

FRAMING NORMS FOR THE PHYSICAL PERFORMANCES FOR PATHANKOT COLLEGIATE GIRLS

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***SWEETY BALA**

****AMANDEEP SINGH**

** Research Scholar, Department of Physical Education (T), Guru Nanak Dev University, Amritsar, Punjab, India*

***Associate Professor, Department of Physical Education (T), Guru Nanak Dev University, Amritsar, Punjab, India*

ABSTRACT

The aim of this study was to frame norms for the physical performances for Pathankot collegiate girls. 450, subjects from selected collage of Pathankot affiliated to Guru Nanak Dev University, Amritsar were selected for the present study. These above aims erect the respective study objectives: To find out the Descriptive Statistics (Mean & Standard Deviation) and (Hi & Low). To determine the Distribution of Grades under Normal Distribution, further it will be graded in into five grades i.e., Excellent, Good, Average, Poor, Very Poor. In 100 M: - The score Below 14.41 was considered excellent, between 14.41-16.48 was considered good, between 16.48-20.61 was considered average, between 20.61-22.67 was considered poor although, the scores Above 22.67 was considered very poor. In 200 M: - The score Below 24.40 was considered excellent, between 24.40-25.40 was considered good, between 25.40-27.40 was considered average, between 27.40-28.40 was considered poor although, the scores Above 28.40 was considered very poor. In Long jump: - The score Above 3.32 was considered excellent, between 3.32-2.63 was considered good, between 2.63-1.25 was considered average, between 1.25-0.56 was considered poor although, the scores Below 0.56 was considered very poor. In Shot-Put: - The score Above 5.41 was considered excellent, between 5.41-4.29 was considered good, between 4.29-2.06 was considered average, between 2.06-0.95 was considered poor although, the scores Below 0.95 was considered very poor. In Javelin Throw: - The score Above 16.17 was considered excellent, between 16.17-12.01 was considered good, between 12.01-3.70 was considered average, between 3.70-0.45 was considered poor although, the scores Below 0.45 was considered very poor.

Keywords: Physical Performance, Collegiate Girls, Norms

INTRODUCTION:

Physical fitness is one of the important indices of health that helps people to carry out daily activities safely and independently without undue fatigue. A new fitness concept, health-related fitness, has been introduced on the basis of relationships between physical activities, fitness, and health. Health-related fitness refers to the components of fitness (cardiorespiratory endurance, muscular strength, muscular endurance, and flexibility) that are affected by habitual physical activity and are related to various health outcomes. Lower levels of fitness are associated with all-cause mortality, a high risk of cardiovascular disease, cancer, functional disability, and arterial stiffness. Health-related physical fitness (HRPF) is made up of multiple components including, cardiorespiratory endurance (CRE), musculoskeletal fitness (muscular strength, endurance, and power) and body composition, which have been identified as powerful markers of future health among children and adolescents. There is a consistent body of evidence supporting the favorable effects of moderate-to-high levels of physical fitness to health-related outcomes, including cardio-metabolic risk factors, musculoskeletal and cognitive traits in childhood and adolescence. It has also been reported that positive changes to HRPF during childhood and adolescence can mitigate the impact of negative health outcomes later in life.

Selection of Subjects: -

- ◆ 450, subjects from selected collage of Pathankot affiliated to Guru Nanak Dev University, Amritsar were selected for the present study. Any acute or chronic physical disease that would limit the ability of the players to participate in the study.

SELECTION OF EVENTS:

- ◆ The study will further be delimited to the following events of athletics (Viz. Running, Jumping and Throwing). The description of events is brought forth at

Table-1:

Table-1: Events (Running: 100 M, 200 M; Jumping: Long Jump; Throwing: Shot-Put and Javelin Throw).

Events				
Running		Jumping	Throwing	
100 M	200 M	Long Jump	Shot-Put	Javelin Throw

AIM AND OBJECTIVES:

This study aims to Predict the Physical Performances for Collegiate Girls by framing its Norms and Distribution of Grades under Normal Distribution. These above aims erect the respective study objectives: -

- ◆ To find out the Descriptive Statistics (Mean & Standard Deviation) and (Hi & Low).
- ◆ To determine the Distribution of Grades under Normal Distribution, further it will be graded in into five grades i.e., Excellent, Good, Average, Poor, Very Poor.

INCLUSION AND EXCLUSION CRITERIA

There were some inclusion and exclusion criteria used for participating in the study. Those included the following: -

Table-2: Inclusion and Exclusion criteria used for participating in the study.

Inclusion Criteria	Exclusion Criteria
450, subjects from selected collage of Pathankot affiliated to Guru Nanak Dev University, Amritsar	Age > 17 and < 23
Only female subjects were included for the present study.	Any acute or chronic physical disease that would limit the ability of the players to participate in the study.
	Denial to give informed consent.

STATISTICAL TREATMENT

The following statistical analysis will be employed to fulfill the objectives: -

- 1) First objective will be fulfilled by applying the Descriptive Statistics (Mean & Standard Deviation) and Percentile Plot (Hi & Low).
- 2) Second objective will be solved by applying the Distribution of Grades under Normal Distribution, further it will be graded in into five grades i.e., Excellent, Good, Average,

Poor, Very Poor.

RESULTS:

Table-3: Descriptive statistics of subjects for collegiate girls of District Pathankot for (Sprinting: 100 M, 200 M; Jumping: Long Jump; Throwing: Shot-Put and Javelin Throw).

	Sprinting	Jumping	Throwing
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<i>Statistics</i>	<i>100 M</i>	<i>200 M</i>	<i>Long Jump</i>	<i>Shot-Put</i>	<i>Javelin Throw</i>
Minimum	14	24.9	0.97	1	1.65
Maximum	24.65	28.9	3.55	7.2	15.6

Range	10.65	4	2.58	6.2	13.95
Size	n=450	n=450	n=450	n=450	n=450
Sum	8345.98	11881.4	876.5	1432.35	3536.99
Mean	18.54662	26.4031	1.94777	3.183	7.85997
Median	18.16	26.3	1.835	3	7.55
Mode	18.98	26.3	3.00	1.6	7.66
Standard Deviation	2.06502	1.001219	0.690145	1.4821	4.158302
Skewness	0.552	0.3853	0.35886	0.4829	0.54673
Kurtosis	3.010	2.743	2.0619	2.3671	2.3191

Table-4: Distribution of Grades for collegiate girls of District Pathankot for (Sprinting: 100M, 200 M; Jumping: Long Jump; Throwing: Shot-Put and Javelin Throw).

Sr. No.	Test Items	Excellent	Good	Average	Poor	Very Poor
1.	100 M	Below 14.41	Between 14.41-16.48	Between 16.48-20.61	Between 20.61-22.67	Above 22.67
2.	200 M	Below 24.40	Between 24.40-25.40	Between 25.40-27.40	Between 27.40-28.40	Above 28.40
3.	Long Jump	Above 3.32	Between 3.32-2.63	Between 2.63-1.25	Between 1.25-0.56	Below 0.56
4.	Shot-Put	Above 5.41	Between 5.41-4.29	Between 4.29-2.06	Between 2.06-0.95	Below 0.95
5.	Javelin Throw	Above 16.17	Between 16.17-12.01	Between 12.01-3.70	Between 3.70-0.45	Below 0.45

The above table indicates that: -

- **100 M:** - The score Below 14.41 was considered excellent, between 14.41-16.48 was considered good, between 16.48-20.61 was considered average, between 20.61-22.67 was considered poor although, the scores Above 22.67 was considered very poor.
- **200 M:** - The score Below 24.40 was considered excellent, between 24.40-25.40 was considered good, between 25.40-27.40 was considered average, between 27.40-28.40 was considered poor although, the scores Above 28.40 was considered very poor.

- **Long jump:** - The score Above 3.32 was considered excellent, between 3.32-2.63 was considered good, between 2.63-1.25 was considered average, between 1.25-0.56 was considered poor although, the scores Below 0.56 was considered very poor.
- **Shot-Put:** - The score Above 5.41 was considered excellent, between 5.41-4.29 was considered good, between 4.29-2.06 was considered average, between 2.06-0.95 was considered poor although, the scores Below 0.95 was considered very poor.
- **Javelin Throw:** - The score Above 16.17 was considered excellent, between 16.17-12.01 was considered good, between 12.01-3.70 was considered average, between 3.70-0.45 was considered poor although, the scores Below 0.45 was considered very poor.

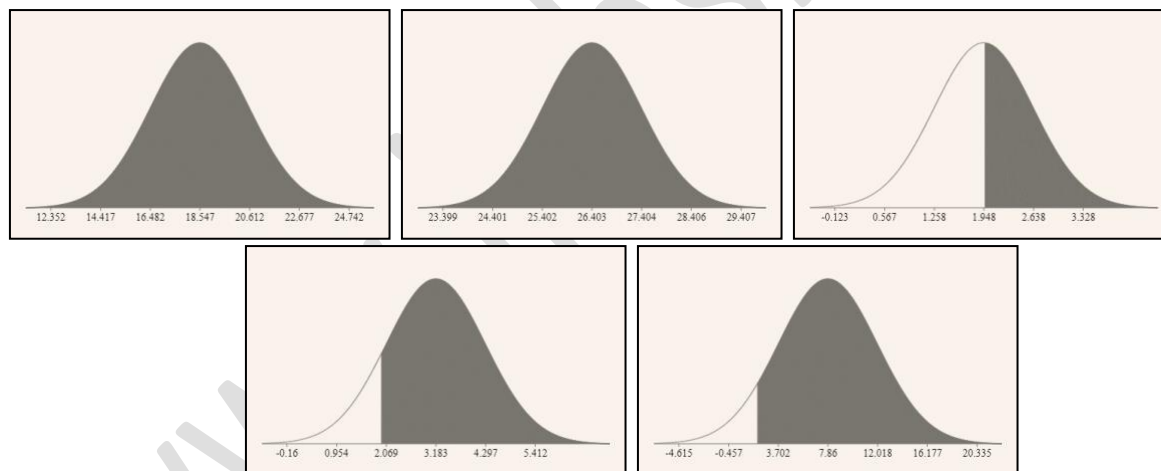


Figure-1: Area Under the Normal Distribution of 100 M, 200 M, Long Jump, Shot-Put and Javelin Throw.

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