



# STANDARDIZATION OF ARTISTIC GYMNASTIC SKILL TEST ON TWO DIFFERENT LEAP WITH OR WITHOUT STEP FOR SUB JUNIOR GIRLS

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## ABSTRACT

The goal of this research was to standardise an artistic gymnastic skill test on the two different leap with or without step for sub junior girls. A sample size or design is a predetermined strategy for acquiring a sample from a specific population before any data is gathered. With the use of purposive sampling, the participants of this study were girls gymnastic players who represented minimum state level or 3 year game age (as confirmed by coach). The subjects were all under the age of 14 years. The researcher developed the face validity of the gymnastic skills test battery. A researcher took many gymnastic techniques from the FIG regulations. Following that, we forwarded the abilities to 13 experts for grading using a Likert scale. The experts then assessed and made recommendations. We finalised the skill by reviewing the ratings. Highly ranked skills were taken into account for the skill test battery. It is determined that the gymnastic skill test may successfully evaluate the gymnastic skill ability of the sub-junior gymnastic players with acceptable face validity, high reliability, and objectivity.

**Keywords:** Artistic, Gymnastics, balancing beam.

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## INTRODUCTION

Gymnastics words, particularly for specific pieces of practise constructed (some without tools) using special tools and applied to competition among practitioners of these exercises—the perfection of competition combinations based on difficulty and performance. Most incidents involving the display sequence in modern sports gymnastics include six artistic programmes for men, namely horizontal bars, parallel bars, vaulting tables, Roman Rings, Pommel Horse, and floor exercises, and four (4) artistic events for women, namely floor exercise, balance beam, uneven or asymmetrical bars, and vaulting table, Trampoline and Tumbling, Sports Acrobatics, group gymnastics, and rhythmic gymnastics competitions, but only those events are included.. Perhaps the notion that matters the popularity of gymnastics is not the entirety of gymnastics today without school physical education. Kamlesh M.L (2006).

**Rosch et al. (2000)** created a standardised test battery to assess football players' physical performance. The F-MARC test battery, which included a functional, structured 2.5-hour training session, was meant to closely mirror a football player's usual activities. It comprised a warm-up grading as well as assessments of flexibility, football abilities, power, speed, and endurance. The game was followed by a cool-down session for the participants. 588 football players were given the F-MARC test battery. Mean test scores for groups of varied ages and ability levels were provided. The test battery proven to be a useful instrument for assessing physical performance as well as football abilities.

**Baskaran (2001)** In Pondicherry State, we created a volleyball skill test and computed criteria for school boys of various ages. 1505 male high school pupils aged 13 to 15 were chosen as subjects. All of the topics were picked from the 7th, 8th, 9th, and 10th grades at each school. For the construction of new skill assessments, the investigator picked pass and service skills. The Brumbach forearm (underarm) pass volley test was utilised as the criteria test, and new skill tests for the new service skill test and the underhand skill test were constructed with suitable court markings. The reliability, validity, and impartiality of the new skill tests were established. Following that, norms for the newly built tests were created for each skill and age group. The norm was created using the Hull scale statistical approach. The newly developed service competence assessments were proven to be reliable and consistent. 73 subjects failed the pass skill, 194 were below average, 554 were average, 483 were above average, 180 were good, and 21 were outstanding, according to the qualitative evaluation. Out of 1505 topics, 86 were failing, 170 were below average, 543 were average, 522 were above average, 138 were good, and 46 were exceptional, according to the qualitative assessment.

### Significance of the Study:

Gymnastic is the mother game of the all sports. Indian gymnasts is not achieve a glorious at the Olympic level. So performance of the Indian women Gymnasts is very behind in 2018 Asian games. Their performance were average but failure to achieve Medal in Olympics. So researcher need to assess the standard of female gymnasts at grass root level and upgrade the talent of gymnasts in appropriate manner. This instrument may also be used in grading Gymnasts in advance teaching or coaching of Gymnastic or in coaching session arranged for competition at various levels. This study will helpful physical education teachers and coaches in judging the adequacy of achievements of their players or students in Gymnastic skill and will assist the players or students to diagnosing their own strengths and weakness in Gymnastic. The test will be the latest test which fulfils the present requirement of girls Gymnastic.

### Statement of the Problem:

“Standardization of Artistic Gymnastic Skill Test on Two different leap with or without step for Sub Junior Girls”.

### Objective of the Study:

1. To standardize the artistic Gymnastic skill test on *Two different leap with or without step* for 10 – 12 year girls

2. To standardize the artistic Gymnastic skill test on *Two different leap with or without step* for 12-14 year girls.

**Hypotheses of the Study:**

1. It is hypothesized that the newly constructed skill test will be highly reliable for sub junior gymnasts.
2. It is hypothesized that the newly constructed skill test battery will be highly objectivity for gymnasts.

**Operational Definition of key terms:**

- ❖ **Gymnastic:** Gymnastics is an exciting activity and sport for its unique contribution to general fitness, coordination, agility, strength, balance and speed. It promotes all-round physical development, muscular strength, joint flexibility, balance, coordination and core strength required for everyday living.
- ❖ **Test:** Test is an instrumental tool which can help to the researcher for assessing or measuring the specific or particular characteristics of selected sample or subjects in the research studies.

**Research Method:**

The present study is a type of descriptive research. In this paper for the sampling design, sampling frame, establishing procedure to construct gymnastic skill test battery, identification of skill items, face validity, establishing the procedure to perform gymnastic skills, tools used, procedure of establishing scoring, data collection for reliability and objectivity, establishing reliability, establishing objectivity. Administration of the test and statistical techniques applied to standardized and developed norms have been described.

**Sampling Technique:**

The subjects of this study was 200 girls Gymnastic players who represented minimum state level or 3 years game's experience (as per certified by coach) with the help of purposive sampling.

Variable- Two Different Leaps With Or Without Step

Purpose- To Measure Two Different Leaps With Or Without Step

Equipments-Mats

Procedure:

The performer stands upright, legs slightly apart but only the front leg's toe contacting the beam, entire body extended, arms raised up by the side of the head, head in line with the body facing straight ahead. Bend the front leg's knee and place your entire body weight on it, while swinging both arms and the back leg strongly from back to front to the height of your hip, arms elevated but stretched out. Remove from the supporting limb and elevate it pushed backward-upward to finish the straddle leap forward motion. Extend the hips angle by hyperextending the thighs while the entire body is extended as the body travels through the air. During this period, the belly is kept in, the torso is pushed out, there is a small arch in the back, and the head is raised up. During the landing, the gymnast/performer first lands on toe-ball heels, bending the knee of the supporting limb to receive the body's force. The rest of the torso stayed stretched. During this action, the entire body is extended, but the supporting leg is slightly bowed, the arms are resting by the side of the pelvis, and the head is straight ahead. Now, kick up the working limb as high as possible, and instantly push off the supporting foot, propelling it upward in the direction of the first foot, so that it passes the working foot/first foot in its descent. During this action, the arms are raised to the side of the head. When the artist completes the scissor kick, she falls on the floor with her first leg's knee

slightly bent and her second leg elevated. The torso must stay upright throughout this period of movement, with arms extended by the side of the hips.



Above the Shows the Two Different Leaps With or Without Step Skill of gymnastic battery test

**Scoring:** The score is on the basis of judgment by experts.

**Result of the study:**

**Table shows the standard score of t-scale, hull-scale, and sigma-scale of Two Different Leaps With or Without Step skill for 10-12 years**

| T-scale | Sigma scale | Hull scale |
|---------|-------------|------------|
| 5.5     | 4.9         | 5.05       |
| 5.2     | 4.72        | 4.84       |
| 4.9     | 4.54        | 4.63       |
| 4.6     | 4.36        | 4.42       |
| 4.3     | 4.18        | 4.21       |
| 4.0     | 4.0         | 4.0        |
| 2.5     | 3.82        | 2.95       |
| 2.8     | 3.64        | 3.16       |
| 3.1     | 3.46        | 3.37       |
| 3.4     | 3.28        | 3.58       |
| 3.7     | 3.1         | 3.79       |

Table showed that the standard t, sigma, and hull score of two different leaps with or without step skill for gymnasts aged 10 to 12 years The minimum t, sigma , and hull score of Two Different Leaps With or Without

Step skill were 3.7, 3.1, and 3.79, respectively, and the maximum score was 5.5, 4.9 and 5.05. The results show that the minimum and maximum standard scores of t, sigma, and hull-scale of Two Different Leaps With or Without Step skill are in the poor and excellent categories.

**This table shows the standard score of t-scale, hull-scale, and sigma-scale of Two Different Leaps With or Without Step skill for 12-14 years**

| T-scale | Sigma scale | Hull scale |
|---------|-------------|------------|
| 6       | 5.4         | 5.6        |
| 5.6     | 5.16        | 5.32       |
| 5.2     | 4.92        | 5.04       |
| 4.8     | 4.68        | 4.76       |
| 4.6     | 4.44        | 4.48       |
| 4.2     | 4.2         | 4.2        |
| 3.8     | 3.96        | 3.92       |
| 3.4     | 3.72        | 3.64       |
| 3       | 3.48        | 3.36       |
| 2.6     | 3.24        | 3.08       |
| 2.2     | 3           | 2.8        |

Table showed that the standard score of the t, sigma and hull scale, of Two Different Leaps With or Without Step skill for 12 To 14 Years Gymnasts. The minimum score of t, sigma and hull score of Two Different Leaps With or Without Step skill i.e. 2.2, 3, 2.8 and maximum score were found i.e.6, 5.4, and 5.6 respectively. The results show that the minimum and maximum standard scores of t, sigma and hull-scale of Two Different Leaps With or Without Step skill lie in poor and excellent category.

#### **Conclusion of the Study:**

The gymnastic skill test ultimately could retain better skill item among the various skill items, which can successfully measure the two jump in succession one being a leap ability of the gymnastic players of sub-junior with acceptable face validity, highly reliability and objectivity.

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