value of Agility (Shuttle Run 4 x 10 mts)

Table – 6: Showing the Mean value ± Standard deviation and 't' score of the Leg Power (Standing Broad Jump).

Sl. No.	High school girls	Sample Size	Mean ± Standard deviation	't' value
1.	Rural	200	157.07 ± 28.5252	2.1008*
2.	Urban	200	161.63 ± 28.9650	

* Significant at 0.05 level.

Table-6 shows the mean value and standard deviation of the two groups i.e., rural and urban high school girls with 't' score.

The 't' score on calculation is 2.1008 which is greater than table value i.e., 1.9719 and is significant at 0.05 level.

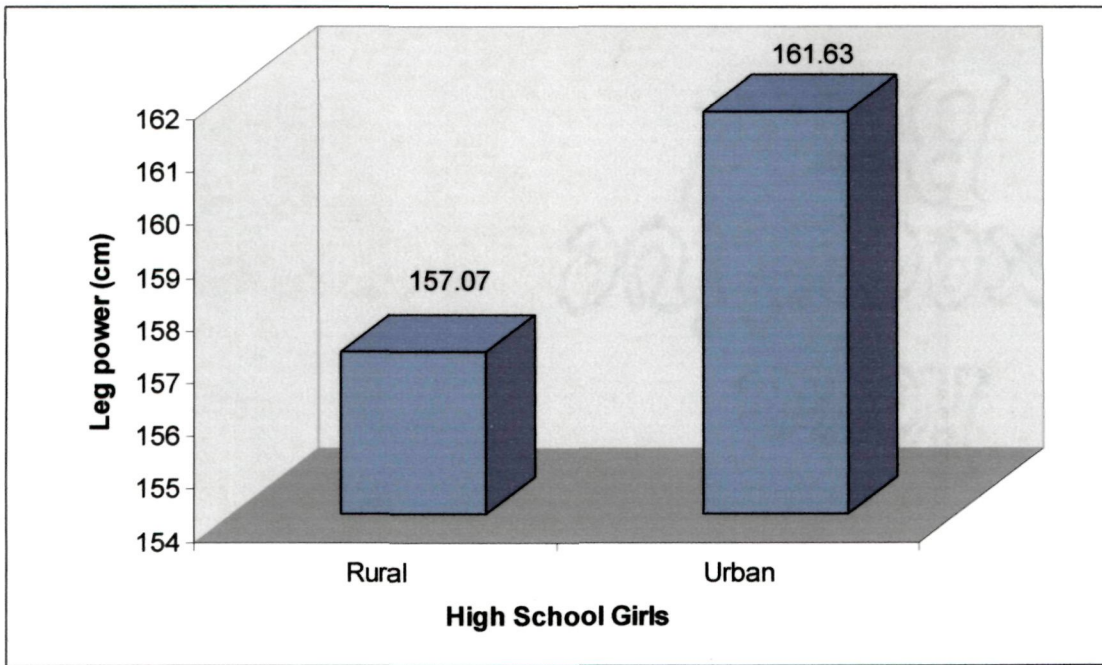The result is in agreement with the hypothesis of the researcher.

Fig-5. Graphical representation of mean value of Leg Power (Standing Broad Jump).