CONSTRUCTION AND STANDARDIZATION OF FREE STYLE WRESTLING SKILL TEST

A Thesis

Submitted in partial fulfillment of the requirements for the

award of the degree of

DOCTOR OF PHILOSOPHY

in

(PHYSICAL EDUCATION)

By

Suresh Kumar

(11212731)

Supervised By

Dr. Harmanpreet Kaur

LOVELY PROFESSIONAL UNIVERSITY

PUNJAB

2022

DECLARATION

I declare that the thesis entitled ***construction and standardization of free style wrestling skill*** *test* has been prepared by me under the guidance of Dr. Harmanpreet Kaur, Associate Professor, Department of Physical Education, Lovely University Phagwara Kapurthala Punjab. No part of this thesis has formed the basis for the award of any degree or fellowship previously

SURESH KUMAR

INVESTIGATOR

Physical Education Department
Lovely Professional University
Phagwara, Kapurthala, Punjab (India)

DATE:

CERTIFICATE

This is to certify that Suresh Kumar has conducted study on the ***Construction and Standardization of Free Style Wrestling Skill*** *Test for* the award of Ph.D degree in Physical Education under my supervision. He has carried out the work at Lovely Professional University Phagwara, Punjab.

Dr. Harmanpreet kaur
Associate Professor, Lovely Professional University
Phagwara Punjab

ABSTRACT

The free style wrestling is an Olympic sport. Wrestling require high degree of skill development, physical fitness and motor abilities for outstanding performance the frequent change and advancement in wrestling sport are mainly due to the overemphasis given by sports experts in terms of systematic training and accurate application of scientific knowledge. The purpose of this study was to construct and standardized the norms for evaluating the skill performance of wrestlers in free style wrestling skill test. Since, there is a lack of standardized evaluative criteria in free style wrestling for assessing the ability, grading and predicting the performance of free style wrestlers, an effort was undertaken the problem as Follows: "Construction and Standardization of Free Style Wrestling Skill Test".

The objective of this study was, to construct and standardize the free style wrestling skill Test. A skill test may serve as useful tools for the selection of real wrestlers for a team representing their institutions, district or state association on an objective basis minimizing bias on the part of selection committee members. Provide feedback with motivation to the wrestlers from time to time on the degree of progress they make in their abilities. This instrument may also be used in grading wrestlers in advance teaching or coaching of free style wrestling or in coaching session arranged for competition at various levels. This study will helpful physical education teachers and coaches in judging the adequacy of talent of their students in wrestling skill and will assist the students to diagnosing their own strengths and weakness in wrestling. The test will be the latest test which fulfills the present requirement of free style wrestling.

The 400 Sample of study were selected through purposive sampling technique as per age group 15 to 17 (200) and 18 to 19 years (200) male wrestlers, which participated at national and state level competitions, and also minimum 3 years game age was considered. The age of wrestlers was taken through birth certificate, matriculation and Aadhaar Card. The sports participation was taken as per the record of academy and federation.

The Free style wrestling involved ninety three skills according to Fundamentals of scientific wrestling and Encyclopaedia of Wrestling book. The researcher had

reviewed wrestling related literature to inherit the knowledge in selected different wrestling skills test items by wrestling sport science journal, Encyclopedia of Wrestling by Singh. H, Comprehensive wrestling book by Gill, B.S, rule book of The Federation International des Luttes Associées(FILA), Ph.D. thesis Development of skill test of free style wrestling game for junior level by Mane H. Dnyaneshwar 2014 and research paper on the construction and validation of a test of wrestling skill by Khodadad,K. Sholeh & Farshad, T. 2015 studied and watched online Olympics free style wrestling match on you tube and live match in different state and national level competitions in Baba sheikh farid khusti Aakhada Faridkot and 61th Punjab school games Faridkot and also explore e-resources, academic databases, research gate, j-star, j-gate, Google scholar, sodhganga, PhD thesis and dissertations studied. After that list of free style wrestling skill test items was send to experts for construction the skill test items, feedback and suggestion.

Researcher has taken the experts opinion and suggestion by consulting with eight international, national level, Sports Authority of India and Punjab sports department wrestling coaches then finalized the free style wrestling skill test items for the standardized the test.

The researcher gave instruction to wrestlers about selected seven test items namely, single leg takedown, double leg takedown, firemen carry, arm throw, hip throw, gut wrench, ankle lace . Firstly researcher measured height and weight of wrestlers and made pairs accordingly. The wrestlers were allowed to warm up for 15 to 20 minutes before the skill test.

The researcher gave demonstration to wrestlers about selected test items. The skill test started with the signal i,e. blowing of whistle. The wrestlers executed his skill properly and the partner did not show any offensive technique. Three chances were given to the wrestlers and the best result was included. There was no time limit and the wrestlers were directed to perform the technique quickly. The skill was observed by the three judges sitting at three different corners. The scoring was based on expert's vision. Three experts gave the marks to performer on the scale of 1-5 and assign points according to the perfection of skill. The experts then compared the

scoring of four variables i,e grip, stance, speed/timing and wrestling skill. During the whole course of process the opponent remained stagnancies. Three chances were given to the wrestlers and best was recorded. There was no time bond but the wrestlers were directed to perform the skill quickly. The skill was noticed by the three judges. They scored independently than the three different score were added, mean was calculated and final scoring was done.

The data was collected by administering tests, was statistically treated to develop norms for all the test items. The norms were constructed by using Descriptive statistics, Correlation, Percentile and 7 Sigma Scale, T- Scale, Hull- Scale techniques analyzed through statistical packages, the scores were further classified into five grades i.e. Fair Poor Average Good Excellent under Normal Distribution. The result of the study T-scale, hull scale and sigma scale of free style wrestling skill test of 15 - 17 years age group lowest free style wrestling skill test score and the highest score were found i.e. T-Scale 13.07, Hull Scale 13.39, Sigma Scale 13.50 and T-Scale 15.24, Hull Scale 14.92 and Sigma Scale 14.81, respectively. The percentile norms of freestyle wrestling skill test battery for 15 to 17 years male wrestlers were found maximum scores at 5^{th} percentile and the minimum score at 95th percentile for Single leg takedown, Double leg takedown, Firemen carry, Arm throw, Hip throw, Gut wrench, Ankle lace skills i.e. 13.01, 13.33, 13.33, 13.00, 13.33, 13.33, 12.68 and 15.00, 15.00, 15.33, 15.00, 15.317, 15.33 and 15.00, respectively. The 5^{th} percentile and 95^{th} percentile score of total male wrestling skills was found 91.70 and 105.98, respectively. The 5 point grading norms of free style wrestling skill test for 15 to 17 years wrestlers. The norms for wrestlers show scores in between Excellent -100.60 to 140, Good – 98.99 to 100.59, Average -95.38 to 98.98, Fair- 95.77to 97.37 and Poor- 28 to 95.76.It was found that 35 wrestlers which is 17.5% falls in the scale of Excellent, 81 wrestlers which is 40.5% falls in the scale of Good, 49 wrestlers which is 24.5% falls in the scale of Average, 28 players which is 14% falls in the scale of Fair and 7 wrestlers which is 3.5% falls in the scale of Poor respectively. The T-scale, hull scale and sigma scale of free style wrestling skill test of 18 -19 years age group lowest free style wrestling skill test score and the highest score were found i.e. T-Scale 10.23, Hull Scale 11.83, Sigma Scale 12.12 and highest score were found i.e. T-

Scale 17.49, Hull Scale 16.40 and Sigma Scale 16.04 respectively. The percentile norms of freestyle wrestling skill test battery for 18 to 19 years male wrestlers were found maximum scores at 5^{th} percentile and the minimum score at 95th percentile for Single leg takedown, Double leg takedown, Firemen carry, Arm throw, Hip throw, Gut wrench, Ankle lace skills i.e. 13.33, 13.00, 13.33, 13.33, 13.00, 13.33, 12.68 and 95th percentile score in all skills 15.00, respectively. The 5 point grading norms of free style wrestling skill test for 18 to 19 years wrestlers. The norms for wrestlers show scores in between Excellent -100.46 to 140, Good – 98.99 to 100.45, Average - 97.52 to 98.98 Fair- 96.05 to 97.51 and Poor- 28 to 96.04. It was found that 32 wrestlers which is 16% falls in the scale of Excellent, 73 wrestlers which is 36.5% falls in the scale of Good, 62 wrestlers which is 31% falls in the scale of Average, 27 players which is 13.5% falls in the scale of Fair and 6 wrestlers which is 3% falls in the scale of Poor respectively.

ACKNOWLEDGEMENT

On the conclusion of the present Research, I wish to express my humble thanks to the 'Almighty' for being gracious in giving me force and intelligence to complete this work. It gives immense pleasure to acknowledge those who have generously supported me.

I would like to express my deep gratitude and heartfelt thanks to my esteemed supervisor, Dr.Harmanpreet Kaur Associate Professor, Department of Physical Education, Lovely Professional University Phagwara ,Punjab for her enthusiasm, inspiration, and great efforts to explain things Cleary and simply. Throughout my research work period, she provided encouragement, sound advice and loads of odds ideas. I would have been lost without her direction. It has been a proud privilege to work under her guidance.

I am immensely grateful to the wrestling federation of India and Punjab wrestling association officials who helped me to collect the data for their kind and valuable support towards this endeavor.

I also extend my cordial thanks to all my subjects belonging to all India for their help extended in the collection data.

I will be failing in my duty if I don' thanks to chief coaches views, their literature and opinions which have helped me complete this study.

I also extend my thanks to Sir O.P Yadav Chief Coach, Sham Budhaeki, Kamani Kumari *NSNIS Patiala,* Deva Nand Chief coach, Indian air force center Adampur, Bhajan Singh Chief coach Hans raj wrestling stadium Jalandhar, Hargobind Singh SAI wrestling coach, Baba Sheikh Farid Kusti Akhara Faridkot , Sarwan Singh SAI wrestling coach G.N.D.U Amritsar and *Dr. Rakesh Mahindra for their worthy guidance in this study.*

Finally, I would like to thanks to my father shri Harbans Lal, my wife Mrs. Sunita and my son Sathvik Kamboj for their kind and cooperative attitude towards this endeavor.

(Suresh Kumar)

CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER-1

INTRODUCTION

Wrestling is the combative sport. It deals with individual capability and strength of the muscles. Techniques, such as clinch fighting, throws and takedowns, joint locks, pins and grappling holds are used in wrestling. Each individual plays the game according to their weight and age category. Wrestling is a very popular sport but its origin is complicated. “Most of the European writers admit that the origin place of wrestling is in India, whereas world re-known Greece, Rome, Egypt and China” Dubey H.C. (1999). According to Kamble, M. K., 2020 “There are numerous evidence of wrestling in Vedic period (2500 B.C.-600B.C.) Aryans were very engaged to develop in physical strength vigor, martial art and involved in hand wrestling”. The same has been stated by Shekhar, C. and Kumar, J. (2019) and Kumar, N. (2008). Therefore wrestling was very famous in the history of India. Many Hindu epic like Ramayana Mahabharata etc. also refers the prevalence of wrestling in that era known as “Malla-Yudhha”. “The first literary reference of MallaYuddha can be traced from the Ramayana; a wrestling match fought between King Bali of Kishkintha and King Ravana of Lanka” Ishva(n.d.). At that time in Early Hindu Period (600B.C -320A.D) “Balram was a strong and skillful wrestler”. Indian Hindu epics also describe about the characters like Jarasandha, Bhima, Karna and Duryodhan during the period of Mahabharata. “In the Mahabharata, MallaYuddha figures in the legend of Lord Krishna and Balarama in their youth days, fighting in wrestling matches. Another instance seen in Mahabharata is when Bhima wrestled with Jarasindh, shattering rocks in the arena” Ishva(n.d.). “It is also mentioned that Rajputs used to participate in the event like wrestling, hunting etc” (Manjumder, N. 2018).

Hanuman was a more beached wrestler during the period in Ramayana. The thirteenth-century 'Malla Purana' converses with some Gujarati Brahmin wrestlers, who were known as 'Jyesthimallas' Kamble, M. K. (2020) and Sports: Wrestling in Lndia (2015).

The Indian kings had many corrals and court wrestlers, who addressed them against the wrestlers of their adversary kings. Wrestling in lndia can be separated into two fundamental classes like Malla-Krida and Malla-Yuddha. While Mall-krida is the games type of the game, Malla-Yoddha is the fight variant of wrestling. There are additionally some different types of wrestling in India, out of which, the free-form assortments are more normal than the wide range of various structures, since Vedic occasions. The free-form assortments of wrestling in India are known as Pushti or Kusthi (Sports:Wrestling in India, 2015).

Wrestling in India can likewise be separated into four kinds like Bhimaseni, Hanumanthi, Jambuvanthi and Jarasandhi, in light of the procedure and technique. The specialized predominance of the grappler matters the most in the Hanumanthi kind of wrestling. The wrestlers can yet score triumph over the rival of much more noteworthy strength, by his specialized predominance. ln the Jambuvanthi wrestling, the grappler applies locks and holds to deal with the rival. The Jarasandhi type of wrestling is primarily centered on the breaking of the lings and joints of the rival and consequently it is considered as the most hazardous from of wrestling in India. The other sort, Bhimaseni is for those wrestlers who have immense develop and fortitude. This type of wrestling gives strain on obtaining the strength. The old South Asian type of wrestling was called Malla Yuddha, rehearsed essentially since the fifth century BC and portrayed in the thirteenth century composition Malla Purana, it was the antecedent of modern phelwani. "Indian kings period can divide into four parts of wrestling such as Hanumanthi wrestling, Bhimaseni wrestling, Jambuwanthi wrestling, Jarasandhi. Hanumanthi wrestling fought with the expertness and holds. Bhimaseni wrestling fought by means strength, like Bheem. Jambuwanthi wrestling in which locks and chalks are used? Jarasandhi wrestling in which body parts are twisted and to be broken" Sports: Wrestling in India. (2015) and Dubey, H.C. (1999).

According to "Wrestling". Encyclopedi Britannica. (2021) "Cave drawings of wrestlers from 3000 BC in the Surnero-Akkadian civilization and divider canvases exist in Ancient

Egyptian civic establishments around 2400 BC. In these canvases were given information about wrestling is most established game in ancient Olympics. That even ancient Olympics sports for better comprehend about free-form wrestling, When it had nearer connections to military preparing, in early days, It was substantially more fierce and rebuffing sport". The equivalent has been expressed by Wrestling-gures history of wrestling. (2020) and Zidan, K. (2019). In world just as other "early civic establishments in India, Japan, China and the Middle East, modem Greco-Roman wrestling was first made famous in France by Roman". Simultaneously, a less prohibitive brand of wrestling made advances in the western world. In contrast to Greco-Roman grappler, who attempted to toss or in any case power their adversaries to the mat keep around the chest area, free-form wrestlers had more choices they could trip their rivals get and their legs and utilized their own legs in holds and it take-downs. The Free style wrestling is a refined state of Indian style. It is called 'Catch as catch can'. First ancient Olympic Games were held in 776 B.C. also, there was no access for wrestling sport" Cartwright, M. (2018) and Dubey, H.C (1999). As indicated by Wrestling gures history of wrestling, (2021) and Kamb le, M. K. (2020) "Wrestling was presented into the ancient Olympics in 708 BC. Contenders needed to toss their rival to the ground multiple times to acquire triumph" and "Wrestling was given a very important place in the world of ancient Olympics where it was considered as one of the pavilion events. It was innately connected to war fair after that it was conducted in a sandy pit.

The Modern Olympics of Athens in 1896 had only a single wrestling bout, a Greco-Roman match for the heavy weights. Freestyle wrestling was first time introduced in 1904 Olympic Games, where the contestants were only Americans and since from 1920 to till date, both forms (Greco- Roman and freestyle) of wrestling are constantly included in summer Olympic Games. India has a long history of playing Olympics games. They made first appearance in 1900 held at Paris and from 1920 they are continuously participating.

In 1920 two members of Indian team participated in wrestling mainly Kumar Navale and Randhir Shindes. Randhir Shindes make to semifinals and finally its fourth

position. After a long gap India participated in London Olympics 1948 as independent nation. India was send six member team in 8 weight categories. K.D Yadav a 21years old fought tremendously and secured sixth position defeated by an Iranian Wrestler M. Raisi who stands fourth. Other players don't play well and left an impression behind.

In 1952 Finland Olympic Soviet Union and best European players also take part in competition. In this Olympic India send four players with medal by K.O. Jodah and very close finish by Keshaw D. Mangawai in free style wrestling feather weight.

In 1956 summer Olympic India send 5 players but failed to make the mark but players cross the 3rd round. In 1960 Rome Olympics Indian wrestling team performed better, Madhav Singh finished with 5th place, Sajan Singh got 7th position, Uday Chand got 14th position and Gian Prakash got 15th position.

Tokyo Olympics 1964 was special for both India and other Asian countries because it was hosted in Asian country. India come with seven players in different weight categories but only Beshamber Singh secured 6th position. In 1968 Maxico Olympic Uday Chand Light Weight wrestler participating in continuously three summer Olympic in 1960, 1964, 1968 at the age of 33 but in 1968 Uday Chad secured 6th rank.

In 1972 Munich Olympic though has been infamous for terrorist attack, India presents a strong shows in different wrestling weight categories. Mr. Sudesh Kumar and 17 years old Prem Nath came 4th in their respective weights categories.

In 1976 Olympics Indian wrestling team did not participate. In 1980 Mascow Olympics India participated with five members team Jagminder Singh finished 4th and Rajwinder Singh was placed at 6th position.

The Los Angeles Olympics (1984) were interesting as USSR (Union of Soviet Socialist Republics) led East Bloc countries boycotted the games and hence competition

in Wrestling was comparatively eased than previous editions. India participated in all free style wrestling weight categories.

In 1988 Seoul Olympic India participated with 4 wrestlers but none of them could go beyond eliminating rounds. Kartar Singh became 2nd wrestler to participate in continuous three Olympic Games in 1980, 1984 and 1988.

In 1992 Barcelona, Spain Olympic Games were also unique for Indian Wrestling Team for two main events. One of them was the performance on Pappu Yadav in Light Fly Weight of Greco-Roman Category, in which after long gap since 1968, an Indian participated and that too secured decent 8th position. Subash Verma in Heavy Weight category free style wrestling secured 6th Rank.

In 1996 At India Olympic, Papu Yadav migrated to higher weight category, could not repeat performance and got 17th rank. In 2000 Sydney Olympic, Gurbinder Singh a lone wrestler participated and finished with 13th. After those things becomes better for India.

Athens Olympic 2004 witnessed women's first time participated, since 1904, India wrestling team comprises of seven wrestlers one in Greco-Roman and six in free style. Ramesh Kumar in men's wrestling team secured 10th rank but an experience for two young wrestlers of 21 years namely Yogeshwar Dutt at the Athens Olympics in 2004, feather weight category found himself drawn in a pool against Japanese grappler Chikara Tanabe and Sushil Kumar in light weight category of free style wrestling got 14th rank. Palwinder Cheema participated in heavy weight categories 120 kg previously untouched by India's wrestlers, he finished 15th in final ranking.

In 2008 Beijing Olympic Games India accompanied just three wrestlers, two experienced Yogeshwar Dutt in Lightweight 60 kg Category and Sushil Kumar in Welterweight 66 kg Class, alongside Rajeev Tomar in Super Heavy weight 120 kg. It merits examining about the arrangement of these free-form rivalries in the 2008

Olympics. This free-form wrestling rivalry comprised of a solitary disposal competition, with a re-pechage used to decide the champ of two bronze medals.

The most recent thirty Olympic Games in London 2012 saw the zenith of Indian Wrestling Team where it got back with two Olympic medals, uncommon first in Quite a while that too of various shadings one silver and one bronze and Sushil Kumar turned out to be first sports individual to accomplish particular accomplishment of being to accomplish twofold Olympic medal, out of these Geeta Phogat got t31h rank in ladies light weight and become first Indian ladies to take part in Olympic games, other two youthful wresters Amit Kumar and Narsingh Yadav got l0th and thirteenth position. "Wrestling as an Olympic game has been around since the beginning of current Olympic Games and India is a taking part country in it. Wrestling has one of a kind situation among Olympic disciplines in India, from being supplier of first individual medal to recently autonomous country to of late turning out to be most critical giver in medal count. This transitioning of Indian wrestling team with twofold medal count in the 2012 Olympics has been result of long and consistent excursion of lndian wrestling team over a time of 40-50 years and various Summer Olympic Games Suhag, N.S. (2015).

Wrestling was subject to maximum controversies prior to the build-up to the 2016 Rio Olympics in India. Sushil Kumar's off-field fight against Narsingh Yadav and the latter's doping controversy started the wrestling campaign on a sour note even before the wrestlers had set foot in Rio. But Sakshi Malik won bronze medal for 58 kg free style weight categories. Babita Kumari lost in the 1/8 round and her cousin Vinesh Phogat was forced to out of tournament due to knee injury.

Greco-Roman wrestlers Hardeep Singh 98kg and Ravinder Khatri 85kg lost in the first round of their respective events. Sandeep Tomar lost to two-time World Champion Victor Lebedev of Russia in the Round of sixteen. Even Yogeshwar Dutt had a shock exit by losing in the opening round to end India’s wrestling campaign in Rio, Ministry of youth affairs and Sports, (2018).

In 2020 Tokyo Olympics rescheduled which was held from 23 July to 8 August 2021 in Tokyo. The originally Olympics were scheduled from 24 July to 9 August 2020 but it was postponed due to world pandemic Covid-19. Indian Wrestling Team where it returned with two Olympic medals, that two of different colors-one silver and one bronze "Ravi Kumar Dahiya was won silver medal for men in 57 kg free style weight category after losing a close final bout to ROC's Zavur Uguev 4-7. Bajrang Punia won India's second wrestling medal as defeated Kazakhstan's Daulet Niyazbekov 8-0 in men's 65kg freestyle to win bronze." After losing to Azerbaijan's Haji Aliyev in the semi-finals, Bajrang dominated his Kazakh opponent to ease to victory in the bronze medal bout" List of All Indian Medal Winners at Tokyo Olympics (2021). Bajrang Punia is one of the best wrestlers in India and the world. Punia has won many Gold medals for India in various international events.

In India during the British rule, wrestling in India got another big push, as the British rulers included the game into the military practice. The British Military including Indian soldiers got attracted to wrestling. In the recent past, (British India and later Pakistan, after partition) the great Indian wrestler "The Great Gama" was famous in Gobar Goho wrestling. "Before the INDO-PAK partition the heavy weight wrestlers was honored by title of Rustam-E-Hind. After this the next title of Hind-Keshri was started. By passing the time many wrestling federations were formed in India. The new title of "Mahabharat Kesri". Mahabharat Kesri as well as Mall Samrat was formed" Dubey, H. C. (1999). Wrestling, in this way, proceeded with prospers as a famous sport in the country and India was positioned as one among the main 10 nations in the field of wrestling. This situation stayed unaltered till the 1960s. During 1967, the World Wrestling Championship was arranged by India in New Delhi."(Kushti ,n.d).

The Indian wrestling is the most popular sport in India as well as in neighboring 14 countries. India reached its peak of glory in the IV Asian Games (later on called Jakarta Games) in 1962. When all the seven wrestlers were placed on the medal list and in between them they won twelve medals in freestyle wrestling and Greco-Roman. A

repetition of this performance was witnessed again when all the 8 wrestlers sent to the Commonwealth Games held at Kingston. Jamaica had the distinction of getting medal for the country. During the 60s, India was ranked among the first 8 or 9 wrestling nations of the world and hosted the world wrestling championships in New Delhi in 1967 and commonwealth games in New Delhi in 2010. In wrestling arena the rising of some wrestlers, who have a high potential to revive their performances in India and international level. The famous Indian wrestler Sushi) Kumar has won Bronze medal in the 2008 Beijing Olympics games. Apart from the conventional way of wrestling, there is also another type of wrestling in India that has earned significant popularity now-a-days. This is called as Sports Entertainment and the World Wrestling Entertainment (WWE) and Total Nonstop Action (TNA) are two of the most popular events in this form of wrestling. Some Indian wrestlers have become popular in this form of wrestling also like "The great khalli, Sushi Kumar, Yogeshwar Dun, Bajrang Punia, Deepak Punia and female wrestlers Sakashi Malik, Geeta Phogat, Babita Phogat, Vinesh Phogat. Alka tomar Puja Gahlot etc" Ministry of youth affairs and Sports (2018).

Skills are the roots of any game, and wrestling is also based on many skills. A high degree of performance depends upon the mastery of these skills. Patience, diligence and dedication are essential for learning these fundamental skills. To enjoy the game truly; one needs to develop proficiency in fundamental skills. When a player masters in the game, a feeling of gaining the mastery over the game comes. In order to measure these skills tests should be conducted for evaluation purposes and tactics will succeed only through individual fundamental skill, therefore, every player must know the requirement and the importance of the perfecting these fundamental skills. Only a player with perfection in all the fundamental skills can become a top player. Complex skills, on the other hand, are learned only after simple skills are perfected and that is the reason why they are more difficult to evaluate objectively. “Skill is the outcome of message sent by the sensory organs to the brain which in turn makes the concerned muscles act in a certain way to perform a complicated action in the desired manner. In general, a skill is

learnt by repeatedly making attempts at movement in such a way that particular muscles are forced to act in certain directions until the requisite skill is acquired" Jesuraj A. (2018).

In measurement and evaluation literature, a number of methods of skill evaluation have been mentioned. Some are valid and reliable, while others are not. The obvious reason is that simple skills are easy to evaluate, while complicated ones are difficult to assess. The qualitative aspect of a skill performance is not easy to test objectively. To participate in the sports deserves a primary aspiration to struggle and exceed from others. Playing ability is found to be a strong predictor of any competitive sports. Measurement of playing ability has two alternative procedures, namely, skill testing through simulated test items and rating of the ability of judges in the actual game situation. Though ideally the rating of playing ability provides a more comprehensive and accurate measure, practical problems of getting qualified judges and lack of uniformity in different situations prevent wide use of this method. Skill testing through simulated items, on the other hand can be standardized and provides objectives measures of playing ability. The need of validating such skill test against sound criterion is usually and quite successfully met by using judge's ratings of playing ability or tournament ranking as the criterion. Essential features of good sport skill tests include a minimum acceptable reliability easy and accuracy of scoring and Provision for diagnostic interpretation of test. Skill is a competitor's ability to pick and play out the ideal strategies at the ideal time, effectively, consistently and with a base exertion. One of

the most engaging explanations behind ability research in sport is the expectation that future ability can be anticipated in "key adaptable skills" Simple skills are not difficult to acquire, but on the other hand are simple to assess all the more equitably" Abbott, A. et.al. (2005).

Test is a particular apparatus, system, or a procedure used to get a reaction from the understudy on a reason for examination of the amount or nature of components like

wellness, skill, information or qualities. The skill tests assist their subjects with assessing their presentation in the game and to give stimulus to progress. The test additionally fills the need of assisting an instructor with estimating understudies, execution and to assess his own educating methodology and program. "Sports skill tests are intended to quantify the essential skills utilized in playing of explicit sports. In view of wide scope of skills in many sports, a choice of the main skill turns out to be constantly essential. The choice is normally founded on specialists' judgment or assessment or measurable examination and these skill things are called Test Battery" AAHPERD. (1969).

Skill test mirrors the ability of the understudies to play such games as Football, Cricket, Hockey and Badminton, Wrestling and so forth the exhibition scores of an understudy will assist the educator with deciding the advancement and granting their grades. It would assist the educator with putting the understudy's objectivity in homogenous group. "Skill tests are normally directed to test the ability of the understudies in the skill of sports and significant games. The skill to be tested specifically sport should be declared beforehand so understudies will practice the different skills. Skill test are necessary to find out, how far the students have understood the material and subjects matter which have been taught in the class. As far as practical session is concerned in sports and physical education, the skill tests are necessary to a learning curve from one station to another station" Yobu, A. (2010).

Sports skill tests were the athletic badge test devised in 1913 by the playground and recreation association of America. In 1918 Hetherington, developed tests for the California decathlon, which made use of a graduate score plan. In 1924, Brace reported a six - items, skill test in basketball, and a year later, Beal completed an experimental study in tennis to determine a battery of test for that sport. Increasing interest in testing of sports skill was evident in the 1930, and throughout the following thirty years, many types tests were proposed, developed and utilized by physical educators. However, for many years there had been an often expressed need for nationally standardized tests. This lack of national standards had been frequently cited as one of physical education biggest

failing. In response to this need, AAHPER initiated a sports skills test project in 1959 to determine the standards for at least fifteen sports activities. This project began under the direction of the research council of AAHPER, by David K. Brace serving as test consultant and Frank A. Sills as chairman. The test items pertained to the sports of volleyball, tennis, baseball by Johnson and Nelson 1986. “Skill tests and learning are very closely related to neuro-muscular co-ordination. The senses of human body are maintaining the feedback system. It is the purpose of this unit to help the individual gain an insight into the relationship between the learning of motor skill and one’s own motor ability. Motor ability means one’s general ability to perform motor activities. Skill learning and tests are concerned with the following important terms, feedback, general motor ability, kinesthetic sense, motor, mental practice and sense**”** Yobu, A. (2010).

The validity of skill tests can be judged by the extent to which the testing environment duplicates the playing environment. In order to measure these skills, skill tests should construct to evaluate the level of players for future planning through individual fundamental sports skill. For the betterment of any sports at least national level norms are required to judge the players' performance for the further achievement. National norms on basic skills tests are vitally needed in each sport. Yobu, A. (2010) wrote “Validity refers to the degree to which test measures what it was designed to measure” (Nelson, J. K). “Standardized tests are constructed scientifically; the validity, reliability, and consistency have been established. As for as physical education is concerned a very a very few standardized tests are available commercially, but this is one of area in which undoubtedly, measurement of progress will be made” Yobu, A. (2010).

The pitiable performance of sports person at advanced competition isn’t only the subject of the constant worry for the wrestling coaches and trainers, physical instructor and scientists of sports, but it is related directly to the natural quality of the players. Various factors comprising skill capabilities, motor abilities, and environment are responsible for the poor performance of the wrestlers in the competition. For this, research should be systematically conducted to identify the factors that help in achieving

mastery of skill, which a player can attain through proper coaching and evaluation. The importance of the game skill is functional and is designed and produced to achieve a common objective and success, especially in a sport setting that is, perhaps why now-a-days much greater emphasis is placed on the practice and mastery over the basics of skill of a game, right at the very beginning and every sports movement involves competitions. Though the victory in a sports competition purely depends on the good performance, to get maximum chance of winning the performance must be better. During the competition the athlete performed the best quality of performance based on the playing and skill ability of the concerned game. "Sports performance is indeed an aspect of complex human performance, which has several aspects or dimension. Hence several discipline of sports science that are required work in co-ordinated manner to explore the nature of performance and process of improving sports performance, they were established in the last few decades. The discipline includes sports medicine, sports physiology, sports training, sports psychology and so on" Mallappa D S, (2018).

That orderly progress towards goals in education depends on measurement and purposeful activities, which are inseparable generally the more valid measurement and more carefully the evaluation of results. To attain the goals proper criteria should be established for the instrument of measurement. ln the modern scenario in every field, human involvement the goals can only be achieved with systematic objectives and scientific procedure must be followed in accordance with the principles based on experience, understanding and application of the knowledge of science. The game and sport is no exception to it, the pre- historic people have experienced a more tough life because they were not aware about the scientific principles and laws they were performing every work by means of the physical power. Modern education emphasizes the importance of \ adopting curricula to meet the need and individual differences of students. The application of this principle in any field of knowledge implies the need for determining the previous experience of students in that field. ln physical education this implies familiarities with the previous playing experience of students. ln other words to make our physical education programme sound, there is a need to analyze the playing

experience of the individual students before we can determine his present and future needs. The need for objective measurement in physical education is recognized by the profession today needs. The requirement for genuine estimation in physical education is perceived by the profession today. Many books have been composed which portray the techniques for tests and estimation yet the writing in physical education is unfortunately inadequate with regards to material which can be utilized practically speaking. "Estimation and assessment are reliant ideas. Assessment is a cycle that utilizes estimation, and reason for estimation is to gather data. ln the assessment, process data is deciphered by set up guidelines with the goal that choices can be made Yobu, A. (20 I 0).

In measurement and evaluation literature, a number of methods of skill evaluation have been mentioned. Some methods are objectives while others are subjective. Some are valid and reliable, while others are not. The obvious reason is that simple skills are easy to evaluate, while complicated ones are difficult to assess. The qualitative aspects of a skill performance are not easy to test objectively. Measurement of playing ability has two alternative procedures, namely, skill testing through simulated test items and ranking of the players by observation in round robin tournaments as the actual game situation. Though ideally, the rating of playing ability provides a more comprehensive and accurate measure but the practical problems of getting qualified judges and lack of uniformity in different situations prevent wide use of these methods. Skill testing through stimulated items, on the other hands, can be standardized, is easier and provides an objective measure of playing ability. The need of validating such skill test against sound criterion is usually and quite successfully met by using judges rating of playing ability or tournament ranking as the criterion. Essential features of good sport skill test include a minimum acceptable reliability, validity, easy and accuracy of scoring. Testing the amount of knowledge gained, skill developed and attitude has an important function of teaching /coaching any subjects or a sport, a problem of testing is much more complicated in physical education as the factors affecting acquisition of physical skills are too numerous such as physical fitness, co-ordination, motivation, intelligence, etc. besides instruction received from well-planned schemes of lessons. Further, the criterion behaviour in testing

physical skills cannot be graded objectively as these are dependent on the situation, circumstances and playing skills of the players as well as of the opponents “Skill test can be used for diagnostic purpose by pointing out needs for special emphasis each particular grade level in which a sport is taught. This is one way to avoid the needless repetition and lack of progression that characterize many physical education programs” Sharma, J. P. (2006).

Evaluation and measurement are universal practices. They reflect man's ever-present curiosity about his environment and his concern about himself. The processes of evaluation in day to day life is a never ending because in day to day life continuously go through the measurement and on the basis of the results replant the daily plans. Measurement and evaluation in day to day life is essential to determine how well the formulated objectives have been met, how efficient the process has been, and how good the product is. The results indicate the direction and the rate of change in performance. But one thing must be kept in mind that for the purposeful evaluation need a purposeful measurement through the use of the purposeful test. More valid the test is, more accurate the measurement will be and more perfect the evaluation processes will be. In the field of different games and sports the coaches and trainers continuously evaluate their players to measure the performance of the players, it help the coaches how well the training program is working. At present evaluation of the standard of performance of players at a given time or comparison of the performance of players with the past is done mostly on the basis of mere observation and opinion and not on the basis of any statistical records. To enjoy the game one needs to develop proficiency in fundamental skill. When a player has mastered the fundamental skills of the game a feeling of gaining mastery over the game comes. A sound knowledge and the ability to execute properly the various fundamentals of the games are essential for successful play. “The skill test helps the students to evaluate their performance in the fundamental skills the game and to provide an incentive for improvement. The test also serves the purpose of helping the teacher/coach to measure student’s/ player’s performance and evaluate their teaching/coaching procedure and programme” Mallappa, D. S. (2020). “Evaluation is the

process by which we from judgments of students. Evaluation and measurement are terms often used with little regard to their meanings. Measurement refers to observations that can be expressed quantitatively and answer the question 'how much'. The process of evaluation is a wasted effort unless the discovered weaknesses are corrected" Yobu, A. (2010).

To determine the physical and performance ability of a player it becomes obligatory to seek out whether a participant is capable for that level or not. For that some assortment of testing is very important. Unluckily within the field of wrestling little or no work has been done, so it becomes very hard to pick a player. Little is finished and far more is need to make a sound and dependable test. To prepare a test one must experience the series of processes that include test dimensions and evaluation.

To find and selection on the idea of possibility of the wrestlers in a particular fields supported knowledge base may be a matter of routine in many first world countries. Unluckily, in India this part has not been given grave consideration. Consequently, wrestlers are taken from the "Available Pool" mainly on the idea of their performance marks in different sports meets. "The newly develop test may, reasonably, be applied as a form of guide or research tool develop insights among the coaches, choosing members and wrestlers in regard to game performance and even to go looking aptitude in wrestling. The alike study on dissimilar age groups, weight categories and skill has been recommended" Mane, H. D. (2014). "In this section some practical tests for measuring sports skills are presented. The reader is cautioned not to rely too heavily on one test or any battery of tests. Except in those sports such as archery, bowling, golf, certain track events etc., in which the actual score itself is essentially and objective measure of achievement, skill test can only measure certain aspects of performance in a particular sport" Sharma, J. P. (2006).

This would provide criteria for the grade placement of sports. Although sufficient diversity would be required to hide a good range of sports, a procedure just like the reading readiness test would seem feasible. The most advantageous time to start out

teaching a sport and also the time when diminishing returns warrant its discontinuances could both be determined. It's ironic that education with the foremost objective test potential should be so subjective a topic matter field. Norm may be a scale that allows exchange from a raw score to a score capable of comparisons and interpretations. Norms are representative of any larger population. They must be supported a selected style of group that's well- identified. Norms are habitually supported age, grade, sex or various combinations of those characteristics, (Johnson and Nelson, 1986). In norms tables for physical performance there are separate scales for boys and girls; in writing tests this difference is sometimes not made. The vital factor is that the explanation of norm tables is finished in light of the specific group from which the norms were compiled. "A norms as an essential element of scientific test is a standardized procedure, a way of doing something acceptable and refraining from doing what is scientifically unacceptable " Yobu, A. (2010).

For the forecast and evaluation of Wrestlers performance there's the shortage of standardized evaluative skill test not only in India but also in the world. The scholar discussed the similar thing with various senior Wrestling officials, NSNIS Wrestling coaches, national and international wrestlers. Keeping the answers from various wrestling communities in view and lack of literature the scholar realized that fundamentally there's the shortage of skill tests in India. The research scholar has constructed and developed standardized norms of the free style wrestling skill test for wrestlers.

1.1 Significance of study

The freestyle wrestling is an Olympic sport. Wrestling required technique, physical ability and motor skills to achieve the highest rank in competitive sports. Wrestling is considered one of the oldest sports in the world and wrestling has a long history in India. It is also called kushti in Punjab. According to review literature, India ranked 48th in 2020 Olympic by winning 1 silver and one bronze medal." For the past few Games, India has performed admirably in wrestling, winning these medals in the sport since Beijing 2008, Landon 2012 and Rio 2016 but need more efforts to improve the standard of wrestling in India. So here are some of the things that one needs to know- the recurrent variation and progress in freestyle wrestling are mostly due to the overemphasis assumed by sports specialists in terms of scientific coaching and correct application of technical knowledge. Provide feedback with motivation to the wrestlers from time to time on the degree of progress they make in their abilities. This instrument may also be used in grading wrestlers in advance teaching or coaching of freestyle wrestling or in coaching sessions arranged for competition at various levels. This study will help physical education teachers and wrestling coaches in judging the adequacy of achievements of their students in wrestling skills and will assist the students in diagnosing their own strengths and weakness in wrestling. The test will be the latest test that fulfills the present requirement of free style wrestling.

- Physical education teachers and wrestling coaches can discover the talents in free style wrestling from largely participated school population by administering the newly standardized ' free style wrestling skill test'.
- Norms of the free style wrestling skill test will help to categorize/ classify the talented wrestlers in forming a homogeneous group judiciously for competition.
- The beginners and trained experienced wrestlers, as classified, can receive specified sports training to enrich top performance in actual game situation.

- This study will also enable the wrestlers to realize their level of own performance and such awareness, without doubt, will improve their overall skills in competition situation.
- The research workers of physical education and sports will get such a standardized skill test as a research tool in their hands for conducting further investigation in the area of wrestling and other games.
- The present study will help evolve a New Scientific Method for selection of talented wrestlers. Such knowledge may help to develop a similar method for selection of wrestlers from tertiary level as well as for the players of others sports faculties to enrich top performance.

1.2 Statement of the problem

The purpose of present investigation is to construct and standardize the wrestling skill test of free style wrestling for the assessment of standard of wrestler's performance. Reviews of related literature confirmed that therefore less standardized criterion is available to examine the skill performances and ability of wrestlers between 15-17 and 18-19 age groups. Therefore, an effort is made by the investigator to construct and standardize of free style wrestling skill Test.

1.3 Objectives of the study

1. To identify specific freestyle wrestling skills test items and establish validity.

2. To establish reliability and objectivity of the developed freestyle wrestling skill test items.
3. To develop standardized score of free style wrestling skill test.
4. To develop percentile norms of the freestyle wrestling skill test.
5. To develop five point grading norms of the freestyle wrestling skill test

1.4 Hypotheses of the study

1. The developed freestyle wrestling skill test will have satisfactory validity, reliability and objectivity.

2. The developed freestyle wrestling skill test will have significantly asses the standard of junior level wresters' skill ability.

1.5 Delimitation of the study

1. The sample of the study between the age group of 15-17 and 18-19 years male wrestlers were delimited.
2. The area of the study was delimited to wrestling Academies of Punjab, state and national wrestling competitions.
3. The study was delimited minimum state level u-17, u-19 and junior wrestling competitions.

1.6 Limitations of the study

1. Certain player related factors were not taken into consideration by the researcher like; the impact of the training schedule of the subject and his playing ability.
2. Certain factors related to the context of the test were not taken into account like climatic conditions, condition of the playground, the role of diet in the variation of performance and overall effect of the environment.
3. Variation in performance of the wrestlers due to fatigue and the carry-over of the skills affecting the performance were considered as limitations of the study.
4. The aptitude of the subjects on the day of testing might influence the results of the study this was considered as the limitation of the study.

1.7 Operational definitions of the term used

Test: An instrument or activity used to accumulate data on a person's ability to perform a specified task.

Measurement: A measurement takes place when a "test" is given and a "score" is obtained. Measurement is process of collecting data on attribute of interest if the test collects quantitative data, the score is a number. If the test collects qualitative data, the score may be a phrase or word such as "excellent."

Evaluation: The process of making judgments about the results of measurement in terms of the purpose of the measurement. The process of obtaining information (data) and then using it to form judgments, which in turn are used in decision making. Evaluation is process of interpreting the collected measurement to make professional judgment of value or worth.

Norms: Norms are the scale which permits conversion from a raw score to a score capable of compression and interpretation. They represent a standard to which an obtained score may be compared. Norms are assumed to be representatives of some larger population.

Wrestling: Wrestling is the oldest type of combative sport. It deals with individual capability and strength of the muscles. Techniques, such as clinch fighting, throws and takedowns, joint locks, pins and other grappling holds are used in wrestling.

CHAPTER-2

REVIEWS OF RELATED LITRATURE

All the investigations related to literature are further categorized in to following types:

2.1 Studies related to performance test in wrestling.

2.2 Studies related to construction and standardization of skill test in combative sports.

2.3 Studies related to construction and standardization of skill test in different game and sports.

2.1 Studies related to performance test in wrestling

Khodadad, K. et.al. (2015) explored the construction and validation of a trial/tool of wrestling abilities. This review was to decide the objectivity, dependability and legitimacy of a wrestling expertise test convention among male examples No of sample were 50, comprised of talented 25 and amateur n=25. Analysts tried a specialist made survey and back bring down test twice in a solitary preliminary, test and once again test convention. Pearson-Product Moment Correlation technique's was utilized to decide the worth of objectivity and unwavering quality. Legitimacy tried through T-test, examine of change, and separate examination. Discoveries proposed that the high consistency between the two analyzers with a worth of r was 0.90. In like manner, the unwavering quality worth among test and yet again test the dependability esteem among test and once again test for the back bring down test r was .83, revised measures ANOVA led to really appearances at objectivity and there were no distinction between each time leading the test $p > 0.05$. Legitimacy of bear bring down checked box ANCOVA, critical contrasts among gifted and apprentice wrestlers $F=11.932$, $p<0.05$ indicated, Agility $F= 3.68$, $p= 0.014$, and power $F= 2.68$, $p= 0.028$ had huge impact on the bear bring down expertise. To check the leftover things legitimacy a separate and T-test examinations was run and

uncovered all abilities aside from single leg tackle anticipated altogether significant (Canonical Correlation= o.442, Wilks' Lambda=0.804, sig.= 0.039).

Mane, H. D. (2014) constructed a wrestling skill test in step with researcher. Within the field of wrestling only few skill tests were available to gauge the skill performance of wrestling players. Researchers had under taken the study "Development of skill of free style wrestling Game for junior level Male Wrestlers". The objective of the review was to development and normalization "Test" for the decision, assessment and evaluation of execution of wrestlers, the standardizing study was directed under expressive exploration. The review was restricted for 55kg weight classification, age 18 to 23 junior level male free-style wrestling players from Pune area. The scholar utilized accommodation testing technique. SOP was followed to lead this logical exploration. The analyst followed step-wise techniques for Construction and building up standard. Analyst dissected significant essential ability utilized by junior male wrestling player of 55kg weight class with assistance the specialists from wrestling field. The recently planned expertise test were controlled on junior male wrestling players of 55kg weight class from different clubs and practice companies in Pune and test was changed. After the alteration the test was finished and changes were made after pilot study. Dependability, legitimacy and objectivity were set up by following method given in different books of tests, estimation and assessment. The methodology technique was utilized to mind standards. The percentile norms, presented above, were further substantiated to find out the performance in the tests in favor of selection of wrestling players. The grading was derived using criterion-referenced grading, percentage method. The results grading scale showed Poor (13 and below), Average (14 to 16), Good (17 to 18), Excellent (19 and above).

David, et.al. (2014) conducted that to explain the technical-tactical concert of the top ten sports wrestler's players in 2011 Word Senior Championship in free style and feminine wrestling. In order to see a few connections between genuine qualities of the specialized and strategic mixes really made in an incredibly test formed by 70 wrestlers for every style, 140 altogether. Factors with more noteworthy educational not really

settled, setting 8 quantitative pointers 4 normal and 4 coefficients-whose qualities were normalized to actually take a look at the specialized and strategic presentation in the two types of wrestling. Explicit information were gotten so it had been feasible to profile the least complex wrestlers inside the word and foster specialized and academic direction for the course of the preparation cycle in order to partake in fruitful manner in such occasions, highlighting explicit strategic and specialized angles a vital condition for accomplishing a high positioning.

Mirzaei, B. and, Akbar Nezhad, A. (2008) explained an ability profile of Iranian Greco-Roman wrestlers. For this reason, five important methods in 141 wrestlers in two different groups were evaluated group 1st n=71 and group 2nd n=70. The scoring strategy for each method was recorded and inspected in an extremely non-cutthroat circumstance. The outcomes showed that Iranian Greco-Roman wrestlers procured high scores and five methods in each group like group 1st and group 2nd.

2.2 Studies related to construction and standardization of skill test in combative sports

Kumar P. (2016) studied that construction and standardization of taekwondo skill test. The work was attempted to build and normalized Norms for Skill Test for 12 to 19 years Taekwondo Players. For this reason 2100 male, region, state and public level Taekwondo players of various states in India were chosen as subjects. The retrospective of Taekwondo players in Taekwondo test battery of five test things, Namely, Punch, Dollyo, Dwit chagi/Back Kick, Ax Kick, Tornado Kick was picked after face legitimacy. The information was gathered by regulating the test for the chose test things during open and school locale, state, and public Taekwondo title in the long periods of 2013 to 2014 The information, which was gathered by managing tests, was measurably treated to foster standards for all the test things. The regularizing scales, to be specific, the Percentile Scale and 7 Sigma Scale were built for The Male Taekwondo players of state and public level. The standards were developed by utilizing Percentile and 7 Sigma Scale procedures examined through measurable bundles, the scores were additionally grouped into seven

grades for example Remarkable, Brilliant, Superior, Good, Average, Fair, under Normal Distribution.

Kaur H. and Kumar P. (2014) studied that construction and standardization of taekwondo skill test for sub junior young men. The test development sixty Taekwondo players age 12 to 13 years of Punjab locale who partook inside the 59th Punjab school Taekwondo title 2013 held at Patiala from eighteenth Nov. to 22nd Nov. 2013 were chosen as subject for the review. The test-retest unwavering quality coefficient was surveyed for each test thing and with complete battery in all. The numerous dependability coefficients guaranteed the primer sort of the test. It had been reasoned that the recently evolved expertise test for kicks in taekwondo. The outcome introduced in the table uncovered that every one of the components of the starter type of the Taekwondo expertise test have critical unwavering quality coefficients $p<0.05$, so this scale got its essential structure shows that the greatest scores of Taekwondo ability Test battery for 12 to 13 years male Taekwondo players are at the 100th percentile and the base score are at the fifth percentile for age bunch 12 to 13 years male Taekwondo players.

Kanniyan, A. (2016) studied that to construct Norms for University level soccer players for the selected variables of Kuhn's soccer test based on their performance. To serve the purpose, 720 soccer players who represented their concerned university were taken as the subjects. Goal kicking for accuracy with preferred foot and Non Preferred foot were the chosen variables. The data for the variables to construct norms were collected by administering the appropriate standard tests. The variable of Kuhn's soccer test battery was used for the collection of data. In addition to the norms, the Mean and Standard Deviation of the raw scores were computed. To obtain the Hull Scale norm, SPSS statistical package was used. Results: The Mean for Goal Kicking for Accuracy for preferred foot was 12. 71 and Standard Deviation (SD) was 2.13 whereas the Mean for Goal Kicking for Accuracy with Non Preferred Foot was 12.77 and Standard Deviation score was 2.14. Conclusions: The kicking accuracy of University level students are

excellent with both preferred foot and Non preferred foot and there is no significant difference in between.

Pieter W. and Johan, H. (2007) made a kinesthetic abilities test for starters in taekwondo. Sample were understudies tried out a starting taekwondo class at a college on the West Coast of the USA. The taekwondo abilities test battery depended on past work in vaulting and wrestling. Test-retest unwavering quality, i.e., repeatability of the test, and objectivity coefficients, i.e., a record of the consistency between the raters, were determined. The objectivity, i.e., a proportion of the consistency between the raters over the two days for Group 1 was extremely high, and for Group 2, high. The unwavering quality, or the consistency of the consequences of the test when regulated on two distinct events, was exceptionally high for the two gatherings. Future examination ought to include more subjects, while test batteries for transitional and progressed understudies ought to be created.

2.3 Studies related to construction and standardization of skill test in different game and sports

Kaushik, S. (2022) conducted that construction and standardization of test for Strength and Endurance in cricket. As a result, new records are being created shattering the old ones at the higher rate. Every country seeks to beguile its superiority. This challenge stimulates and inspires all human to sweat and strive to run faster, jump higher and to throw farther than others, and show greater strength, speed, endurance and skill to lead and dominate to over others. Nineteenth century was an extra ordinary period of development in tenures of both ideas about sport and fitness. Muscular activity and competition became not only acceptable but favorable. Moral development began to be tied to sports and fitness.

Songa, D.K et al. (2020) studied that constructed physical fitness norms for “Social Welfare schools in Andhra Pradesh” for sports talent identification and fitness development programmes. The researcher administered a battery of tests to 339 girls from the sixth to tenth grades from Andhra Pradesh's Social Welfare Schools who

attended the summer camp, representing schools from the state's urban and semi-urban areas. Speed, strength, agility, and flexibility are examples of physical fitness variables. The test items came from the AAPHER youth fitness battery. "RProgram" was used to compute the mean, standard deviation, and percentile. According to the data, the 9th grade students had the best mean value for the 50-meter run, which was 9.12 seconds. . The Bend & Reach test results show that the mean flexibility of 10th grade students is the highest, followed by 8th grade students. Medicine ball put indicates that performance improvement among classes was gradual and progressive from lower to higher classes. Except for the students in the tenth grade, the standing broad jump results show a positive increase in performance from lower to higher classes. The data from the 6x10mts shuttle run shows a gradual improvement in performance from 6th to 9th class.10 students performed worse than the 9^{th} student. The vertical jump results showed that there was only a small improvement in performance from sixth and seventh grade students, and the increment was gradually positive from seventh to 9^{th} grade students, with a decrease in performance from tenth grade students. The percentiles were calculated to provide a 10-point scale for each variable for each class, i.e., 6th, 7th, 8th, 9th, and 10th.

Prabhakar, S. (2019) conducted that construction of fielding ability test in softball for Junior boys. This examination was directed to structure a test for fielding ability in the game softball. 220 male junior softball players from different locale of Kerala inside the age group of 15 to 19 years were picked as subjects for this test. Point of the test was to check the ability of the subjects to gather a softball with fielding glove and execute controlled throws to a target from a specific separation. This test was then checked for its reliability and objectivity. Test was named as Wall Fielding test. Data was gathered with the assistance of expert testers. A sum of 120 male junior softball players of Kerala state who took an interest in the state championship directed by the Kerala State Softball Association were chosen as subjects for dissecting reliability and a sum of 220 for examining objectivity. The principle goal of the examination was to foresee the performance of a player by the level of skills had. Intra Class Correlation Coefficient with Two-way irregular impact ANOVA model was utilized to gauge the reliability and

objectivity of this test. Rehashed trials were led by a similar tester to break down the reliability and rehashed trials by two distinct testers at comparative conditions on similar subjects were led for deciding the objectivity. A reliability coefficient of 0.959 and Objectivity coefficient of 0.952 was gotten.

Laxmeshwar, B. and Amarnath, KK. (2019) studied that development of kabaddi offensive skills test for high school boy**.** The purpose of the study is to find the scientific authenticity of newly constructed Kabaddi offensive skill tests. In this study the samples age is between fourteen to sixteen were participated. Total 12 tests namely Riding Footwork**,** Simple Hand touch**,** Running hand touch**,** Stooping hand touch**,** Turn & hand touch**,** Hopping hand touch**,** Toe touch**,** Double attack in toe touch**,** Drag back and toe touch, Running toe touch, Back kick and Bonus were administered. With this all sample's playing ability was also measured by 7 experts of Kabaddi game. To find the validity of the test each skill's score was correlated with playing ability score which was provided by the experts. To find the reliability test and retest score were correlated and to find out objectivity inter tester's scores were correlated. For all the statistical calculations Karl Pearson's coefficient of correlation was used. Results indicated that all the Kabaddi offensive skill tests found significant correlation with playing ability of players, hence tests are said to be valid. Test and retest scores were also highly and significant correlation with each other hence tests were said to be reliable. Last intertester's scores were also found significantly correlated with each other hencetests were said to be objective.

Ashwin, R. (2019) studied that construction of handball skill tests for women players of Karnataka. Purpose of this study was to develop and standardize a rating scale and match performance of Handball Players with the help of rating scale. The study was also done to find out the skill performance of players with the help of standardized handball skill tests. The study mainly focused on the construction a new skill test battery and to develop for women Handball players of Karnataka state. Initially eight test items were designed on the Handball fundamental skills. A pilot study was conducted on thirty

women Handball players from Belagavi region aged ranged from 18 to 23 years It was also necessary to compare the skill and match performance (Rating scale) of handball players along with finding out the relation among skill performance with match performance.

Padrón-Cabo, A. et al. (2019) conducted that test–retest reliability of skill tests in the f-marc battery for youth soccer players. The objective of this study was to assess the test-retest reliability of the F-MARC test battery's soccer skill tests. When evaluating young male players' soccer-specific talents, coaches and scouts should use valid assessments to reduce prejudice during the talent identification and development process. F-MARC soccer skill assessments were administered to 52 male U-14 outfield soccer players on two occasions, seven days apart. Following acquainting ourselves, we had two trial sessions of five talent tests: speed dribbling, juggling, shooting, passing, and heading. We measured relative reliability using the intraclass correlation coefficient and Pearson's correlation, and we measured absolute reliability by expressing the standard error of measurement as a coefficient of variation with 95% bounds of agreement (r). The findings showed that speed dribbling was satisfactorily relative and absolutely reliable.

Singh, T. (2018) studied that Construction and Standardization of Specific Physical Fitness Test Battery for Circle Style Kabaddi Players .The descriptive type study was designed to collect the data on selected 21 physical fitness test items and the statistical procedure was adopted. With the purposive sampling technique a sample of 216 circle style male kabaddi players was taken from sixteen teams which were qualified for the league stage or qualified for the semifinal of the inter college tournament of selected universities i.e. PU Chandigarh, Pbi.U Patiala, GNDU Amritsar and KU Kurukshetra during the session of 2.017-18. The results were obtained through the SPSS verson 21.0. Factor Analysis technique was applied to develop the Specific Physical Fitness Test Battery of eight test items namely medicine ball throw, dips, 50 meters run, flamingo balance test, shuttle run, ball reaction exercise, 600 meters run and bridge test.

A short specific physical fitness test battery of three test items was also constructed. The percentile norms were developed from the whole data.

Saravanan, B. (2018) conducted that construction of skill tests and compilation of norms for college level kho- kho players. Study was delimited for school Children under the people of 13-17, boys who participated in Inter school competition. 480 samples were selected for this study from Pattukkottai (Tamil Nadu). For the establishment of validity criteria and construct method was utilized by the investigator. He suggests the 6 test batteries to assess the Kho -Kho players playing ability namely 1. Chain Kho Test, 2. Shuttle Run Test, 3. Running round the Square Test, 4. Zig-Zag Run Sideward Test, 5. Seven Minutes Run, 6. Frolic Alternate Square. Product movement correlation was accustomed established validity and objectivity. The result was showing that everyone the test item was significant to live Kho-Kho playing ability. There have been significant relationship was found test items and player ability. Suggestion given by the investigator, Study may be conduct on to assess the players playing ability through newly construct the skill test. Similar study will be conducted in other games.

Rohit, (2017) studied that construction and standardization of volleyball skill tests for men players. Survey method was employed in this study. Out of 400 male volley ball players every 2nd player was selected using systematic random sampling technique. The sample was 200 inter collegiate male volley ball players from affiliated colleges and department physical education and sports, Dr. B.A.M. University, Aurangabad. Researcher has used Checklist and objective tests [Criterion based] to collection of data. Data was analyzed by Mean, S.D.QD. Procedure of the study was divided in two phases. In the first phase, researcher constructed and standardized of specific skill tests. Second phase: Researcher implemented motor fitness test and specific skill tests which was constructed and standardized in second phase of research. There was significant difference between specific skill score and fitness score of playing status of male volley ball players. There was positive correlation between service test and strength, speed and power test. There was positive correlation between smashing skill test and speed,

endurance, flexibility and power test. The norms developed after adequate objectivity with statistical acceptability. Those norms will be useful to discriminate talented Volley Ball players to show better performance in Inter University Tournament Competitions.

Laxman, S.S and Wangwad, V. S. (2016) was conducted research on construction and standardization of Kabaddi skill test for junior state level players of Mahrashtra. For completing the aim of the study 300 sample was selected from 25 teams of Maharastra. People were delimited 12 to 14 years old. 2 test item was finalized that measure successfully players playing ability. Reliability and validity was established. Test is ready to assess talent of Kabaddi players at the age level of 12 to 14. It had been concluded by the result the Kabaddi skill test ultimately could retain 2 items, which can successfully measure the Kabaddi skill ability of the players of 12 to14 year's age group with acceptable reliability and face validity. The stability developed has adequate objectivity with statistical acceptability. The stability of the test is gradable and can be useful to search talented Kabaddi players having a good level of skill.

Tiwari, R. (2016) conducted that Kho-Kho ke liye kaushal Parikshanon ka Nirman. Investigator select the sample from Chhattisgarh state under the people of 18-25. Study was delimited only on female. 12 items (Offensive Skills:- 1. Ball touch, 2. Tapping cone, 3. Covering, 4. Fast attack Kho, 5. Shuttle run, 6. Latent period, 7. Pole turn, 8. Squat sit. Defensive skills:- 1. Cone zig -zag running, 2. Fast attack run, 3. Ring game, 4. Dodging, 5. Running skill.) were selected within the initial stage. Correlational analysis was wont to reduce the test items. After analysis the info statistically 9 (Offensive Skills: - 1. Ball touch, 2. Tapping cone, 3. Covering, 4. Fast attack Kho, 5. Pole turn. Defensive Skills: - 1. Cone zig-zag running, 2. Fast attack run, 3. Dodging,) item was finalized those were accurately measure the kho kho player playing ability. Suggestion was given by the researcher that similar study is going to be conduct on other age. Study also conducts on Men also. Similar study will conduct on different. Study is often conducted on different variables.

Murtaza, S. T. et al. (2014) conducted that construction & standardization of fielding test in cricket. Physical education tests and measures are a relatively new offshoot of the general testing movements (Achenbach 1992; Barnett & Peter 2004). For all age groups, there are several skill tests that have been developed, particularly in the last three decades, assessing every type of physical action. Over the past ten years, there has been a significant growth in the number of cricket matches played. Despite the odd-400-year history of the sport, there isn't any mention in the literature of a formal exam to gauge cricket players' degree of proficiency. At all levels, coaches around the world have employed personal exams to predict playing skill, but their structure and substance have varied greatly. This has happened because coaches don't seem to share the same perspective on.

Ferrauti, A. et al. (2014) conducted Fitness testing of tennis players: How valuable is it? Tennis players need a comprehensive profile of physical performance elements in addition to their sport-specific technical skills. Tennis players' abilities to perform at various levels in the lab and on the field, whether at the junior or elite level, are examined with the help of fitness test batteries. While laboratory testing can be used to assess fundamental aspects of an athlete's performance in the majority of individual sports, field-based methods are more suited to the demands of complicated intermittent sports like tennis. An individual's performance profile can be determined using a routine test battery, which can also be used to identify individual training treatments. Consequently, the purpose of this review was to describe.

Kumar, R. P. (2013) revealed the event of Ball Badminton player skill test. Samples were selected form Tamilnadu state, India under the age of 18 to 23. Samples were 330 those represent for his or her college team and data were collected during the competition period. Nine test item were selected for the skill test i.e. Low service, High spin twist service, Fast drive wrist service, Over-arm volley test, Under-arm volley test, Front row over-head flat smash, Back row over-head flat smash, Back row over-head twist smash, Shut-at-net. For the ultimate phase norm was constructed though 6-sigma

scale to supply the grading of over-all performance. The result was showing that there inter-relationship between test item and that they were highly reliable.

Kumar, A. G. I. (2013) conducts the study to construct and standardization of specific basketball skill test battery for senior boys. For the aim of the study was delimited 18-25 those were participated at inter-college level. Total 300 male players were sample of the study those were selected from Kerala State. Hull scale was wont to construct the norm. Finding was showing that out of 15 test items only 8 items was finalized which valid and reliable to assess the senior player basketball playing ability.

Jayavel, S. (2006) the researcher conducts the study on construction of badminton skill test and compilation of norms for faculty men players. Selected variable was high lob service and forehand smash. For the aim of study 18 to 25 year age delimited selected from Tamilnadu state. A complete 120 sample was a part of the study those participated at inters collegiate level. They were analyzed though appropriate method and establish the validity, reliability and objectivity for the newly constructed test and Hull scale was wont to construct the norms. It had been concluded by the result High lob service skill and forehand smash skill in badminton were evolved as the Final test Battery to find out the ability of the skill test of Inter collegiate men Badminton players. The consistency of the constructed tests was reliable, valid and objective. The Hull scale Norms were compiled and presented as the Final test Battery for the most appropriate tests.

Lemmink, K. et.al. (2004) developed a reliability test for the shuttle sprint and dribble of field 34 young hockey players comprising 22 young men and 12 women were selected as information. Within four weeks of period the chosen data were analyzed on two occasions. It had been concluded by the result that the both tests were reliab

le measures of sprint and dribble performances of young field hockey players.

2.4 CONCLUSIONS OF REVIEWS

Total twenty six reviews are quoted in this chapter. Latest reviews are of 2018 and oldest review is of year 1981. Though work has been done by many sports skill test development for different games and sports like wrestling, combative games and football volleyball Badminton, Ball Badminton, Hockey, Handball, Table Tennis, Kho-Kho, Basketball Kabaddi etc. too but it has been done by foreign and Indian authors. Four studies are on wrestling skill test, six combative Games, one Football, three Volleyball, one Badminton, one Ball Badminton, one Hockey, one Handball, one Table Tennis, two Kho-Kho, one Basketball, three studies on Kabaddi skill test. Three studies are done by foreign authors in the field of wrestling skill test but only one study is done by Indian author on development of skill test of free style wrestling game for junior level male wrestlers. In this study investigator work has done on only single skill of free style wrestling skill. Other reviews on different games and sports skill test development.

The investigator has taken scientific supports attained from various investigations in the past have exposed the various aspects of free style wrestling. The exacting characteristics of the Wrestlers athlete's movements, favorable neuro-muscular coordination, as required by this particular sport discipline. After reviewing the critical literature, it has been found that scholarly attempts have been made separately to construct the skill test for free style wrestling and prepare their norms to check the skill status among school level Wrestlers for the best performance; however, no study regarding the construction and standardization has so far been conducted on all India school level on the male ‘Free style wrestlers’.

2.5 Overview of the literature

1. This endeavor was a suitable pace in the correct route. It was clear from the overhead mention literature discussion that only one study until now has been conducted on wrestling skill test on the international level while in India less study has been done on the Construction of norms for the school level wrestlers .

2. Construction and Standardization seems quite exceptional in the free style wrestling

3. The physical education departments as well as the wrestling community have not applied their mind on this type of study in India.

4. For the best performance of wrestling, there is a great need of the construct and norms developing study, on the other winning factor of free style wrestling.

CHAPTER-3

METHOD AND PROCEDURE

The present study is a type of descriptive research. In this chapter for the sampling design, sampling frame, establishing procedure to construct wrestling skill test, identification of skill items, face validity, establishing the procedure to perform freestyle wrestling 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.

3.1 Sampling Design

The samples of study total 400 male wrestlers were selected for the construction and standardized the free style wrestling skill test. The sample of the study was selected through purposive sampling technique as per age group 15 to17 (200) and 18 to19 (200) years male wrestlers, which participated at national and state-level competitions, were considered. The sample was selected as per the guidelines of the School Games Federation of India and FILA on the U-17 and U-19 wrestlers can participate in the school games competitions. The age of wrestlers was taken through a birth certificate, matriculation, and Adhar card. The sports participation was taken as per the record of the academy, state and national level competition. The subjects were taken from different wrestling centers were selected for data collection i.e. Baba sheikh farid khusti Aakhada Faridkot, Baba sheikh farid SAI wrestling center Faridkot, Punjab sports department,wrestling wing Faridkot, Govt. Model Senior Secondary. School Megha Rai Ferozepur, Jaghat singh wrestling academy Guruharsahai, Hans Raj wrestling Stadium Jalandhar, 61st Punjab schools wrestling games held at Faridkot and Baba sheikh farid open national level wrestling Dangal held at Faridkot.

3.1.1 Sampling Frame

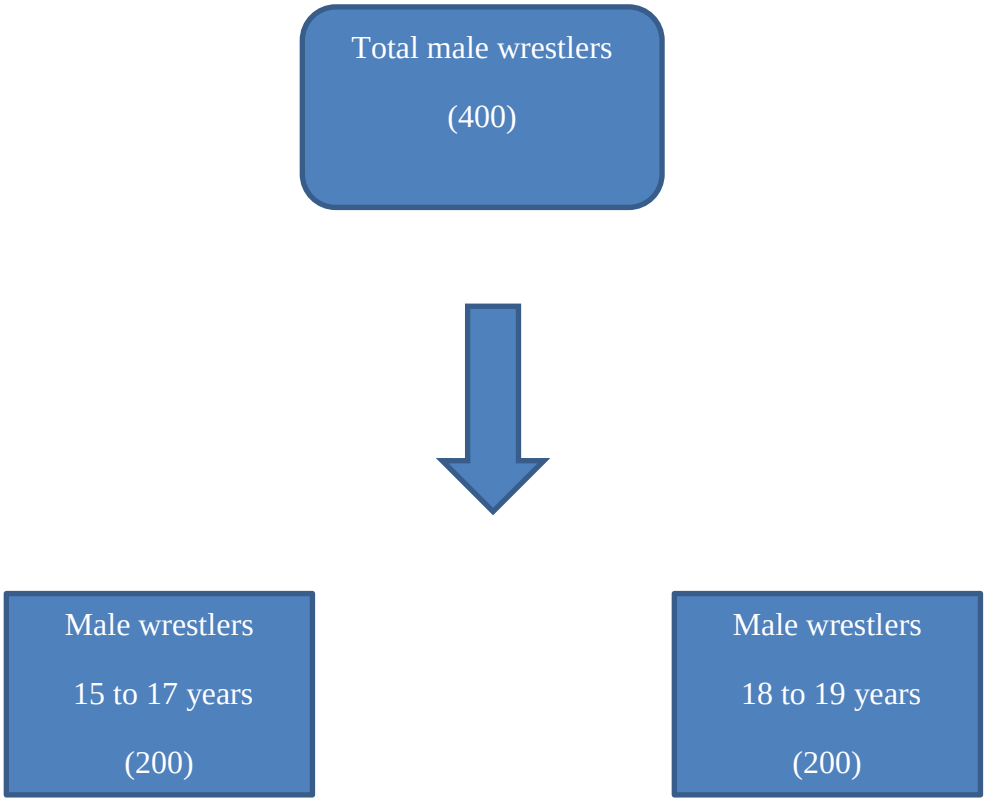

Figure 3.1. Shows the sampling distribution

Table 3.1

Sample selected from various wrestling centers, state and national level wrestling competitions

Sr.no	Name of the wrestling centers and competitions	Age Group 15 to 17 18 to 19 200, 200		Total Sample 400
1	Baba Sheikh Farid Khusti Aakhada Faridkot	20	20	40
2	Baba Sheikh Farid SAI Wrestling Center Faridkot	30	30	60
3	Punjab Sports Dept. Wrestling Wing Faridkot	20	20	40
4	Govt. Model Sen Sec School Megha Rai Ferozepur	20	20	40
5	Jaghat Singh Wrestling Academy Guruharsahai	20	20	40
6	Hans Raj Wrestling Stadium Jalandhar	20	20	40
7	61st Punjab Schools Wrestling Games Faridkot	30	30	60
8	Baba Sheikh Farid Open National Level Wrestling Dangal Faridkot	40	40	80

3.2 Establishing Procedure to Construct Wrestling Skill Test

The procedure of the construction of skill test according to (Waghchoure, M.T 2006) is given below.

1. Identification of skill test items
2. Establishing validity
3. Establishing the procedure to perform freestyle wrestling skills
4. Tools used
5. Procedure of establishing scoring
6. Data collection for reliability and objectivity
7. Establishing reliability
8. Establishing objectivity

3.2.1 Identification of skill test items

The Freestyle wrestling involved ninety-three skills according to Fundamentals of scientific wrestling and Encyclopaedia of Wrestling book. The researcher had reviewed wrestling-related literature to inherit the knowledge in selected different wrestling skills test items by wrestling sport science journal, Encyclopaedia of Wrestling by Singh, H. Comprehensive wrestling book by Gill. B.S, development of skill test of freestyle wrestling sport for junior level by Mane H. D. 2014, research paper the construction and validation of a test of wrestling skill by Khodadad, K. Sholeh & Farshad, T. 2015 and research paper development of a wrestling specific performance test by Utter, A. et.al. 1997 studied and watched online Olympics freestyle wrestling match on youtube and live match in different state and national level competitions in Baba sheikh farid khusti Aakhada Faridkot and 61th Punjab school games Faridkot and also explore e-resources, academics databases, research gate, j-star, j-gate, Google scholar, Sodhganga, PhD thesis and dissertations studied. After that list of freestyle wrestling skill test items was sent to experts for construction the skill test items, feedback and suggestion.

Table 3.2

Show the name of wrestling experts for construction of skill items.

Sr.No	Name	Designation	Level	Affiliation
1	O.P Yadav	Chief coach	International	NSNIS Patiala
2	Sham Budhaeki	HoD	International	NSNIS Patiala
3	Kamani Kumari	Wrestling Coach	National	NSNIS Patiala
4	Deva Nand	Chief coach	International	Indian air force center Adampur
5	Bhajan Singh	Chief coach	National	Hans raj wrestling stadium Jalandhar
6	Ranjit sing	Wrestling coach	National	Hans raj wrestling stadium Jalandhar
7	Hargobind singh	SAI wrestling coach	International	Baba Sheikh Farid Kusti Akhara Faridkot.
8	Sarwan Singh	SAI wrestling coach	National	G.N.D.U Amritsar

3.2.2 Establishing face validity

The validity of test depends on loyalty with which it measures what it supposed to measures. Researcher has mentioned the method for validating the skill tests as determining validity by means of observation (face validity), determining the validity experimentally was used to invention out validity of all constructed skill tests. Zilly, A. (2001)

Researcher has taken the experts opinion and suggestion by consulting with eight international, national level, Netaji Subash National Institute of Sports, Patiala and Sports Authority of India and Punjab sports department wrestling coaches. After consulting with wrestling experts, skills were mapped and highly mapped seven skills are below

1. Single-leg take down ……Ekhari patti
2. Double-leg takes down …… Do-hari patt
3. Fire man carry ……..Khala-jung
4. Hip toss……...Dhak
5. Arm throw…….……..Dhobbi
6. Gut-wrench ……..Bharandaj
7. Ankle lace/ Leg lace……..Fittile

3.2.3 Establishing the procedure to perform freestyle wrestling skills

The following procedure of free style wrestling skill i.e. arm throw (Portolese, A. ,2018), single leg take down, double leg take down, firemen carry (Takedown, n.d.), Hip toss (Professional wrestling throws, n.d.), gut wrench, ankle lace (Kolat, C. (2009).

(i) Single Leg Takedown

Purpose: To measure the Single leg takedown skill ability.

Age Group: 15-17 and 18-19 years' male wrestlers.

Equipment: Wrestling mat, stopwatch, whistle, scorecard/ recording sheet and pen.

Procedure:

The single leg takedown gripping one of the legs of the sports wrestler player, normally with two hands and applying the circumstance to control or strengthen the wrestler to the mat. Normally, the down a side of the leg is dragged aside, however the middle or shoulder is performed to compressed from the up side of leg of the wrestler in the other way.

Figure 3.2 show the single leg take down free style wrestling skills.

(ii) Double leg takedown

Purpose: To measure the Double Leg Takedown skill ability.

Age Group: 15-17and 18-19 year male wrestlers.

Equipment: Wrestling mat, stopwatch, whistle, scorecard/ recording sheet and pen.

Procedure:

The twofold or double leg takedown incorporates grabbing the companion's or partner with the two arms around the companion's leg over putting the chest close to the companion's and performing the present circumstance to control the companion's to the Mat. There are various kinds of compelling the companion's to the Mat, for example, lifting and crushing, or pulling aside by the shoulder by pushing the companion's leg. The twofold leg takedown may be gone against as old as single leg takedown, through striking and spreading spinning. The guillotine choke is moreover the very best counter to a week performed double leg takedown.

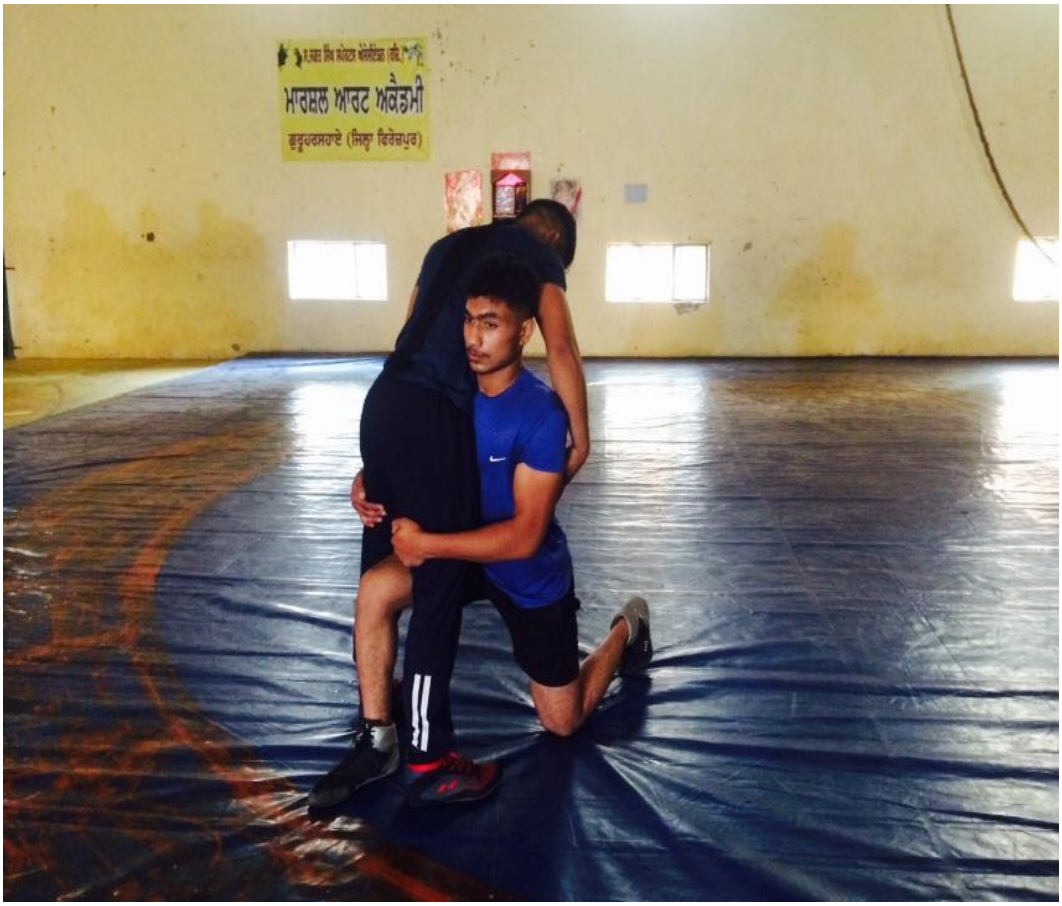

Figure 3.3 show the double leg take down free style wrestling skill.

(iii) Fireman's carry

Purpose: To measure the Single leg takedown skill ability.

Age Group: 15-17and 18-19 year male wrestlers.

Equipment: Wrestling mat, stopwatch, whistle, scorecard/ recording sheet and pen.

Procedure:

The fireman, hold is takedown abilities or skills that resemble a typical strategy of holding a hurted or injured person by firemen. When performed on the right direction of the mate's body, the wrestler's left arm hand wrenches the partners' right arm elbow frontward so the wrestler's head went under the companion's right arm. Simultaneously, the wrestler's right arm hand gets within the companion's right leg's thigh and pushing it up, even though the wrestler's increases and came to his left side, take along the companion's and partner's down side to the Mat on his right side.

Figure 3.4 show the fireman carry free style wrestling skill.

(iv) Hip toss

Purpose: To measure the Hip toss skill ability.

Age Group: 15-17and 18-19 year male wrestlers.

Equipment: Wrestling mat, stopwatch, whistle, scorecard/ recording sheet and pen.

Procedure:

The wrestler remain close to the coconspirator or partner both are confronting a similar situation, and the wrestler carries their nearest arm underneath and back side the coconspirator's or partner's nearest under from the arm or armpit. The wrestler next at that moment, speedy carries up the coconspirator with the arms and pushing him aside that will lead to the wrestler to flip the partner to his back to end to the turn. There is also a stand on variety, in that the wrestler utilizes an ordinary hip throw and grounds in a situated circumstance" Professional wrestling tosses.

Figure 3.5 show the hip toss free style wrestling skill.

(v) Arm Throw

Purpose: To measure the Arm throws skill ability.

Age Group: 15-17 and 18-19 year male wrestlers.

Equipment: Wrestling mat, stopwatch, whistle, scorecard/ recording sheet and pen.

Procedure

Throws or tosses are exceptionally normal free-style wrestling action from the ectual circumstance. The arm toss is a real turn which can go through additional score and holding blend. To play out the strategy, apply one hand to clutch the wrestler's up-backside of the arm muscles however your other arm crosses behind the wrestler's head, laying on his neck and reaching to your other hand on the up-backside arm muscles. Point into your wrestler by the external leg and moving towards him by 180 degree. Accessible to your upside body or trunk vertical and turn his chest area to near the mat.

Figure 3.6 show the Arm throw free style wrestling skills.

(vi) Gut wrench

Purpose: To measure the Gut wrench skill ability.

Age Group: 15-17and 18-19 year male wrestlers.

Equipment: Wrestling mat, stopwatch, whistle, scorecard/ recording sheet and pen.

Procedure:

A arrangement for many tosses or throws and crushes, it sees the hitting or beating up to the wrestler put a twisted at the midsection coconspirator or partner aside of him, range the close to hand around get his hands around the mid part of the body. A typical ability or skills out of its move can be a bomb or suplex.

Figure 3.7 show the gut wrench free style wrestling skill.

(vii) Ankle Lace

Purpose: To measure the Leg lace skill ability.

Age Group: 15-17 and 18-19 year male wrestlers.

Equipment: Wrestling mat, stopwatch, whistle, scorecard/ recording sheet and pen.

Procedure:

The lower leg from the ankle lace is quite possibly the most real moves in free-style wrestling method. While playing out this move, you control together of your coconspirator's or partner's legs with respect to bent him. The lower leg from the ankle lace is an adaptable move with a few kinds of varieties and completions, yet before you can gain proficiency with these varieties, you should initially realize the principal lower leg from the ankle lace roll.

Figure 3.8 show the ankle lace free style wrestling skill.

3.2.4 Tools used for the study

1. Wrestling mat

Reliability of tools

Wrestling mat and whistle are used to measure the performance of wrestlers as approved by Wrestling Federation of India which are accurate measurement tools according to rulebook of FILA and also reliable.

3.2.5 Procedure of establishing scoring

The researcher gave instructions to wrestlers about selected test items beforehand for data collection. Firstly researcher measured the height and weight of wrestlers and made pairs accordingly. The wrestlers were allowed to warm up for 15 to 20 minutes before the skill test. The three judges were prepared for the each subject evaluation and give the scoring sheet dully filled with the basic information of the subjects for the scoring by the researcher. The researcher gave demonstrations to wrestlers about selected test items. The skill test was started with the signal (blew of whistle) by the researcher. The wrestlers were executed his skill and the partner did not show any defensive skill. Three chances were given to the each wrestler and the best result was taken. There was no time limit and the wrestlers were directed to perform the technique quickly. The performance of the wrestlers was evaluated by the three judges the scoring criteria have been shown following.

The score of the wrestling skill was based on the judge's observation. Three judges gave the scoring to performer on the basis of the five point scale (1 poor, 2 failure, 3 average, 4 good, 5 excellent) according to the perfection of skill. The rubric of the skill items (grip, stance, speed and execution of the skill) has been follow for the evaluation of the each skill item. Independently result was prepared by three judges so that data were recorded impartially. After calculating of average score of three judges the best result of the wrestler was recorded.

Table 3.3

Show the rubric of the skill item of free style wrestling

Sr.	Rubric of the skill item	Scoring criteria
1	Grip	1, 2, 3, 4, 5
2	Stance	1, 2, 3, 4, 5
3	Speed	1, 2, 3, 4, 5
4	Execution	1, 2, 3, 4, 5
	Each skill item minimum-maximum score	4-20

Table 3.4

Show the grading value of free style wrestling skill test

Rating/ Grading Value	
Excellent	5
Very good	4
Good	3
Failure	2
Poor	1

3.2.6 Procedure of data collection for reliability and objectivity

The researcher gave instructions to wrestlers about selected test items beforehand for data collection. For this study, the tests were employed repeatedly on the same age group and correlation was calculated. In this stage 20 (n=20) 18 to 19 and 20 (n=20) 15 to 17 male wrestler of different weight category wrestlers from Hans Raj Wrestling Club (Hans Raj Stadium) in Jalandhar were tested Firstly researcher measured the height and weight of wrestlers and made pairs accordingly. The wrestlers were allowed to warm up for 15 to 20 minutes before the skill test. The three judges were prepared for each subject evaluation and give the scoring sheet dully filled with the basic information of the subjects for the scoring by the researcher. The researcher gave demonstration to wrestlers about selected test items. The skill test was started with the signal (blew of whistle) by the researcher. The wrestlers were executed his skill and the partner did not show any defensive skill. Three chances were given to the each wrestler and the best result was taken. There was no time limit and the wrestlers were directed to perform the technique quickly. The performance of the wrestlers was evaluated by the three judges. After calculating of average score of three judges the best result of the wrestler was recorded.

3.2.7 Establishing reliability of free style wrestling skill test items

For this study, the tests were employed repeatedly on the same age group and Pearson correlation was calculated for establishing reliability. After 16 days the items were administered for a second try out. The test retest was assessed for each test item and also for a test battery as a whole. The significant reliability coefficient ensured the preliminary from of the test for developing reliability. Zilly, A. (2001)

The test and re-test procedure was employed to compute the reliability of the test items. 15 to 17 (n=20) and 18 to 19 years (n=20) subjects were tested on 2 different days with an interval of sixteen days in between. The tests on both days were conducted by the researcher himself.

Table 3.5

Show the reliability co-efficient of all selected free style wrestling skill test for 15 to 17 years

SR.NO	TEST OF ITEMS	"r"
1.	Single Leg Take Down Test	**.78**
2.	Double Leg Take Down Test	**.82**
3.	Fireman carry Test	**.76**
4.	Arm Throw Test	**.78**
5.	Hip Throw Test	**.74**
6.	Gut wrench Test	**.88**
7.	Ankle lace test	**.87**
8.	Total	**.81**

The table 3.5 shows the result of reliability coefficient 15 to 17 years age group of different wrestling skills test items, single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace were found .78, .82, .86, .78, .74, .88 and .87 respectively. The reliability coefficient are statistically ($p<0.05$) significant respectively.

The hypothesis no-1 was to developed freestyle wrestling skill test with satisfactory reliability.

The statistical analysis of the data for the developed freestyle wrestling skill test revealed that the obtained coefficient correlation value of two tests was found to be significant at 0.05 and 0.01 levels. Hence the hypothesis first fully accepted and the test was highly reliable.

Table 3.6

Show the reliability co-efficient of all selected free style wrestling skill test for 18 to 19 years

SR.NO	TEST OF ITEMS	"r"
1.	Single Leg Take Down Test	**.82**
2.	Double Leg Take Down Test	**.84**
3.	Fireman carry Test	**.80**
4.	Arm Throw Test	**.74**
5.	Hip Throw Test	**.79**
6.	Gut wrench Test	**.93**
7.	Ankle lace test	**.94**
8.	Total	**.84**

The table 3.6 Show the result of reliability coefficient 18 to 19 years age group of different wrestling skills test items, single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace were found .82, .84, .80, .74, .79, .93 and .94 respectively. The reliability coefficient were statistically ($p<0.05$ and $p<0.05$) significant respectively.

The hypothesis no-1 was to developed freestyle wrestling skill test with satisfactory reliability.

The statistical analysis of the data for the developed freestyle wrestling skill test revealed that the obtained coefficient correlation value of two tests was found to be significant at 0.05 and 0.01 levels. Hence the hypothesis first fully accepted and the test was highly reliable.

3.2.8 Establishing objectivity of free style wrestling skill items

For this study, the tests were employed repeatedly on the same age group and Pearson's product-moment correlation was calculated for establishing objectivity. After 16 days the items were administered for each test item separately three different judges (Penal-2) applied on same age group sample second try out. The test-retest was assessed for each test item and also for a test battery as a whole. The significant objectivity coefficient ensured the preliminary from of the test for developing objectivity. Zilly, A. (2001)

The test and re-test procedure was employed to compute the objectivity of the test items. 15 to 17 (n=20) and 18 to 19 years (n=20) subjects were tested on 2 different days with an interval of sixteen days in between by different penal of three judges. The tests on both days were conducted by the researcher himself.

Table 3.7

Show the objectivity co-efficient of all selected the free style wrestling skill test for 15 to 17 years

SR.NO.	TEST OF ITEMS	"r"
1.	Single Leg Take Down Test	**.76**
2.	Double Leg Take Down Test	**.85**
3.	Fireman 'carry Test	**.83**
4.	Arm Throw Test	**.81**
5.	Hip Throw Test	**.72**
6.	Gut wrench Test	**.87**
7.	Ankle Lace test	**.77**
8.	Total	**.81**

The table 3.7 shows the result of objectivity coefficient 15-17 years age group of different wrestling skills test items, single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace are found .73, .72, .60, .81, .72, .67 and .77 respectively. The objectivity coefficient are statistically ($p<0.05$ and $p<0.01$) significant respectively.

The hypothesis no-1 was to developed freestyle wrestling skill test with satisfactory objectivity.

The statistical analysis of the data for the developed freestyle wrestling skill test revealed that the obtained coefficient correlation value of two tests was found to be significant at 0.05 and 0.01 levels. Hence the hypothesis first fully accepted and the test was highly reliable.

Table 3.8

Show the objectivity co-efficient of all selected free style wrestling skill test for 18 to 19 years

SR.NO.	TEST OF ITEMS	"r"
1.	Single Leg Take Down Test	**.81**
2.	Double Leg Take Down Test	**.84**
3.	Fireman 'carry Test	**.86**
4.	Arm Throw Test	**.83**
5.	Hip Throw Test	**.87**
6.	Gut wrench Test	**.82**
7.	Ankle Lace test	**.78**
8.	Total	**.83**

The table 3.8 shows the result of objectivity coefficient 18-19 years age group of different wrestling skills test items, single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace are found .75, .74, .63, .83, .71, .68 and .78 respectively. The objectivity coefficient are statistically ($p<0.05$ and $p<0.01$) significant respectively.

The hypothesis no-1 was to developed freestyle wrestling skill test with satisfactory objectivity.

The statistical analysis of the data for the developed freestyle wrestling skill test revealed that the obtained coefficient correlation value of two tests was found to be significant at 0.05 and 0.01 levels. Hence the hypothesis first fully accepted and the test was highly objective.

3.3Tester competency

To ensure that the investigator was well versed in the technique of conducting the test, the investigator had number of practice sessions in the testing procedure as well as demonstration. All the measurements were taken by the investigator with the help of wrestling coaches and players well acquainted with the techniques

3.4 Procedure of the study

The procedure of construction and standardization of free style wrestling skill test according to (Waghchoure, M.T 2006).

1. **Preparatory stage**
2. **Middle stage**
3. **Final stage**

Preparatory stage

In the preparatory stage, the first step identification of free-style wrestling skills was introduced. After that list of free-style wrestling, skill test items were sent to experts for construction of the skill test items, feedback and suggestion. After consulting with

wrestling experts, skills were mapped and highly mapped seven skills are single-leg take down, double leg take down, firemen carry, hip toss, arm throw, gut wrench, ankle lace. The researcher established a procedure to perform selected free style wrestling skills. To check the reliability and objectivity of the final skill test items forty (40) national level competition participated male wrestlers age ranging from 15 to 17 (20) and 18 to 19 years (20) were selected Hans Raj Stadium Jalandhar. The test-retest reliability coefficient was assessed for each test item and with complete battery collectively. The significant reliability coefficient ensured the preliminary form of the test.

2. Middle stage

In the middle stage the pilot study had been conducted on samples (N=100) 15 to17 (50) drawn from Baba sheikh farid khusti Aakhada Faridkot (25) out of (32) and (25) out of (42) from Baba sheikh farid SAI wrestling center Faridkot and 18 to19 (50) selected from Baba sheikh farid khusti Aakhada Faridkot (25) out of (35) and (25) out of (47) from Baba sheikh farid SAI wrestling center Faridkot through purposive sampling technique those participated at least state level competition. The researcher gave instruction to wrestlers about selected test items beforehand of data collection. Firstly researcher measured height and weight of wrestlers and finalized the opponent competitors accordingly. The wrestlers were allowed to warm up for 15 to 20 minutes before the skill test. The three judges were prepared for the each subject evaluation and give the scoring sheet dully filled with the basic information of the subjects for the scoring by the researcher. The researcher gave demonstration to wrestlers about selected test items. The skill test was started with the signal (blew of whistle) by the researcher. The wrestlers were executed his skill and the partner did not show any defensive skill. Three chances were given to the each wrestler and the best result was taken. There was no time limit and the wrestlers were directed to perform the technique quickly. The performance of the wrestlers was evaluated by the three judges. After data collection researcher set a data for data analysis through statistical technique and establish norms T-scale, Hull scale, Sigma scale Percentile, five point rating scale and of free style wrestling skill test according to

age group. In this pilot study researcher assess the approach and practice the necessary techniques required for final thesis.

2. Final stage

In the final stage, the 400 male wrestlers were selected for standardized the free style wrestling skill test. The sample of the study was selected through purposive sampling technique as per age group 15 to 17 (200) and 18 to 19 (200) years male wrestlers, which participated at national and state-level competitions, were considered for the establishment of the norms to standardize the free style wrestling skill test. The sample was selected as per the guidelines of the School Games Federation of India and FILA on the U-17 and U-19 wrestlers can participate in the school games competitions. The age of wrestlers was taken through a birth certificate, matriculation certificate, and Adhar Card. The sports participation was taken as per the record of the academy and federation.

The researcher gave instruction to wrestlers about selected test items beforehand of data collection. Firstly researcher measured height and weight of wrestlers and finalized the opponent competitors accordingly. The wrestlers were allowed to warm up for 15 to 20 minutes before the skill test. The three judges were prepared for the each subject evaluation and give the scoring sheet dully filled with the basic information of the subjects for the scoring by the researcher. The researcher gave demonstration to wrestlers about selected test items. The skill test was started with the signal (blew of whistle) by the researcher. The wrestlers were executed his skill and the partner did not show any defensive skill. Three chances were given to the each wrestler and the best result was taken. There was no time limit and the wrestlers were directed to perform the technique quickly. The performance of the wrestlers was evaluated by the three judges. After calculating of average score of three judges the best result of the wrestler was recorded.

Firstly researcher had collected the data from Hans Raj Stadium Jalandhar 15 to 17 years (20) out of (28) after that researcher had collected data from Govt. Model Senior Secondary School Megha Rai Ferozepur (20) out of (39), Baba sheikh farid khusti Aakhada Faridkot (20) out of (32), Baba sheikh farid SAI wrestling center Faridkot (30)

out of (42), Punjab sports dept. wrestling wing Faridkot (20) out of (26), 61th the Punjab schools wrestling games held at Faridkot (30) out of (74) and Baba sheikh farid open national level wrestling Dangal in 2016 held at Faridkot(40) out of (90) and last data collection from Jaghat singh wrestling academy Guruharsahai (20) out of (35) and Hans Raj Stadium Jalandhar 18 to 19 years (20) out of (32), after that researcher had collected data from Govt. Model Senior Secondary School Megha Rai Ferozepur (20) out of (34), Baba sheikh farid khusti Aakhada Faridkot (20) out of (35) Baba sheikh farid SAI wrestling center Faridkot (30) out of (47), Punjab sports dept. wrestling wing Faridkot (20) out of (33), 61th the Punjab schools wrestling games held at Faridkot (20) out of (82) and Baba sheikh farid open national level wrestling Dangal in 2016 held at Faridkot (40) out of (125) and last data collection done from Jaghat singh wrestling academy Guruharsahai (20) out of (42). After data collection statistical techniques have been applied for standardized the test and establish norms through T-scale, Hull scale, Sigma scale and Percentile scale, five point standard scale of free style wrestling skill test according to age group.

3.5 Statistical techniques

Following statistical tools have been used for data analysis:

- Test re-tests reliability, objectivity and item-total coefficients were determined by employing Pearson's product moment correlation method. Zilly, A. (2001)
- Content validity was determined by analyzing the opinion of the various experts in the area of wrestling field. Zilly, A. (2001)
- Descriptive statistical techniques (Mean, Standard Deviation) were analyzed with the help of SPSS Software.
- T-scale, Hull-scale, and Sigma-scale of each items and total skill test were calculated by using standard formulas. Purashwani, P. et.al. (2010) Verma, J.P. (2007)

- Percentile norms of each items and total skill test were calculated by using standard formulas. Verma, J.P. (2007)
- The skill test items-wise normative data were graded on the basis of the principal five point rating scale. Verma, J.P. (2007)

CHAPTER-4
RESULT AND DISCUSSION

The objective of the study was to construct and standardize of free style wrestling skill test to assess the performance of wrestlers on the basis of selected specific free style wrestling skill test items. In this chapter results have been presented according to age group 15 to 17 years and 18 to 19 years on wrestling skills through standardized score and establish norms.

Table no 4.1

Show the mean and standard deviation of all selected free style wrestling skill test score for 15 to 17 years wrestlers

Variables	N	Mean	SD
Single leg take down	200	14.24	0.61
Double leg take down	200	14.01	0.63
Firemen carry	200	14.29	0.57
Arm Throw	200	14.07	0.58
Hip throw	200	14.26	0.59
Gut wrench	200	14.22	0.58
Ankle lace	200	13.92	0.69
Total	200	99	4.25

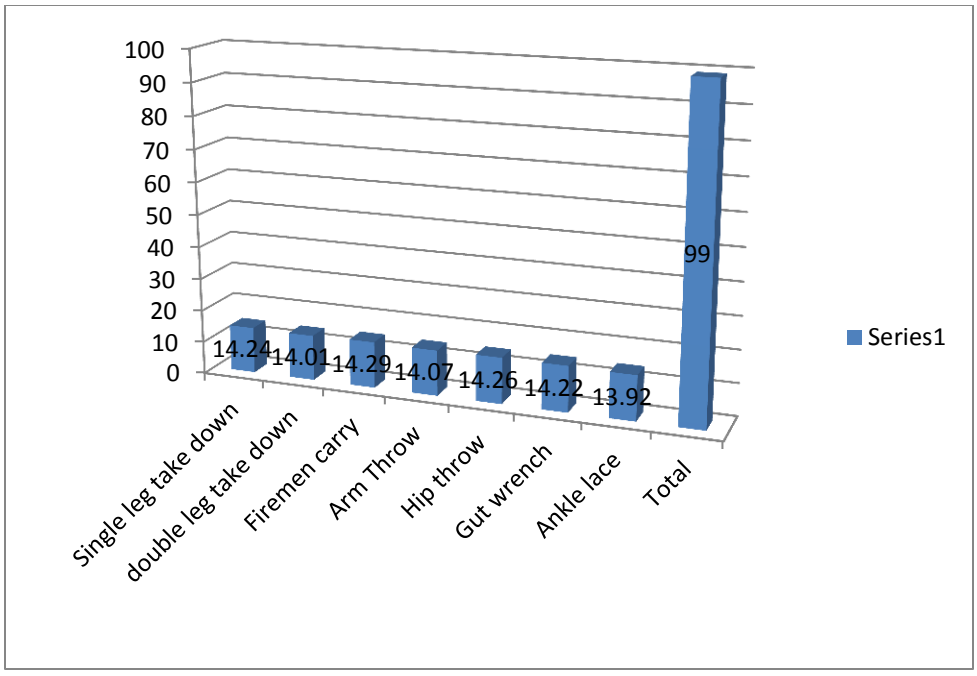

Figure 4.1 show the mean of all selected free style wrestling skill test score for 15 to 17 years wrestlers.

Table and figure 4.1 shows the mean and standard deviation of all selected free style wrestling skill score for 15 to 17 years wrestlers. The single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace was found 14.24, 14.01, 14.29, 14.07, 14.26, 14.22, 13.92 and total 99 respectively. The out of score each skill item was 20.

4.1 Result pertaining to standardized score of free style wrestling skills for 15 to 17 year wrestlers

Table no 4.2

Describes the standard score of t-scale, hull scale, and sigma scale of single-leg takedown skill for 15 to 17 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	11.20	12.11	12.41
10	11.80	12.53	12.78
20	12.41	12.96	13.14
30	13.02	13.38	13.51
40	13.63	13.81	13.87
50	14.23	14.23	14.23
60	14.84	14.66	14.60
70	15.45	15.09	14.96
80	16.06	15.51	15.33
90	16.67	15.94	15.69
100	17.27	16.36	16.06

Table 4.2 describes the standard score of the t-scale, hull scale, and sigma scale of single-leg takedown skill for 15 to 17 years wrestlers. The lowest score of t-scale, hull scale, and sigma of single-leg takedown skill i.e. 11.20, 12.11, and 12.41, respectively, and highest score were found i.e. 17.27, 16.36, and 16.06, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of single-leg takedown wrestling skill as per norms score, lie in poor and excellent category

Table no. 4.3

Describes the standard score of t-scale, hull scale, and sigma scale of double leg take down skill test for 15 to 17 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	10.84	11.79	12.11
10	11.48	12.24	12.49
20	12.11	12.68	12.87
30	12.74	13.12	13.25
40	13.38	13.57	13.63
50	14.01	14.01	14.01
60	14.64	14.45	14.39
70	15.27	14.89	14.77
80	15.91	15.34	15.15
90	16.54	15.78	15.53
100	17.17	16.22	15.91

Table 4.3 describes the standard score of the t-scale, hull scale, and sigma scale of double-leg takedown skill for 15 to 17 years wrestlers. The lowest score of t-scale, hull scale, and sigma of double-leg takedown skill i.e. 11.48, 12.24, and 12.49, respectively, and highest score were found i.e. 17.17, 16.22 and 15.91, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of double-leg takedown wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.4

Describes the standard score of the t-scale, hull scale, and sigma scale of firemen carry skill test items for 15 to 17 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	11.44	12.30	12.58
10	12.01	12.70	12.92
20	12.58	13.09	13.27
30	13.15	13.49	13.61
40	13.72	13.89	13.95
50	14.29	14.29	14.29
60	14.86	14.69	14.63
70	15.43	15.09	14.97
80	16.00	15.49	15.31
90	16.57	15.88	15.66
100	17.14	16.28	16.00

Table 4.4 describes the standard score of the t-scale, hull scale, and sigma scale of firemen carry skill for 15 to 17 years wrestlers. The lowest score of t-scale, hull scale, and sigma of firemen carry skill i.e. 11.44, 12.30, and 12.58, respectively, and highest score were found i.e. 17.14, 16.28 and16.00, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of firemen carry wrestling skill as per norms score, lie in poor and excellent category.

Table no. 4.5

Describes the standard score of t-scale, hull scale and sigma scale of arm throw skill for 15 to 17 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	11.17	12.04	12.33
10	11.75	12.45	12.68
20	12.33	12.85	13.03
30	12.91	13.26	13.37
40	13.49	13.66	13.72
50	14.07	14.07	14.07
60	14.65	14.48	14.42
70	15.23	14.88	14.77
80	15.81	15.29	15.11
90	16.39	15.69	15.46
100	16.97	16.10	15.81

Table 4.5 describes the standard score of the t-scale, hull scale, and sigma scale of arm throw skill for 15 to 17 years wrestlers. The lowest score of t-scale, hull scale, and sigma of arm throw skill i.e. 11.17, 12.04 and 12.33, respectively, and highest score were found i.e. 16.97, 16.10 and15.81, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of arm throw wrestling skill as per norms score, lie in poor and excellent category.

Table no. 4.6

Describes the standard score of t-scale, hull scale and sigma scale of hip throw skill for 15 to 17 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	11.41	12.26	12.55
10	11.98	12.66	12.89
20	12.55	13.06	13.23
30	13.11	13.45	13.57
40	13.68	13.85	13.91
50	14.25	14.25	14.25
60	14.81	14.64	14.59
70	15.38	15.04	14.93
80	15.95	15.44	15.27
90	16.51	15.83	15.61
100	17.08	16.23	15.95

Table 4.6 describes the standard score of the t-scale, hull scale, and sigma scale of hip throw skill for 15 to 17 years wrestlers. The lowest score of t-scale, hull scale, and sigma of hip throw skill i.e. 11.41, 12.26, and 12.55, respectively, and highest score were found i.e. 17.08, 16.23, and 15.95, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of hip throw wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.7

Describes the standard score of t-scale, hull scale and sigma scale of gut wrench skill for 15 to 17 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	11.31	12.18	12.47
10	11.89	12.59	12.82
20	12.47	13.00	13.17
30	13.06	13.41	13.52
40	13.64	13.82	13.87
50	14.22	14.22	14.22
60	14.81	14.63	14.57
70	15.39	15.04	14.92
80	15.97	15.45	15.27
90	16.55	15.85	15.62
100	17.14	16.26	15.97

Table 4.7 describes the standard score of the t-scale, hull scale, and sigma scale of gut wrench skill for 15 to 17 years wrestlers. The lowest score of t-scale, hull scale, and sigma of gut wrench skill i.e. 11.31, 12.18, and 12.47, respectively, and highest score were found i.e. 17.14, 16.26, and 15.97, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of gut wrench wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.8

Describes the standard score of t-scale, hull scale and sigma scale of ankle lace skill test item for 15 to 17 years wrestlers

Raw Score	T-scale	Hull scale	Sigma scale
0	10.46	11.50	11.84
10	11.15	11.98	12.26
20	11.84	12.47	12.67
30	12.53	12.95	13.09
40	13.23	13.43	13.50
50	13.92	13.92	13.92
60	14.61	14.40	14.33
70	15.30	14.88	14.75
80	15.99	15.37	15.16
90	16.68	15.85	15.58
100	17.37	16.34	15.99

Table 4.8 describes the standard score of the t-scale, hull scale, and sigma scale of ankle lace skill for 15 to 17 years wrestlers. The lowest score of t-scale, hull scale, and sigma of ankle lace skill i.e. 10.46, 11.50, and11.84, respectively, and highest score were found i.e. 17.37, 16.34, and 15.99, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of ankle lace wrestling skill as per norms score, lie in poor and excellent category.

Table no. 4.9

Describes the standard score of t-scale, hull scale and sigma scale of free style wrestling skills test for 15 to 17 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	13.07	13.39	13.50
10	13.28	13.54	13.63
20	13.50	13.70	13.76
30	13.72	13.85	13.89
40	14.94	14.00	14.02
50	14.15	14.15	14.15
60	14.37	14.31	14.28
70	14.59	14.46	14.42
80	14.81	14.61	14.55
90	15.02	14.76	14.68
100	15.24	14.92	14.81

Table 4.9 describes the standard score of the t-scale, hull scale, and sigma scale of free style wrestling skills test for 15 to 17 years wrestlers. The lowest score of t-scale, hull scale, and sigma of free style wrestling skills i.e. 13.07, 13.39, and 13.50, respectively, and highest score were found i.e. 15.24, 14.92, and 14.81, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of freestyle wrestling skills as per norms, score lie in average and good category.

4.2 Result pertaining to norms of free style wrestling skill test for 15 to 17 years wrestlers

Table no. 4.10

Show the percentile score of all selected free style wrestling skill test items for 15 to 17 years wrestlers

Percentile	Single leg take down	Double leg take down	Firemen carry	Arm throw	Hip throw	Gut wrench	Ankle lace	Total
5	13.017	13.000	13.333	13.000	13.333	13.333	12.683	91.70
10	13.333	13.333	13.667	13.333	13.667	13.667	13.000	94.00
15	13.333	13.333	13.667	13.667	13.667	13.667	13.333	94.67
20	13.667	13.333	14.000	13.667	13.667	13.667	13.333	95.33
25	13.750	13.667	14.000	13.667	14.000	14.000	13.333	96.42
30	14.000	13.667	14.000	13.667	14.000	14.000	13.667	97.00
35	14.000	13.667	14.000	14.000	14.000	14.000	13.667	97.33
40	14.000	14.000	14.000	14.000	14.000	14.000	13.667	97.67
45	14.333	14.000	14.333	14.000	14.333	14.000	13.667	98.67
50	14.333	14.000	14.333	14.000	14.333	14.333	14.000	99.33
55	14.333	14.000	14.333	14.000	14.333	14.333	14.000	99.33
60	14.333	14.333	14.333	14.333	14.333	14.333	14.000	100.00
65	14.667	14.333	14.333	14.333	14.333	14.333	14.000	100.33

70	14.667	14.333	14.333	14.333	14.667	14.333	14.333	101.00
75	14.667	14.333	14.667	14.333	14.667	14.583	14.333	101.58
80	14.667	14.667	14.667	14.667	14.667	14.667	14.333	102.34
85	15.000	14.667	14.950	14.667	15.000	14.667	14.667	103.62
90	15.000	15.000	15.000	14.667	15.000	15.000	15.000	104.67
95	15.000	15.000	15.333	15.000	15.317	15.333	15.000	105.98

Table 4.10 shows the percentile score of all selected freestyle wrestling skill test items for 15 to 17 years wrestlers. The minimum score of the freestyle wrestling skills test was found at the 5th percentile and the maximum score at the 95th percentile. The 5th percentile score of male wrestling skill single-leg takedown, double-leg takedown, firemen carry, Arm throw, hip throw, gut wrench, and ankle lace skills were found i.e. 13.01, 13.33,13.33, 13.00, 13.33, 13.33, and 12.68, respectively, and 95th percentile scores 15.00,15.00, 15.33,15.00, 15.317,15.33 and 15.00, respectively. On the 5th percentile and 95th percentile scores of all freestyle wrestling skills were found 91.70, and105.98. The result shown in the freestyle wrestling skills test was found lowest and highest percentile scores lie in the average and good category of percentile norms.

Table No. 4.11

Shows the 5 point rating scale of single- leg take down free style wrestling skill for 15 to 17 years wrestlers

Sr. No	Score range	Category	Total number of wrestlers in each grade	Percentage of wrestlers
1	14.85 to 15.45	Excellent	35	17.5
2	14.24 to 14.84	Very good	83	41.5
3	13.64 to 14.23	Good	51	25.5
4	13.03 to 13.63	Fair	21	10.5
5	4.00 to 13.02	Poor	10	5

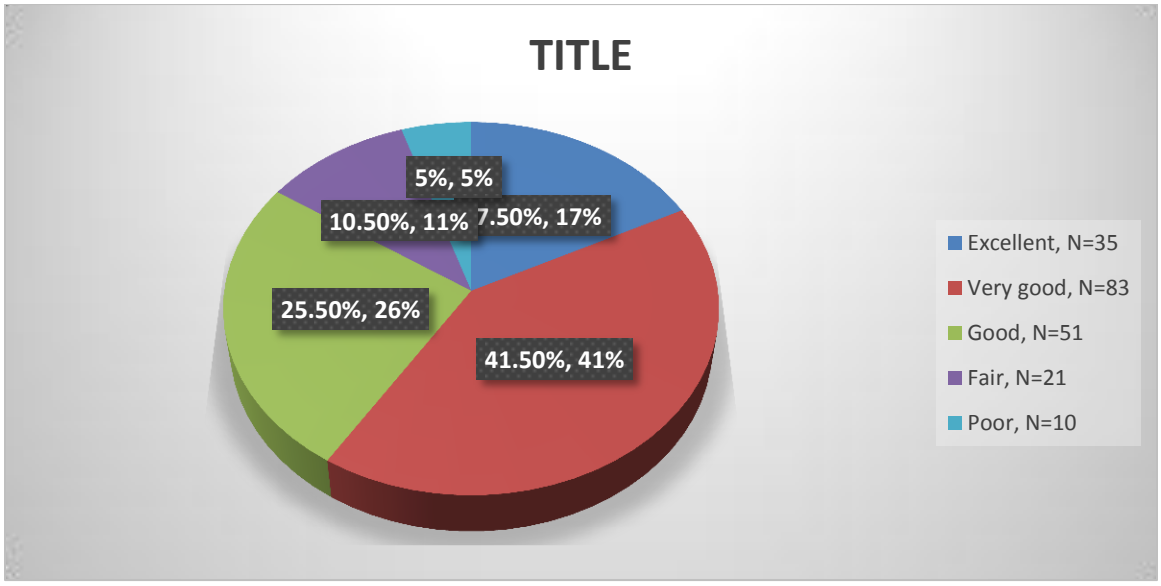

Figure No. 4.2. Shows for the better understanding of percentage wise levels of wrestlers in each grade of 5 point rating scale of single- leg take down free style wrestling skill for 15 to 17 years.

Above the table and figure shows the 5 point rating scale of single-leg takedown free style wrestling skill for 15 to 17 years wrestlers. The norms for wrestlers show scores in between Excellent -14.85 to 15.45, Very good -14.24 to 14.84, Good -13.64 to 14.23,

Fair- 13.03 to 13.63 and Poor- 4.00 to 13.02. It was found that 35 wrestlers which is 17.5% falls in the scale of Excellent, 83 wrestlers which is 41.5% falls in the scale of Very good, 51 wrestlers which is 25.5% falls in the scale of Good, 21 players which is 10.5% falls in the scale of Fair and 10 wrestlers which is 5% falls in the scale of Poor.

Table No. 4.12

Shows the 5 point rating scale of double-leg take down free style wrestling skill for 15 to 17 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.65 to 15.27	Excellent	43	21.5
2	14.09 to 14.64	Very good	44	22
3	13.39 to 14.08	Good	68	34
4	12.75 to 13.38	Fair	37	18.5
5	4.00 to 12.74	Poor	8	4

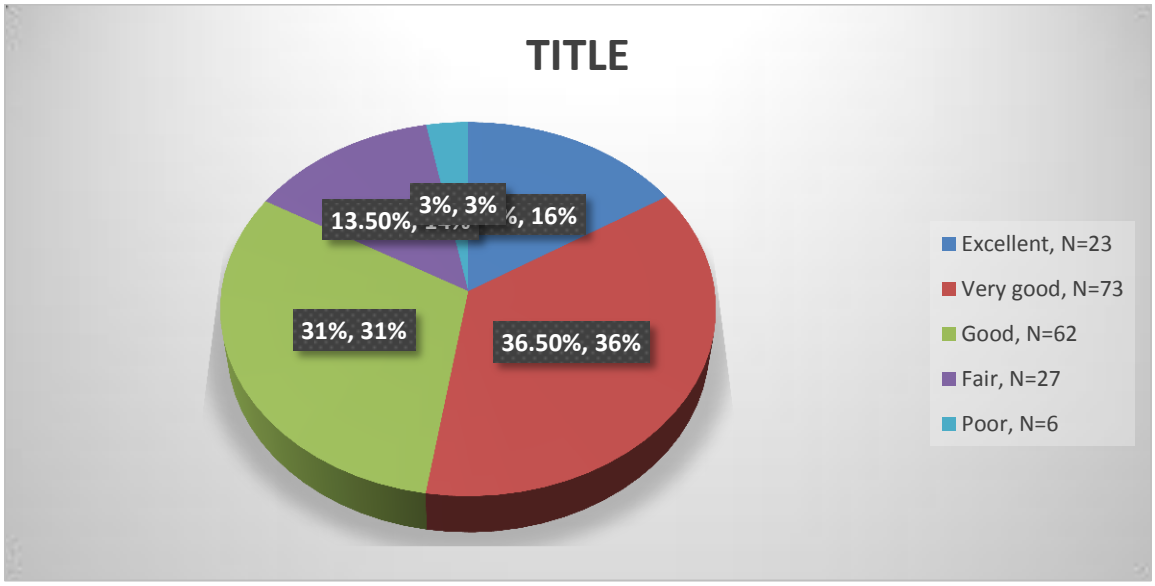

Figure No. 4.3 Shows for the better understanding of percentage wise levels of 5 point rating scale of double-leg take down free style wrestling skill for 15 to 17 years wrestlers

Above the table and figure shows the 5 point rating scale of double-leg takedown free style wrestling skill for 15 to 17 years wrestlers. The norms for wrestlers show scores in between Excellent -14.65-15.27, Very good -14.09 to 14.64, Good -13.39 to 14.08, Fair- 12.75 to 13.38 and Poor- 4.00 to 13.74. It was found that 43 wrestlers which is 21.5% falls in the scale of Excellent, 44 wrestlers which is 22% falls in the scale of Very good, 68 wrestlers which is 34% falls in the scale of Good, 37 players which is 18.5% falls in the scale of Fair and 8 wrestlers which is 4% falls in the scale of Poor.

Table No. 4.13

Show the 5 point rating scale of firemen carry free style wrestling skill for 15 to 17 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.87 to 15.43	Excellent	57	28.5
2	14.30 to 14.86	Very good	55	27.5
3	13.73 to 14.29	Good	50	25
4	13.16 to 13.72	Fair	37	18.5
5	4.00 to 13.15	Poor	1	0.5

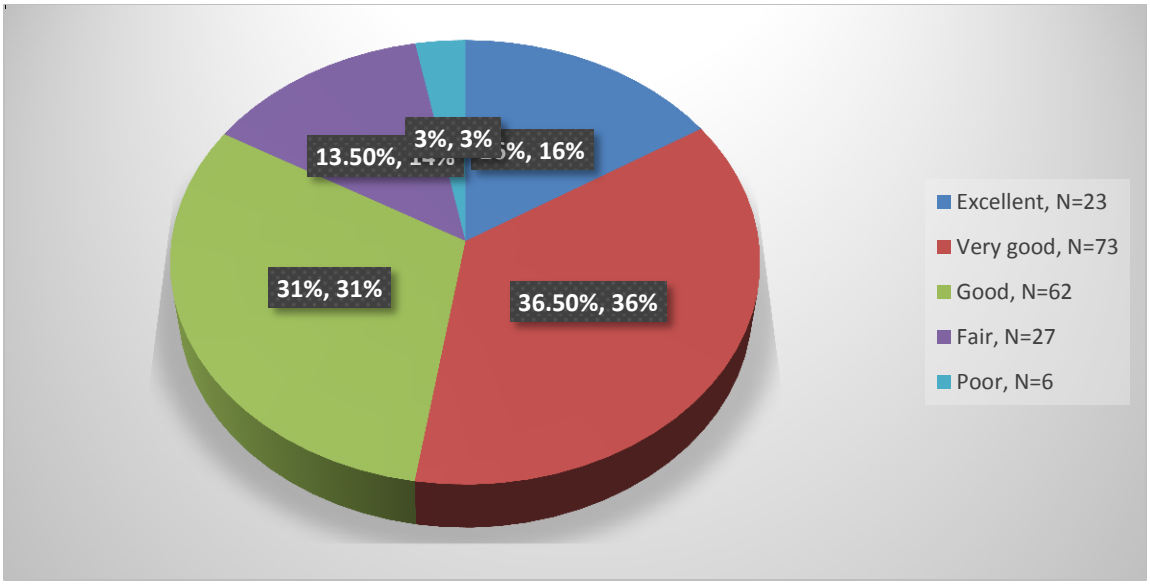

Figure No. 4.4. Shows for the better understanding of percentage wise levels of 5 point rating scale of firemen carry free style wrestling skill for 15 to 17 years wrestlers

Above the table and figure shows the 5 point rating scale of firemen carry free style wrestling skill for 15 to 17 years wrestlers. The norms for wrestlers show scores in between Excellent -14.87 to 15.43, Very good -14.30 to 14.86, Good -13.73 to 14.29, Fair- 13.16 to 13.72 and Poor- 4.00 to 13.15. It was found that 57 wrestlers which is 28.5% falls in the scale of Excellent, 55 wrestlers which is 27.5% falls in the scale of Good, 50 wrestlers which is 25% falls in the scale of Average, 37 players which is 18.5% falls in the scale of Fair and 1 wrestlers which is 0.5% falls in the scale of Poor.

Table No. 4.14

Shows the 5 point rating scale of arm throw free style wrestling skill for 15 to 17 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.66 to 15.23	Excellent	47	23.5
2	14.08 to 14.65	Very good	40	20
3	13.50 to 14.07	Good	85	42.5
4	12.92 to 13.49	Fair	22	11
5	4.00 to 12.91	Poor	6	3

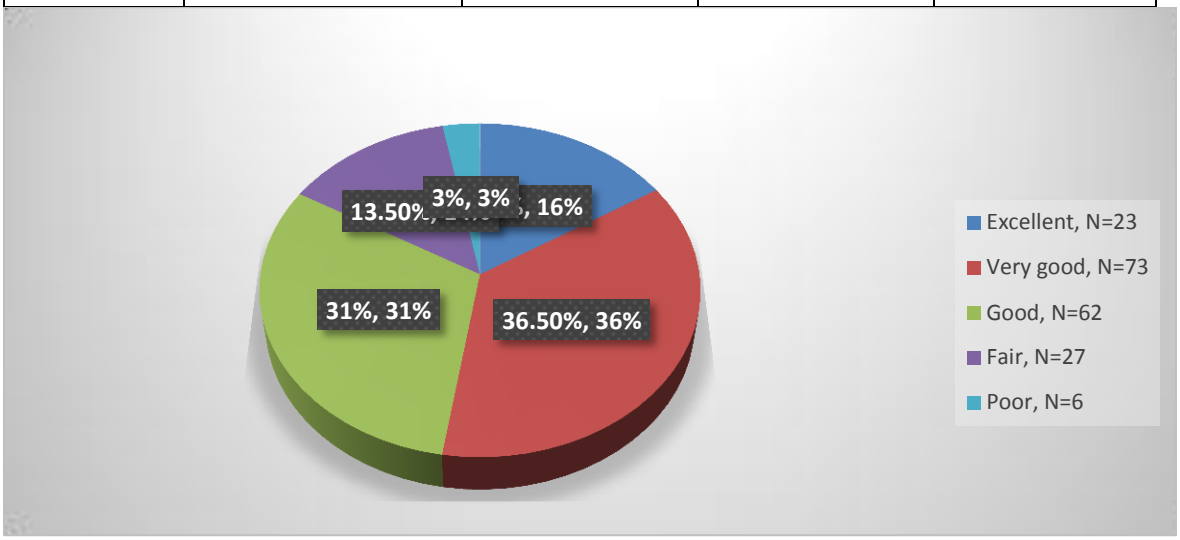

Figure No. 4.5. Shows for the better understanding of percentage wise levels of 5 point rating scale of arm throw free style wrestling skill for 15 to 17 years wrestlers

Above the table and Figure shows the 5 point rating scale of arm throw for free style wrestling skills for 15 to 17 years wrestlers. The norms for wrestlers show scores in between Excellent -14.66-15.23, Very good -14.09 to 14.65, Good -13.50 to 14.07, Fair-

12.92 to 13.49 and Poor- 4.00 to 12.91. It was found that 47 wrestlers which is 23.5% falls in the scale of Excellent, 40 wrestlers which is 20% falls in the scale of Very good, 85 wrestlers which is 42.5% falls in the scale of Good, 22 players which is 11% falls in the scale of Fair and 6 wrestlers which is 3% falls in the scale of Poor.

Table No. 4.15

Show the 5 point rating scale of hip throw free style wrestling skill for 15 to 17 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.86 to 15.44	Excellent	35	17.5
2	14.27 to 14.85	Very good	77	38.5
3	13.69 to 14.26	Good	40	20
4	13.10 to 13.68	Fair	44	22
5	4.00 to 13.09	Poor	4	2

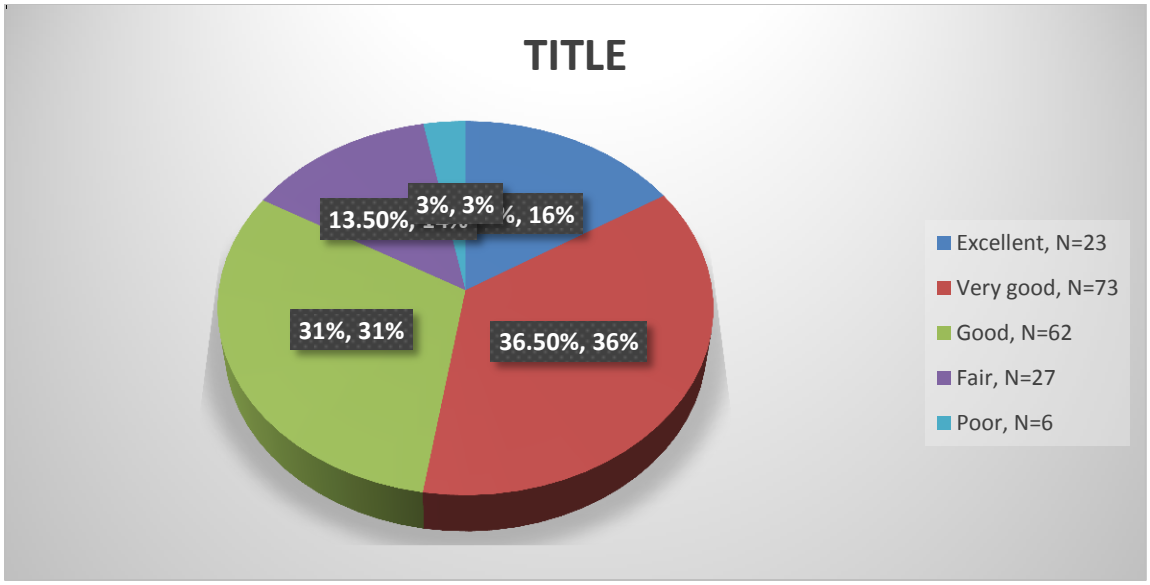

Figure No. 4.6. Shows for the better understanding of percentage wise levels of 5 point rating scale of hip throw free style wrestling skill for 15 to 17 years wrestlers

Above the table and figure shows the 5 point rating of hip throw free style wrestling skill for 15 to 17 years wrestlers. The norms for wrestlers show scores in between Excellent -14.86-15.44, Very good -14.27 to 14.85, Good -13.69 to 14.26, Fair-12.10 to 13.68 and Poor- 4.00 to 13.09. It was found that 35 wrestlers which is 17.5% falls in the scale of Excellent, 77 wrestlers which is 38.5% falls in the scale of Very good, 40 wrestlers which is 20% falls in the scale of Good, 44 players which is 22% falls in the scale of Fair and 4 wrestlers which is 2% falls in the scale of Poor.

Table No. 4.16

Show the 5 point rating scale of gut wrench free style wrestling skill for 15 to 17 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
A	14.82 to 15.39	Excellent	35	17.5
B	14.23 to 14.81	Very good	27	13.5
C	13.65 to 14.22	Good	75	37.5
D	13.07 to 13.64	Fair	13	6.5
E	4.00 to 13.06	Poor	4	2

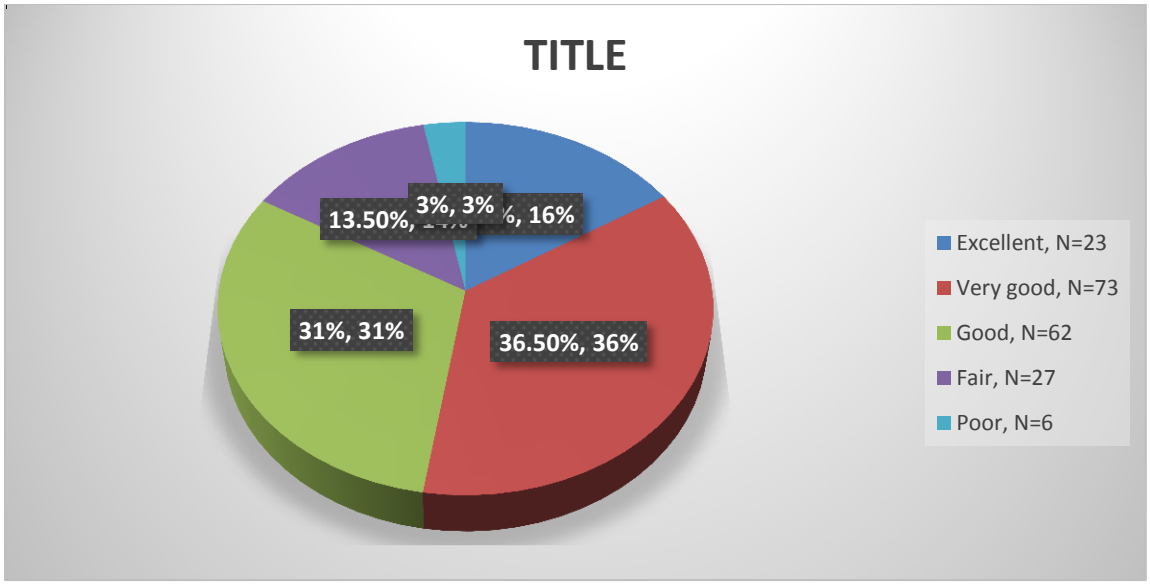

Figure No. 4.7. Shows for the better understanding of percentage wise levels of 5 point rating scale of gut wrench free style wrestling skill for 15 to 17 years wrestlers

Above the table and figure shows the 5 point rating scale of gut wrench free style wrestling skill for 15 to 17 years wrestlers. The norms for wrestlers show scores in between Excellent -14.82 to 15.41, Very good -14.23 to 14.81, Good -13.65 to 14.22, Fair- 12.07 to 13.64 and Poor- 4.00 to 13.07. It was found that 35 wrestlers which is 17.5% falls in the scale of Excellent, 27 wrestlers which is 13.5% falls in the scale of Very good, 75 wrestlers which is 37.5% falls in the scale of Good, 13players which is 6.5% falls in the scale of Fair and 4 wrestlers which is 2% falls in the scale of Poor.

Table No. 4.17

Show the 5 point rating scale of ankle lace free style wrestling skill for 15 to 17 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.62 to 15.30	Excellent	38	19
2	13.92 to 14.61	Very good	65	32.5
3	13.24 to 13.91	Good	71	35.5
4	12.54 to 13.23	Fair	22	11
5	4.00 to 12.53	Poor	4	2

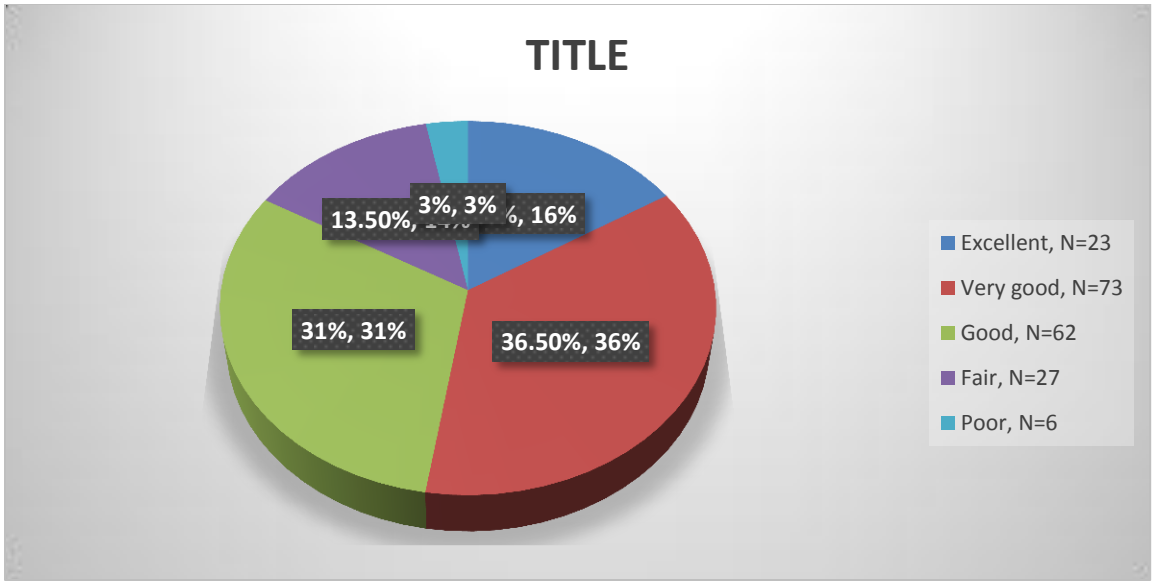

Figure No. 4.8. Shows for the better understanding of percentage wise levels of 5 point rating scale of ankle lace free style wrestling skill for 15 to 17 years wrestlers

Above the table and figure shows the 5 point rating scale of ankle lace free style wrestling skill for 15 to 17 years wrestlers. The norms for 200 wrestlers show scores in between Excellent -14.62 to15.30, Very good -13.92 to 14.61, Good -13.24 to 13.91, Fair- 12.54 to 13.23 and Poor- 4.00 to 12.53. It was found that 38 wrestlers which is 19% falls in the scale of Excellent, 65 wrestlers which is 32.5% falls in the scale of Very good, 71 wrestlers which is 35.5% falls in the scale of Good, 22 players which is 11% falls in the scale of Fair and 4 wrestlers which is 2% falls in the scale of Poor.

Table No. 4.18

Show the 5 point rating scale of free style wrestling skill test for 15 to 17 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	100.60 to140	Excellent	35	17.5
2	98.99 to100.59	Very good	81	40.5
3	95.38 to 98.98	Good	49	24.5
4	95.77 to 97.37	Fair	28	14
5	28 to 95.76	Poor	7	3.5

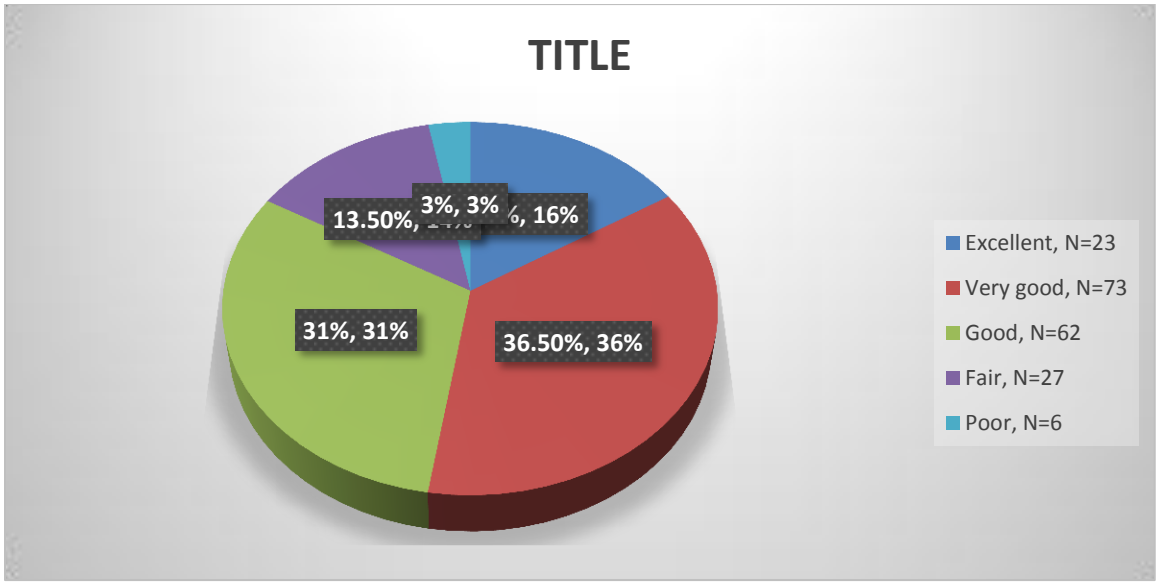

Figure No. 4.9. Shows for the better understanding of percentage wise levels of 5 point rating scale of free style wrestling skill test for 15 to 17 years wrestlers

Above the table and figure shows the 5 point rating scale of free style wrestling skill test for 15 to 17 years wrestlers. The norms for 200 wrestlers show scores in between Excellent -100.60 to 140, Very good - 98.99 to 100.59, Good -95.38 to 98.98, Fair- 95.77to 97.37 and Poor- 28 to 95.76.It was found that 35 wrestlers which is 17.5% falls in the scale of Excellent, 81 wrestlers which is 40.5% falls in the scale of Very good, 49 wrestlers which is 24.5% falls in the scale of Good, 28 players which is 14% falls in the scale of Fair and 7 wrestlers which is 3.5% falls in the scale of Poor.

In no-2 hypothesis that developed freestyle wrestling skill test exist significantly asses the standard of junior level wresters skill ability. The statistical analysis of the data were found 82.5% wrestlers fall in-between of good to excellent in total skill ability so hypothesis no-2 is accepted.

Table 4.19

Show the mean and standard deviation of all selected free style wrestling skills for 18 to 19 years wrestlers

Variables	N	Mean	Std. Deviation
Single leg take down	200	14.33	0.54
double leg take down	200	14.03	0.65
Firemen carry	200	14.23	0.56
Arm Throw	200	14.09	0.61
Hip throw	200	14.24	0.57
Gut wrench	200	14.07	057
Ankle lace	200	13.97	0.71
Total	200	98.97	4.21

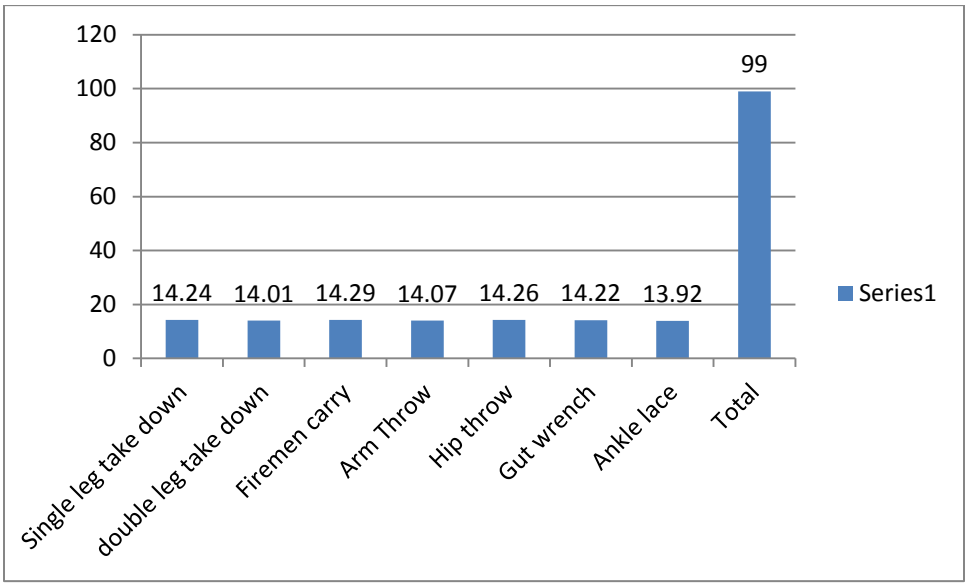

Figure 4.10 show the mean of all selected free style wrestling skills for 18 to 19 years wrestlers.

Table and figure 4.19 show the mean and standard deviation of all selected free style wrestling skills for 18 to 19 years wrestlers. The single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace was found 14.33, 14.03, 14.23, 14.09, 14.24, 14.07 and 13.97. The mean result show in Single leg take down, Firemen carry, Arm Throw, Gut wrench and Ankle lace wrestlers' group was found average and Double leg take down, Hip throw and total wrestling skills was found good as per the norms.

Table no. 4.20

Describes the standard score of the t-scale, hull scale and sigma scale of single-leg takedown skill for 18 to 19 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	11.64	12.44	12.71
10	12.17	12.82	13.04
20	12.71	13.20	13.36
30	13.25	13.58	13.68
40	13.79	13.95	14.01
50	14.33	14.33	14.33
60	14.87	14.71	14.65
70	15.41	15.08	14.98
80	15.95	15.46	15.30
90	16.49	15.84	15.62
100	17.02	16.22	15.95

Table 4.20 describes the standard score of the t-scale, hull scale, and sigma scale of single-leg takedown skill for 18 to 19 years wrestlers. The lowest score of t-scale, hull scale and sigma of single-leg takedown skill i.e. 11.64, 12.44 and 12.71, respectively, and

highest score were found i.e. 17.02, 16.22 and 15.95, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of single-leg takedown wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.21

Describe the standard score of the t-scale, hull scale, and sigma scale of double-leg takedown skill for 18 to 19 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	10.78	11.76	12.08
10	11.43	12.21	12.47
20	12.08	12.67	12.86
30	12.73	13.12	13.25
40	13.38	13.58	13.64
50	14.03	14.03	14.03
60	14.68	14.48	14.42
70	15.33	14.94	14.81
80	15.98	15.39	15.20
90	16.63	15.85	15.59
100	17.28	16.30	15.98

Table 4.21 describes the standard score of the t-scale, hull scale, and sigma scale of double-leg takedown skill for 18 to 19 years wrestlers. The lowest score of t-scale, hull scale, and sigma of single-leg takedown skill i.e. 10.78, 11.76 and 12.08, respectively, and highest score were found i.e. 17.28, 16.30 and 15.98, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of double-leg takedown wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.22

Describes the standard score of the t-scale, hull scale, and sigma scale of firemen carry skill for 18 to 19 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	11.41	12.25	12.54
10	11.97	12.65	12.88
20	12.54	13.04	13.21
30	13.10	13.44	13.55
40	13.67	13.83	13.89
50	14.23	14.23	14.23
60	14.79	14.63	14.57
70	15.36	15.02	14.91
80	15.92	15.42	15.25
90	16.49	15.81	15.58
100	17.05	16.21	15.92

Table 4.22 describes the standard score of the t-scale, hull scale, and sigma scale of firemen carry skill for 18 to 19 years wrestlers. The lowest score of t-scale, hull scale, and sigma of firemen carry skill i.e. 11.41, 12.25 and 15.92, respectively, and highest score were found i.e. 17.05, 16.21 and 15.92, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of firemen carry wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.23

Describes the standard score of the t-scale, hull scale, and sigma scale of arm throw skill for 18 to 19 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	11.03	11.95	12.26
10	11.64	12.38	12.62
20	12.26	12.81	12.99
30	12.87	13.24	13.36
40	13.48	13.67	13.73
50	14.10	14.10	14.10
60	14.71	14.53	14.47
70	15.32	14.96	14.83
80	15.94	15.39	15.20
90	16.55	15.82	15.57
100	17.17	16.25	15.94

Table 4.23 describes the standard score of the t-scale, hull scale, and sigma scale of arm throw skill for 18 to 19 years wrestlers. The lowest score of t-scale, hull scale, and sigma of arm throw skill i.e. 11.03, 11.95 and 12.26, respectively, and highest score were found i.e. 17.17, 16.25 and 15.94, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of arm throw wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.24

Describes the standard score of the t-scale, hull scale, and sigma scale of hip throw skill for 18 to 19 years wrestlers

Raw Score	T-scale	Hull scale	Sigma scale
0	11.41	12.26	12.55
10	11.98	12.66	12.89
20	12.55	13.06	13.23
30	13.11	13.45	13.57
40	13.68	13.85	13.91
50	14.25	14.25	14.25
60	14.81	14.64	14.59
70	15.38	15.04	14.93
80	15.95	15.44	15.27
90	16.51	15.83	15.61
100	17.08	16.23	15.95

Table 4.24 describes the standard score of the t-scale, hull scale, and sigma scale of hip throw skill for 18 to 19 years wrestlers. The lowest score of t-scale, hull scale, and sigma of hip throw skill i.e. 11.41, 12.26 and 12.55, respectively, and highest score were found i.e. 17.08, 16.23 and 15.95, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of hip throw wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.25

Describes the standard score of the t-scale, hull scale, and sigma scale of gut wrench skill for 18 to 19 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	11.23	12.08	12.36
10	11.80	12.48	12.71
20	12.36	12.88	13.05
30	12.93	13.27	13.39
40	13.50	13.67	13.73
50	14.07	14.07	14.07
60	14.64	14.47	14.41
70	15.21	14.87	14.75
80	15.78	15.26	15.09
90	16.34	15.66	15.43
100	16.91	16.06	15.78

Table 4.25 describes the standard score of the t-scale, hull scale, and sigma scale of gut wrench skill for 18 to 19 years wrestlers. The lowest score of t-scale, hull scale, and sigma of gut wrench skill i.e. 11.23, 12.08 and 12.36, respectively, and highest score were found i.e. 17.08, 16.23 and 15.95, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of gut wrench wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.26

Describes the standard score of the t-scale, hull scale, and sigma scale of ankle lace skill for 18 to 19 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	10.43	11.49	11.85
10	11.14	11.99	12.27
20	11.85	12.48	12.70
30	12.56	12.98	13.12
40	13.27	13.48	13.55
50	13.98	13.98	13.98
60	14.68	14.47	14.40
70	15.39	14.97	14.83
80	16.10	15.47	15.25
90	16.81	15.96	15.68
100	17.52	16.46	16.10

Table 4.26 describes the standard score of the t-scale, hull scale, and sigma scale of ankle lace skill for 18 to 19 years wrestlers. The lowest score of t-scale, hull scale, and sigma of ankle lace skill i.e. 10.43, 11.49 and 11.85, respectively, and highest score were found i.e. 17.52, 16.46 and 16.10, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of ankle lace wrestling skill as per norms, score lie in poor and excellent category.

Table no. 4.27

Describes the standard score of the t-scale, hull scale, and sigma scale of free style wrestling skills for 18 to 19 years wrestlers

Raw score	T-scale	Hull scale	Sigma scale
0	10.23	11.32	11.68
10	10.95	11.83	12.12
20	11.68	12.22	12.55
30	12.41	12.84	12.99
40	13.13	13.35	13.42
50	13.86	13.86	13.86
60	14.59	14.37	14.30
70	15.31	14.88	14.73
80	16.04	15.39	15.17
90	16.77	15.89	15.60
100	17.49	16.40	16.04

Table 4.27 describes the standard score of the t-scale, hull scale, and sigma scale of free style wrestling skills for 18 to 19 years wrestlers. The lowest score of t-scale, hull scale, and sigma of free style wrestling skills i.e. 10.23, 11.83 and 12.12, respectively, and highest score were found i.e. 17.49, 16.40 and 16.04, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of free style wrestling skills as per norms, score lie in poor and excellent category.

Table no. 4.28

Show the percentile scores of all selected free style wrestling skills test for 18 to 19 years wrestlers

Percentile	Single leg take down (20)	Double leg take down (20)	Firemen carry (20)	Arm throw (20)	Hip throw (20)	Gut wrench (20)	Ankle lace (20)	Total (140)
5	13.333	13.000	13.333	13.000	13.333	13.333	12.683	92.02
10	13.667	13.333	13.667	13.333	13.667	13.333	13.000	94.00
15	13.667	13.333	13.667	13.333	13.667	13.333	13.333	94.33
20	14.000	13.333	13.667	13.667	13.667	13.667	13.333	95.33
25	14.000	13.667	14.000	13.667	14.000	13.667	13.417	96.42
30	14.000	13.667	14.000	13.667	14.000	13.667	13.667	96.67
35	14.117	13.667	14.000	14.000	14.000	14.000	13.667	97.45
40	14.333	14.000	14.000	14.000	14.000	14.000	13.800	98.13
45	14.333	14.000	14.000	14.000	14.333	14.000	14.000	98.67
50	14.333	14.000	14.333	14.000	14.333	14.000	14.000	99.00
55	14.333	14.333	14.333	14.333	14.333	14.000	14.000	99.67
60	14.667	14.333	14.333	14.333	14.333	14.333	14.333	100.67
65	14.667	14.333	14.333	14.333	14.333	14.333	14.333	100.67

70	14.667	14.333	14.667	14.333	14.667	14.333	14.333	101.33
75	14.667	14.333	14.667	14.333	14.667	14.333	14.333	101.33
80	14.667	14.667	14.667	14.667	14.667	14.333	14.667	102.34
85	15.000	14.667	14.667	14.667	14.667	14.667	14.667	103.00
90	15.000	15.000	15.000	15.000	15.000	14.667	14.667	104.33
95	15.000	15.000	15.000	15.000	15.000	15.000	15.000	105.00

Table 4.28 shows the percentile scores of all selected freestyle wrestling skills test for 18 to 19 years wrestlers. The minimum score of the freestyle wrestling skills test was found at the 5th percentile and the maximum score at the 95th percentile. The 5th percentile score of male wrestling skill single-leg takedown, double-leg takedown, firemen carry, Arm throw, hip throw, gut wrench, and ankle lace skills were found i.e. 12.68 13.33, 13.00,13.33, 13.33, 13.00, 13.33 and 12.68, respectively, and 95th percentile scores 15.00,15.00, 15.33,15.00, 15.317,15.33 and 15.00, respectively. On the 5th percentile and 95th percentile scores of all freestyle wrestling skills were found 92.01, and105. The result shown in the freestyle wrestling skills test was found lowest and highest percentile scores lie in the average and good category of percentile norms.

Table No. 4.29

Shows the 5 point rating scale of single-leg takedown free style wrestling skill test for 18 to 19 years wrestlers.

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.88 to 15.41	Excellent	33	16.5
2	14.34 to 14.87	Very good	49	24.5
3	13.79 to 14.33	Good	82	41
4	13.25 to 13.78	Fair	33	16.5
5	4.00 to 13.24	Poor	4	2

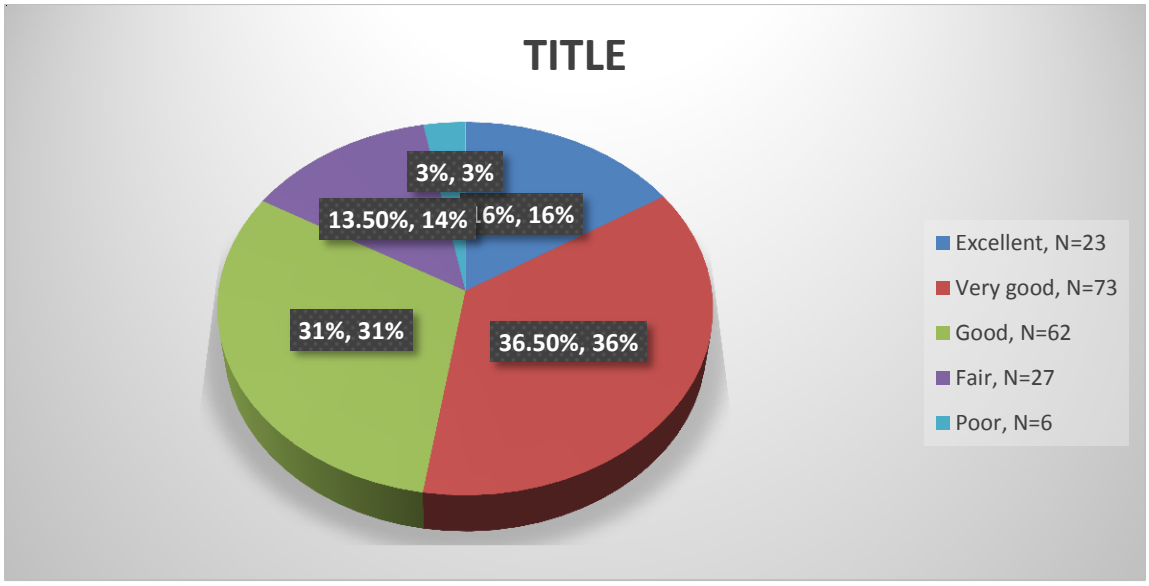

Figure No. 4.11. Shows for the better understanding of percentage wise levels of 5 point rating scale of single-leg takedown free style wrestling skill test for 18 to 19 years wrestlers.

Above the table and Figure shows the 5 point rating scale of single-leg takedown free style wrestling skill test for 18 to 19 years wrestlers**.** The norms for wrestlers show scores

in between Excellent -14.88-15.41, Very good -14.34 to 14.87, Good -13.79 to 14.33, Fair- 13.25 to 13.78 and Poor- 4.00 to 13.24. It was found that 33 wrestlers which is 16.5% falls in the scale of Excellent, 49 wrestlers which is 24.5% falls in the scale of Very good, 82 wrestlers which is 41% falls in the scale of Good, 33 players which is 16.5% falls in the scale of Fair and 4 wrestlers which is 2% falls in the scale of Poor.

Table no. 4.30

Show the 5 point rating scale of double-leg takedown free style wrestling skill test for 18 to 19 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.69 to 15.33	Excellent	23	11.5
2	14.03 to 14.68	Very good	60	30
3	13.38 to 14.02	Good	64	32
4	12.73 to 13.37	Fair	38	19
5	4.00 to 12.72	Poor	7	3.5

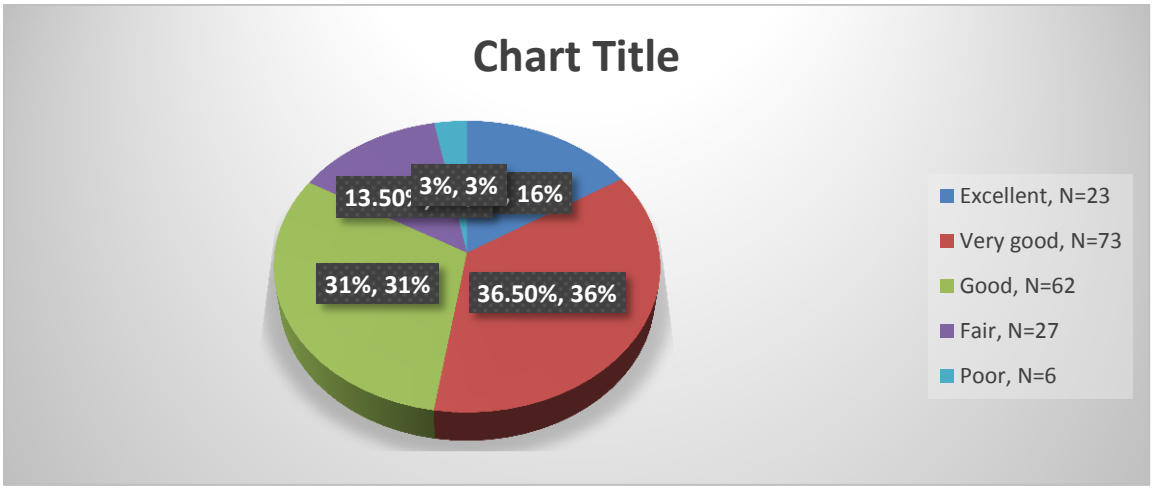

Figure No. 4.12. Shows for the better understanding of percentage wise levels of 5 point rating scale of double-leg takedown free style wrestling skill test for 18 to 19 years wrestlers

Above the table and figure shows the 5 point rating scale of double leg takedown free style wrestling skill for 18 to 19 years wrestlers. The norms for wrestlers show scores in between Excellent -14.69-15.33, Very good -14.03 to 14.68, Good -13.38 to 14.02, Fair- 12.73 to 13.37 and Poor- 4.00 to 12.72. It was found that 23 wrestlers which is 11.5% falls in the scale of Excellent, 60 wrestlers which is 30% falls in the scale of Very good, 64 wrestlers which is 32% falls in the scale of Good, 38 players which is 19% falls in the scale of Fair and 7 wrestlers which is 3.5% falls in the scale of Poor.

Table no. 4.31

Shows the 5 point rating scale of firemen carry free style wrestling skill for 18 to 19 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.80 to 15.36	Excellent	28	14
2	14.24 to 14.79	Very good	35	17.5
3	13.68 to 14.23	Good	91	45.5
4	13.11 to 13.67	Fair	40	20
5	4.00 to 13.10	Poor	6	3

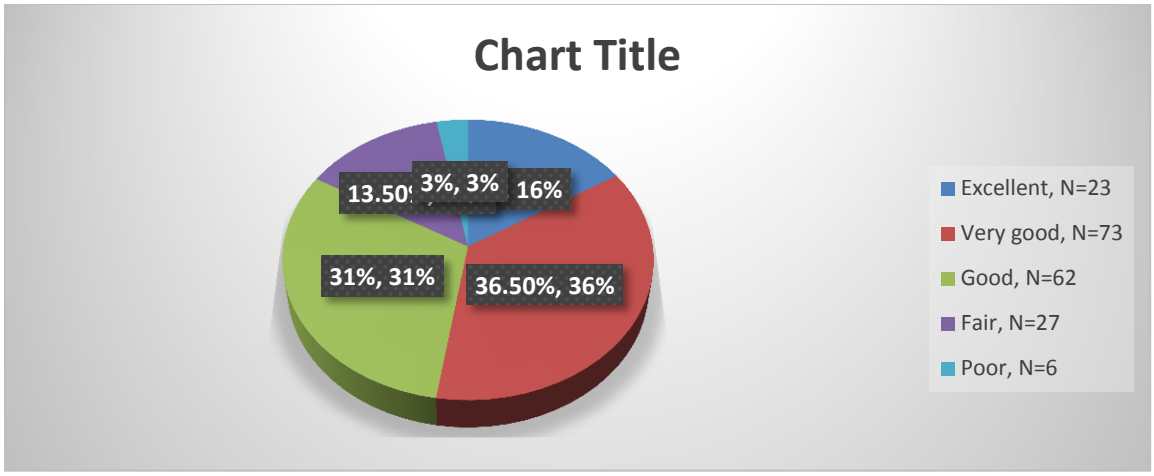

Figure No. 4.13. Shows for the better understanding of percentage wise levels of 5 point rating scale of firemen carry free style wrestling skill for 18 to 19 years wrestlers

Above the table and figure show the 5 point rating scale of firemen carry freestyle wrestling skill for 18 to 19 years wrestlers. The norms for wrestlers show scores in between Excellent -14.80-15.36, Very good -14.24 to 14.79, Good -13.68 to 14.23, Fair- 13.11 to 13.67 and Poor- 4.00 to 13.10. It was found that 28 wrestlers which is 14% falls in the scale of Excellent, 35 wrestlers which is 17.5% falls in the scale of Very good, 91 wrestlers which is 45.5% falls in the scale of Good, 40 players which is 20% falls in the scale of Fair and 6 wrestlers which is 3% falls in the scale of Poor.

Table no. 4.32

Shows the 5 point rating scale of arm throw free style wrestling skill for 18 to 19 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.72 to 15.32	Excellent	22	11
2	14.10 to 14.71	Very good	71	35.5
3	13.49 to 14.09	Good	76	38
4	12.87 to 13.48	Fair	26	13
5	4.00 to 12.86	Poor	5	2.5

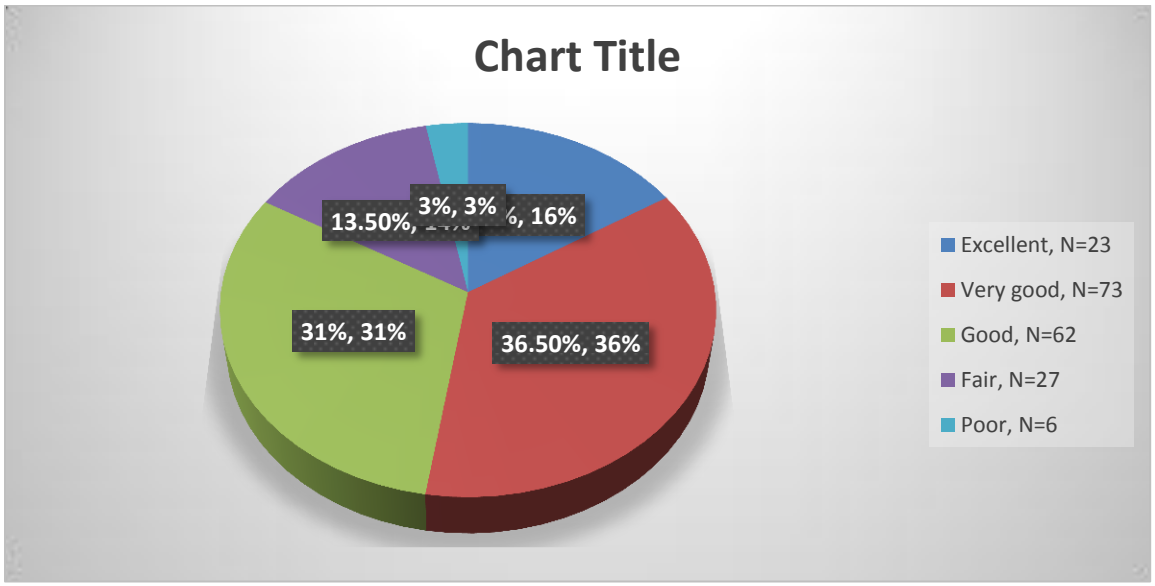

Figure No. 4.14. Shows for the better understanding of percentage wise levels of 5 point rating scale of arm throw free style wrestling skill for 18 to 19 years wrestlers

Above the table and figure show the 5 point rating scale of arm throw free style wrestling skill for 18 to 19 years wrestlers. The norms for wrestlers show scores in between Excellent -14.72 to 15.32, Very good -14.10 to 14.71, Good -13.49 to 14.09, Fair- 12.87 to 13.48 and Poor- 4.00 to 12.86. It was found that 22 wrestlers which is 11% falls in the scale of Excellent, 71wrestlers which is 35.5% falls in the scale of Very good, 76 wrestlers which is 38% falls in the scale of Good, 26 players which is 13% falls in the scale of Fair and 5 wrestlers which is 2.5% falls in the scale of Poor.

Table no. 4.33

Shows the 5 point rating scale of hip throw free style wrestling skill for 18 to 19 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.80 to 15.36	Excellent	29	14.5
2	14.24 to 14.79	Very good	82	41
3	13.68 to 14.23	Good	44	22
4	13.11 to 13.67	Fair	39	19.5
5	4.00 to 13.10	Poor	6	3

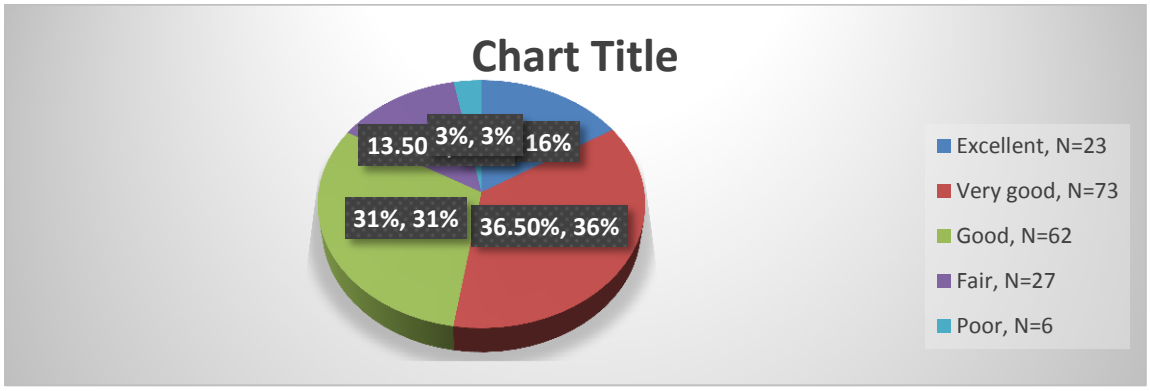

Figure No. 4.15. Shows for the better understanding of percentage wise levels of 5 point rating scale of hip throw free style wrestling skill for 18 to 19 years wrestlers

Above the table and figure show the 5 point rating scale of hip throw free style wrestling skill for 18 to 19 years wrestlers. The norms for wrestlers show scores in between Excellent -14.80 to15.36, Very good -14.24 to 14.79, Good -13.68 to 14.23, Fair- 13.11 to 13.67 and Poor- 4.00 to 13.10. It was found that 29 wrestlers which is 14.5% falls in the scale of Excellent, 82 wrestlers which is 41% falls in the scale of Very good, 44 wrestlers which is 22% falls in the scale of Good, 39 players which is 19.5% falls in the scale of Fair and 6 wrestlers which is 3% falls in the scale of Poor.

Table no. 4.34

Shows the 5 point rating scale of gut wrench free style wrestling skill for 18 to 19 years wrestlers

Sr. No	Score Range	Category	Total Number of Students in Each Grade	Percentage of Wrestlers
1	14.65 to 15.21	Excellent	13	6.5
2	14.08 to 14.64	Very good	80	40
3	13.51 to 14.07	Good	77	38.5
4	12.94 to 13.50	Fair	34	17
5	4.00 to 12.93	Poor	2	1

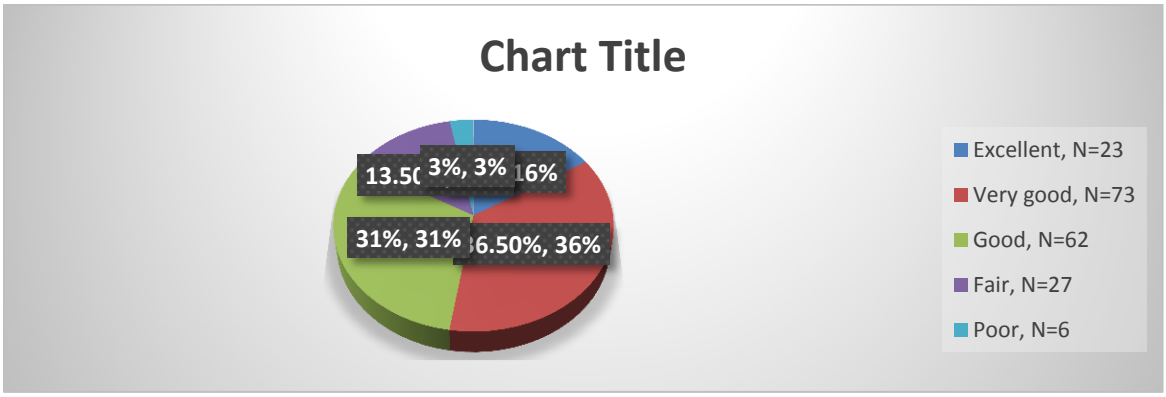

Figure No. 4.16. Shows for the better understanding of percentage wise levels of 5 point rating scale of gut wrench free style wrestling skill for 18 to 19 years wrestlers

Above the table and Figure No. 4.34 Show the 5 point rating scale of gut wrench free style wrestling skill for 18 to 19 years wrestlers. The norms for wrestlers show scores in between Excellent -14.65 to15.21, Very good -14.08 to 14.64, Good -13.51 to 14.07, Fair- 12.94 to 13.50 and Poor- 4.00 to 13.93. It was found that 13 wrestlers which is 6.5% falls in the scale of Excellent,80 wrestlers which is 40% falls in the scale of Very good, 77 wrestlers which is 38.5% falls in the scale of Good, 34 players which is 17% falls in the scale of Fair and 2 wrestlers which is 1% falls in the scale of Poor.

Table No. 4.35

Shows the 5 point rating scale of ankle lace free style wrestling skill for 18 to 19 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	14.69 to 15.39	Excellent	19	9.5
2	13.98 to 14.68	Very good	101	50.5
3	13.28 to 13.97	Good	53	26.5
4	12.57 to 13.27	Fair	23	11.5
5	4.00 to 12.56	Poor	4	2

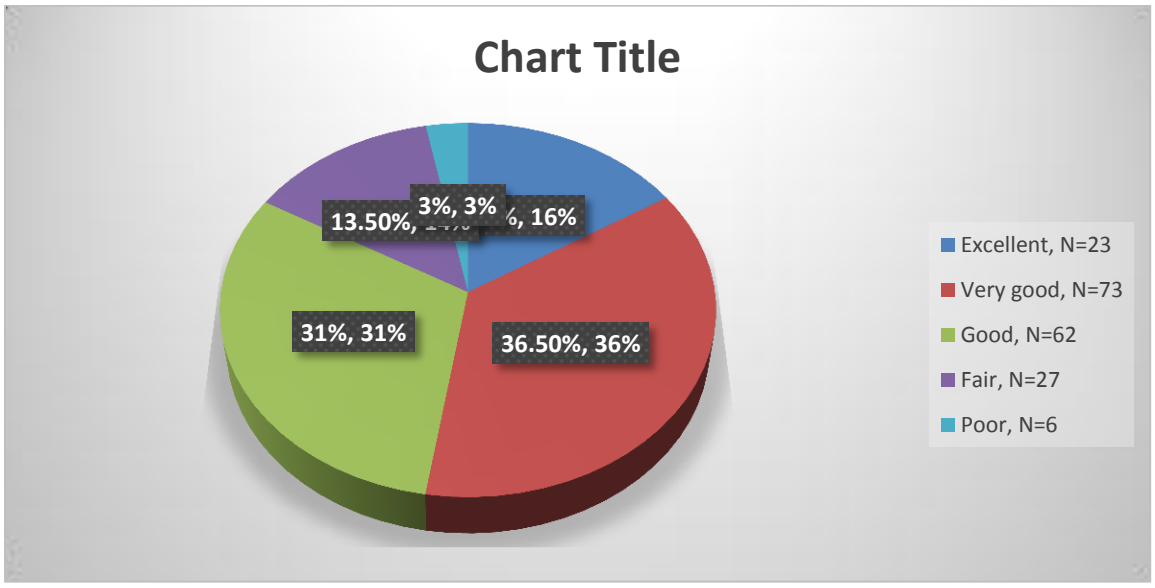

Figure No. 4.17. Shows for the better understanding of percentage wise levels of 5 point rating scale of ankle lace free style wrestling skill for 18 to 19 years wrestlers

Above the table and figure shows the 5 point rating scale of ankle lace free style wrestling skill for 18 to 19 years wrestlers. The norms for wrestlers show scores in between Excellent -14.69 to 15.39, Very good -13.98 to 14.68, Good -13.28 to 13.97, Fair- 12.57 to 13.27 and Poor- 4.00 to 12.56. It was found that 19 wrestlers which is 9.5% falls in the scale of Excellent, 101 wrestlers which is 50.5% falls in the scale of Very good, 53 wrestlers which is 26.5% falls in the scale of Good, 23 players which is 11.5% falls in the scale of Fair and 4 wrestlers which is 2% falls in the scale of Poor.

Table No. 4.36

Show the 5 point rating scale of free style wrestling skills test for 18 to 19 years wrestlers

Sr. No	Score Range	Category	Total Number of Wrestlers in Each Grade	Percentage of Wrestlers
1	100.46 to 140	Excellent	32	16
2	98.99 to 100.45	Very good	73	36.5
3	97.52 to 98.98	Good	62	31
4	96.05 to 97.51	Fair	27	13.5
5	28.00 to 96.04	Poor	6	3

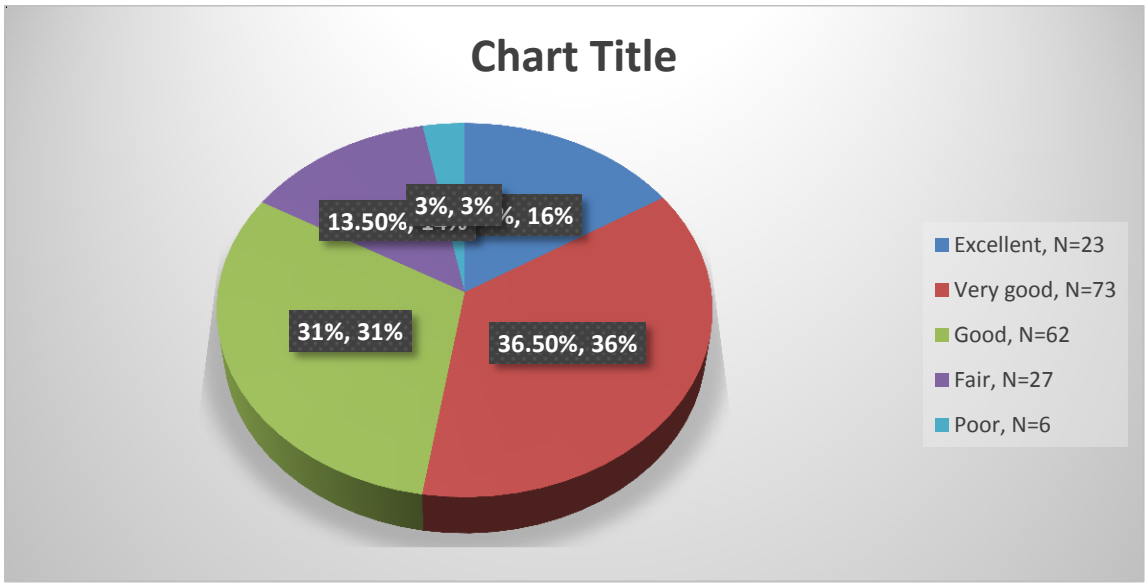

Figure No. 4.18. Shows for the better understanding of percentage wise levels of 5 point rating scale of free style wrestling skills test for 18 to 19 years wrestlers

Above the table and figure shows the 5 point rating scale of free style wrestling skill test for 18 to 19 years wrestlers. The norms for wrestlers show scores in between Excellent -100.46 to 140, Very good -98.99 to 100.45, Good -97.52 to 98.98 Fair- 96.05 to 97.51 and Poor- 28 to 96.04. It was found that 32 wrestlers which is 16% falls in the scale of Excellent, 73 wrestlers which is 36.5% falls in the scale of Very good, 62 wrestlers which is 31% falls in the scale of Good, 27 players which is 13.5% falls in the scale of Fair and 6 wrestlers which is 3% falls in the scale of Poor.

In No-2 hypothesis that developed freestyle wrestling skill test exist significantly asses the standard of junior level wresters skill ability. The statistical analysis of the data were found 83.5% wrestlers fall in-between of good to excellent in total skill ability so hypothesis no-2 is accepted.

4.3 Discussion on findings

Certain game-specific fundamental talents have frequently and greatly influenced how well wrestlers perform in freestyle wrestling matches. Fundamental abilities, which are the basics of any game, have received excessive emphasis in modern sports in order to establish control during attacks and prevent attacks during defense at all levels of competition. Each player, if necessary, had to stay constantly on the move for a predetermined amount of time while frequently changing his pace and direction. This places a lot of pressure on each wrestler on the mat in terms of their possible physical exertion.

Dynamic physical adaption patterns are crucial in the sport of wrestling. The true achievement requires the highest level of mastery of the sport's essential skills. The key to winning a match in one's favor is the ability to learn a certain freestyle wrestling technique, to defend against an opponent, and to rhythmically display all of the sport's potential features.

The main objective of constructing and standardized of freestyle wrestling skill Test is considered to assess the skill of school-level wrestlers. To assess the wrestler's skill level ability seven skills comprising Single-leg takedown, Double-leg takedown, Firemen carry, Arm throw, Hip throw, Gut wrench, and Ankle lace are selected because they were generally applied during playing the wrestling sport.

The result of freestyle wrestling skills selection reveals that out of many skill test items only seven skill test items are retained in the final freestyle wrestling skill test. The Freestyle wrestling skill test is found reliable and valid to measure the wrestler's skill test in Wrestling. However, the range of reliability coefficient was reported as age group 15 to 17 Single leg take down .78, Double leg take down .82, Firemen carry .76, Arm throw .78, Hip throw .74, Gut wrench .88 and Ankle lace .87 which is statistically significant

The coefficient of the correlation and objectivity is reported age group 15 to 17 Single-leg takedown .73, Double-leg takedown .72, Firemen carry .60, Arm throw .81, Hip throw .72, Gut wrench .66 and Ankle lace .77 which is statistically significant. Thus, the free-style wrestling skills test has become a valid scale to measure the Wrestling skills ability.

The result of the standard score of the t-scale, hull scale, and sigma scale of free style wrestling skills test for 15 to 17 years wrestlers. The lowest score of t-scale, hull scale, and sigma of free style wrestling skills i.e. 13.07, 13.39, and 13.50, respectively, and highest score are found i.e. 15.24, 14.92, and 14.81, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of freestyle wrestling skills as per norms score lie in average and good category.

The percentile score of the freestyle wrestling skills test for 15 to 17 years wrestlers. The minimum score of the freestyle wrestling skills test is found at the 5th percentile and the maximum score at the 95th percentile. The 5th percentile score of male wrestling skill single-leg takedown, double-leg takedown, firemen carry, Arm throw, hip throw, gut wrench, and ankle lace skills were found i.e. 13.01, 13.33,13.33, 13.00, 13.33, 13.33, and 12.68, respectively, and 95th percentile scores 15.00,15.00, 15.33,15.00, 15.317,15.33 and 15.00, respectively. On the 5th percentile and 95th percentile scores of all freestyle wrestling skills are found 91.70, and105.98. The result shown in the freestyle wrestling skills test is found lowest and highest percentile scores lie in the average and good category of percentile norms.

The 5 point rating of free style wrestling skill test for 15 to 17 years wrestlers. The norms for wrestlers show scores in between Excellent -100.60 to 140, Very good -98.99 to 100.59, Good -95.38 to 98.98, Fair- 95.77to 97.37 and Poor- 28 to 95.76.It was found that 35 wrestlers which is 17.5% falls in the scale of Excellent, 81 wrestlers which is 40.5% falls in the scale of Very good, 49 wrestlers which is 24.5% falls in the scale of Good, 28 players which is 14% falls in the scale of Fair and 7 wrestlers which is 3.5%

falls in the scale of Poor. The evaluation has been presented through a table for follow understanding.

The result of test items selection reveals that out of many skill test items only seven skill test items are retained in the final free style wrestling skill test. The Free style wrestling skill test is found reliable and valid to measure the wrestler's skill test in Wrestling. However, the range of reliability coefficient is reported as age group age group 18 to 19 Single leg take down .82, Double leg take down .84, Firemen carry .80, Arm throw .74, Hip throw .79, Gut wrench .93 and Ankle lace .94 which is statistically significant. The range is feasible and logical as agreed by various investigators (Kumar P. 2016 and Mane, H. D. 2014) who developed various scales in the arena of physical education and allied science.

The coefficient of the correlation and objectivity was reported age group age group 18 to 19 Single leg take down .75, Double leg take down .74, Firemen carry .63, Arm throw .83, Hip throw .71, Gut wrench .68 and Ankle lace .78, which was statistically significant. Thus, the free style wrestling skill test had become a valid scale to measure the Wrestling skill ability.

The result of the standard score of the t-scale, hull scale, and sigma scale of free style wrestling skills for 18 to 19 years wrestlers. The lowest score of t-scale, hull scale, and sigma of free style wrestling skills i.e. 10.23, 11.83 and 12.12, respectively, and highest score were found i.e. 17.49, 16.40 and 16.04, respectively. The results show of the lowest and highest standard scores of t-scale, hull scale, and sigma scale of free style wrestling skills as per norms score lie in poor and excellent category.

The percentile scores of the freestyle wrestling skills test for 18 to 19 years wrestlers. The minimum score of the freestyle wrestling skills test is found at the 5th percentile and the maximum score at the 95th percentile. The 5th percentile score of male wrestling skill single-leg takedown, double-leg takedown, firemen carry, Arm throw, hip throw, gut wrench, and ankle lace skills were found i.e. 12.68 13.33, 13.00,13.33, 13.33,

13.00, 13.33 and 12.68, respectively, and 95th percentile scores 15.00,15.00, 15.33,15.00, 15.317,15.33 and 15.00, respectively. On the 5th percentile and 95th percentile scores of all freestyle wrestling skills are found 92.01, and105. The result shown in the freestyle wrestling skills test is found lowest and highest percentile scores lie in the average and good category of percentile norms.

The 5 point rating scale of free style wrestling skill test for 18 to 19 years wrestlers. The norms for wrestlers show scores in between Excellent -100.46 to 140, Very good - 98.99 to 100.45, Good -97.52 to 98.98 Fair- 96.05 to 97.51 and Poor- 28 to 96.04. It was found that 32 wrestlers which is 16% falls in the scale of Excellent, 73 wrestlers which is 36.5% falls in the scale of Very good, 62 wrestlers which is 31% falls in the scale of Good, 27 players which is 13.5% falls in the scale of Fair and 6 wrestlers which is 3% falls in the scale of Poor. The evaluation has been presented through a table for follow understanding.

It is important to note that the norms of each test items of The Free style wrestling skill test was determined by using standard and procedure as suggested by literature (Saravanan, B. 2018 and Kumar, A. G. I. 2013) the percentile norms have been prepared for suitability of further application. The norms have been made so clear that any raw score obtained by school level wrestlers can be well fitted and converted to normalize score. Moreover, the gradation of each item is made easy so that the performance score of any wrestlers can be graded at 5 point rating scale.

The percentile norms of the Free style wrestling skill test was ranged from p5th to p95th the score falling above p95th represents the “Excellent Grade”, whereas the score falling below the p5 represents the “poor grade” the grades good, average, fair, and poor fall in between p5th to p95th this indicates that a similar process of grading percentile norms is also observed and followed by various investigators (Kumar P. 2016 and

Jayavel, S. 2006). Based on the above discussion on findings, the hypothesis is tested as under.

The discussion states above indicates that the 'Free style wrestling skill test' developed and standardized in this study will be helpful to measure the performance ability in the free style wrestling skill test of the male wrestlers.

4.4 DISCUSSION ON THE RESULTS OF FOLLOW UP STUDY

After development of the norm of "Free Style Wrestling Skill Test," although found reliable and valid, it was necessary to evaluate its applicability for this follow –up study has been undertaken. The follow–up study helped to judge the applicability of the new developed "Free Style Wrestling Skill Test" in term of assessing the skill level of wrestlers and also their playing abilities in actual game situation. The result of the "Follow up Study" revealed that the wrestlers selected through "Free Style Wrestling Skill Test" had better level of skill level than the wrestlers selected on the basis of traditional way selection method. The result, thus, infers that "Wrestling Skill Test" could help to discriminate the talented wrestlers having a higher level of free style wrestling skills. There are many evidences available to support that even a wrestlers has high level of fitness may not exhibit good skill in actual game situation. Similarly, even a wrestlers has higher efficiency in executive skill may not win the match. Although many factors are involved to win a competitive match in any game, however, appropriate procedure of selection of suitable and efficient players can predict excellent game performance. Therefore, a free style wrestling Skill Test has been developed in this study. Although this test is reliable and valid and the norms as developed are gradable, it was assumed that the wrestlers being selected through this test would exhibit better performance in the actual game situation. The result of the study indicates that wrestlers selected through the "Free Style wrestling Skill Test" exhibits better performance in actual games than the wrestlers selected through traditional way. Moreover the wrestler has secured highest score during the performance of wrestling skill in the competition. Thus, the "Free Style

Wrestling Skill Test" developed in this study has justifiable applicability in the arena of the game "Free Style Wrestling"

To summarize, the overall result revealed that the "Free Style Wrestling Skill Test" as developed in this study is reliable and valid for the boys in the age group 15 to 17 and 18 to 19 years. The norms of the test are gradable and can be useful to search the talented wrestlers having a good level of skill.

Chapter-5

SUMMARY, CONCLUSIONS AND RECOMMEDATIONS

Wrestling is the oldest type of combative sport. Most of the European writers admit that the origin place of wrestling is in India (Kamble., 2020). The Indian kings had many stables and court wrestlers, who represented them against the wrestlers of their rival kings. The freestyle varieties of wrestling in India are known as Pushti or Kusthi (Sports:Wrestling in India, 2015). Wrestling in India can also be divided into four types like Bhimaseni, Hanumanthi, Jambuvanthi and Jarasandhi, based on the technique and methodology.

According to "Wrestling". *Encyclopedia Britannica*. (2021) “Cave drawings of wrestlers from 3000 BC in the Sumero-Akkadian civilisation and wall paintings exist in Ancient Egyptian civilizations circa 2400 BC. In these paintings were given knowledge about wrestling is oldest sport in ancient Olympics. “Wrestling was introduced into the eighteen ancient Olympics in 704 BC”. Wrestling was held first time in between Herculas and Anataas wrestlers fought to together during ancient Olympics 704 B.C” Dubey, H.C. (1999). The Modern Olympics of Athens in 1896 had only a single wrestling bout, a Greco-Roman match for the heavy weights. Freestyle wrestling was first time introduced in 1904 Olympic Games, where the contestants were only Americans and since from 1920 to till date, both forms (Greco- Roman and freestyle) of wrestling are constantly included in summer Olympic Games. In 1920 two members of Indian team participated in wrestling mainly Kumar Navale and Randhir Shindes. Randhir Shindes make to semifinals and finally its fourth position. In 1952 Finland Olympic Soviet Union and best European players also take part in competition. Tokyo Olympics 1964 was special for both India and other Asian countries because it was hosted in Asian country. India come with seven players in different weight categories but only Beshamber Singh secured 6^{th} position. In 1976 Olympics Indian wrestling team did not participate. In 1980 Mascow Olympics India participated with five members team and in Los Angeles Olympics

(1984) were interesting as USSR (Union of Soviet Socialist Republics) led East Bloc countries boycotted the games and hence competition in Wrestling was comparatively eased than previous editions. In 1992 Barcelona, Spain Olympic Games were also unique for Indian Wrestling Team for two main events. Athens Olympic 2004 witnessed women's first time participated, since 1904, India wrestling team comprises of seven wrestlers one in Greco-Roman and six in free style. In 2008 *Beijing Olympic Games India* came with only three wrestlers, two experienced Yogeshwar Dutt in Lightweight 60 kg Category and Sushil Kumar in Welterweight 66 kg Category, along with Rajeev Tomar in Super Heavy weight 120 kg. The latest 30th Olympic Games in London 2012 saw the zenith of Indian Wrestling Team where it returned with two Olympic medals, rare first in Indian sports that too of different colors-one silver and one bronze and Sushil Kumar became first sports person to achieve distinct feat of being to achieve double Olympic medal. Wrestling was subject to maximum controversies prior to the build-up to the 2016 Rio Olympics in India. In 2020 Tokyo Olympics rescheduled which was held from 23 July to 8 August 2021 in Tokyo. "Ravi Kumar Dahiya was won silver medal for men in 57 kg free style weight category after losing a close final bout to ROC's Zavur Uguev 4-7. Bajrang Punia won India's second wrestling medal as defeated Kazakhstan's Daulet Niyazbekov 8-0 in men's 65kg freestyle to win bronze." India ranked 48th in 2020 Olympic by winning 1 silver and one bronze medal.

Skills are the roots of any game, and wrestling is also based on many skills. A high degree of performance depends upon the mastery of these skills. Patience, diligence and dedication are essential for learning these fundamental skills. Test is a specific tool, procedure, or a technique used to elicit a response from the student on a basis for appraisal of the quantity or quality of elements such as fitness, skill, knowledge or values. "Sports skill tests are designed to measure the basic skills used in playing of specific sports. Because of wide range of skills in most sports, a selection of the most important skill becomes invariably necessary. In measurement and evaluation literature, a number of methods of skill evaluation have been mentioned. Some are valid and reliable, while

others are not. The obvious reason is that simple skills are easy to evaluate, while complicated ones are difficult to assess. The qualitative aspect of a skill performance is not easy to test objectively. In order to measure these skills, skill tests should construct to evaluate the level of players for future planning through individual fundamental sports skill.

For the forecast and evaluation of Wrestlers performance there's the shortage of standardized evaluative skill test not only in India but also in the world. The scholar discussed the similar thing with various senior Wrestling officials, NSNIS Wrestling coaches, national and international wrestlers. Keeping the answers from various wrestling communities in view and lack of literature the scholar realized that fundamentally there's the shortage of skill tests in India. The research scholar has constructed and developed standardized norms of the free style wrestling skill test for wrestlers.

5.1 Objectives of the study

1. To identify specific freestyle wrestling skill test variables.
2. To develop free style wrestling skill test Battery.
3. To establish validity, reliability and objectivity of the developed freestyle wrestling skill test items.
4. To develop percentile norms of the free style wrestling skill test.

5.2 Hypotheses of the study

1. The developed freestyle wrestling skill test will have satisfactory validity, reliability and objectivity.

2. The developed freestyle wrestling skill test will have significantly assess wrestling skill ability.

Khodadad ,K. Sholeh and Farshad, T. (2015) conducted the construction and validation of a test of wrestling skills, Mane, H. D. (2014) conducted the development of skill of free style wrestling Game for junior level Male Wrestlers, David, et.al. (2014) conducted that to explain the technical-tactical performance of the highest ten wrestlers in 2011 Word Senior Championship in free style and feminine wrestling, Mirzaei, B. and Akbar Nezhad, A. (2008) conducted a skill profile of elite Iranian Greco-roman wrestlers, Kumar P. (2016) studied that construction and standardization of taekwondo skill test, Pieter W. and Johan, H. (2007) develop a motor skills test for beginners in tae-kwondo and Singh, T. (2018) studied that Construction and Standardization of Specific Physical Fitness Test Battery for Circle Style Kabaddi Players

The purpose of present investigation is to construct and standardize the norms of free style wrestling to assess the performance of athlete. Reviews of literature confirmed/reveled that no standardized criterion is available to examine the skill performance and ability of wrestler between 15-17 and 18-19 age groups. Therefore, an effort is made by the investigator to construct and standardize of free style wrestling skill Test. A total 400 male wrestlers are selected for the construction and standardized the free style wrestling skill test. The sample of the study is selected through purposive sampling technique as per age group 15 to17 (200) and 18 to19 (200) years male wrestlers, which participated at national and state-level competitions, are considered. The sample is selected as per the guidelines of the School Games Federation of India and FILA on the U-19 and U-17 wrestlers can participate in the school games competitions.

The age of wrestlers is taken through a birth certificate, matriculation certificate, and Adhar card. The sports participation is taken as per the record of the academy and federation. The subjects are taken from different wrestling centers and competitions are selected for data collection. The main objective of the study was to construct and standardized of freestyle wrestling skill test.

For this purpose, the free style wrestling skills were identified and later limited to effective skill items. The Free style wrestling involved ninety three skills according to *Fundamentals of scientific wrestling and Encyclopedia of Wrestling* book. The researcher has reviewed wrestling related literature to inherit the knowledge in selected different wrestling skills test items. After that list of free style wrestling skill test items has sent to experts for construction of the skill test items, feedback and suggestion. Researcher has taken the experts opinion and suggestion by consulting with eight international, national level, Netaji Subash National Institute of Sports, Patiala and Sports Authority of India and Punjab sports department wrestling coaches. After consulting with wrestling experts, skills were mapped and highly mapped seven skills are single-leg take down, double-leg takes down, fire man carry, hip toss, arm throw, gut-wrench and ankle lace/ leg lace.

5.3 Establishing face validity

The validity of test depends on loyalty with which it measures what it supposed to measures. Researcher has mentioned the method for validating the skill tests as determining validity by means of observation (face validity), determining the validity experimentally was used to invention out validity of all constructed skill tests. Zilly, A. (2001)

Researcher has taken the experts opinion and suggestion by consulting with eight international, national level, Netaji Subash National Institute of Sports, Patiala and Sports Authority of India and Punjab sports department wrestling coaches. After consulting with wrestling experts, skills were mapped and highly mapped seven skills are below

1. Single-leg take down ……Ekhari patti
2. Double-leg takes down …… Do-hari patt
3. Fire man carry ……..Khala-jung
4. Hip toss……...Dhak
5. Arm throw…….……..Dhobbi
6. Gut-wrench ……..Bharandaj
7. Ankle lace/ Leg lace……..Fittile

5.4 Procedure of establishing scoring

The researcher gives instruction to wrestlers about selected test items beforehand of data collection. Firstly researcher measured height and weight of wrestlers and made pairs accordingly. The wrestlers were allowed to warm up for 15 to 20 minutes before the skill test. The three judges were prepared for the each subject evaluation and give the scoring sheet dully filled with the basic information of the subjects for the scoring by the researcher. The researcher gave demonstration to wrestlers about selected test items. The skill test was started with the signal (blew of whistle) by the researcher. The wrestlers executed their skills and the partner did not show any defensive skill. Three chances were given to the each wrestler and the best result was taken. There was no time limit and the wrestlers were directed to perform the technique quickly. The performance of the

wrestlers was evaluated by the three judges the scoring criteria has been shown following.

The score of the wrestling skill was based on judge's observation. Three judges gave the scoring to performer on the bases of the five point grading scale (1 poor, 2 failure, 3 average, 4 good, 5 excellent) according to the perfection of skill. The rubric of the skill items (grip, stance, speed and execution of the skill) has been follow for the evaluation of the each skill item. Independently result was prepared by three judges so that data were recorded impartially. After calculating of average score of three judges the best result of the wrestler was recorded.

5.5 Finding

The following are the findings of the present study.

1. By using the 'R' value of coefficient 15 to 17 years age group of different wrestling skills test items, single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace were found .78, .82, .86, .78, .74, .88 and .87 respectively. The reliability coefficient are statistically ($p<0.05$ and $p<0.01$) significant respectively.

2. By using the 'R' value of coefficient 18 to 19 years age group of different wrestling skills test items, single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace were found .82, .84, .80, .74, .79, .93 and .94 respectively. The reliability coefficient were statistically ($p<0.05$ and $p<0.01$) significant respectively.

3. It was found that the objectivity coefficient of 15-17 years age group of different wrestling skills test items, single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace are found .73, .72, .60, .81, .72, .67

and .77 respectively. The objectivity coefficient are statistically ($p<0.05$ and $p<0.01$) significant respectively.

4. It was found that the objectivity coefficient of 18-19 years age group of different wrestling skills test items, single leg take down, double leg take down, Firemen carry, Arm Throw, Hip throw, Gut wrench, and Ankle lace are found .75, .74, .63, .83, .71, .68 and .78 respectively. The objectivity coefficient are statistically ($p<0.05$ and $p<0.01$) significant respectively.

5. Further the result and findings of the present study displays that the face validity of all the seven test items in the free style wrestling skill test items was included.

6. Further the norms were constructed for the newly constructed skills test by using T-scale, Hull scale, Sigma scale, Percentile norms and Five point grading scale statistical technique.

Conclusions

1. Selected seven the freestyle wrestling variables/ fundamental skill test items analyzed single leg takedown, double leg takedown, firemen carry, arm throw, hip throw, gut wrench, ankle lace were found to be significantly related to freestyle wrestling playing ability.
2. The freestyle wrestling skill test ultimately could retain seven skill items, which can successfully measure the freestyle wrestling skill ability of the wrestlers of 15 to17 and 18 to19 years with acceptable face validity, highly reliability and objectivity.

Recommendations

1. That free style wrestling skill test can be used as the sole means for making decisions in the selection of wrestlers.

2. This study on different age groups, even for girls, has been recommended.

3. Further study on the fitness and some psychological variable is suggested.

4. This newly established test may, reasonably, be used as kind of direction or research tool to establish insights among coaches, selection committee, and wrestlers in relation to wrestling skills achievement and even find talents in this game.

5. The grading table prepared can be used but has to be updated time and again.

6. The knowledge being evolved from the current piece of research could give a new guidance as for the promotion of worldwide wrestling, which in turn could develop the literature of sports and physical education.

7. The score received using test items will help of the coaches to know the shortcoming of players in specific area and bring improvement.

8. The test can be applied as evaluation tool and will help to accept new tactics in coaching and training so as to improve the efficiency of wrestlers.

9. This study will give players a guideline and target to prepare themselves.

Hence researcher recommends the use of test items, norms and grading prepared.

Contribution to the knowledge

1. The literature of physical education and sports is less informative with reference to the Wrestling in India. The knowledge being evolved from the current piece of research could give new guidance by presenting a standardized “free style wrestling skill test” for the promotion of combative games, which in turn could enrich the literature of sports and physical education.

2. Sports authority of India or National Wrestling federation or the sports scientist would become a proper insight for establishing a nation wise norm of free style wrestling skill test which could be an additional give of knowledge to sports literature.

BIBLIOGRAPHY

Abbott, A. Button, C. Pepping, G. J. & Collins, D. (2005). Unnatural selection: Talent identification and development in sport. *Nonlinear Dynamics, Psychology and Life Sciences, 9 (1),* 61-88. Retrieved from https://europepmc.org/article/med/15629068

Ahmed, Y. Y. A. (2010). Establishing a test for measuring motor skill in judo, *World Journal of Sport Sciences 3 (S):* 520-523, ISSN 2078-4724, 520-523.

Alexis Padrón-Cabo, Ezequiel Rey, Alexandra Pérez-Ferreirós and Anton Kalén. (2019). Conducted that Test–Retest Reliability of Skill Tests in the F-MARC Battery for Youth Soccer Players. Retrieved from https://doi.org/10.1177/0031512519866038.

American Alliance for Health, Physical Education, Recreation and Dance. (1958) Youth fitness test manual. *The American Alliance for Health, Physical Education, Recreation and Dance. Publication manual (6th edition).* Washington D.C

American Alliance for Health, Physical Education, Recreation and Dance. (1969). Skill tests manual: volleyball. *The American Alliance for Health, Physical Education, Recreation and Dance.* Washington DC.

Ashwin, R. (2019). Construction of handball skill tests for women players of Karnataka. International Journal of Physical Education, Sports and Health" *2019, Vol.6, Issue1*.https://www.kheljournal.com/archives/?year=2019&vol=6&issue=1&part=C&ArticleId=1423

Basanagouda Laxmeshwar, B and Amarnath.KK. (2019). Development of kabaddi offensive skills test for high school boys. International journal of physiology, eutrition and physical education. 4(1) 608-610.

Cartwright. M. (2018). *World History Encyclopedia.* Retrieved from https://www.worldhistory.org/Olympic_Games/

David, E. L. G., Rodriguez, A. A., Bárcenas, M.A & Sandra Rodríguez Alonso, S. R. (2014). Quantitative indicators of technical-tactical performance: an example with freestyle and female top 10 wrestlers from the 2011 world senior championship. *Journal of International Wrestling Science, 1(2).* Retrieved from https://www.tandfonline.com/doi/abs/10.1080/21615667.2012.10878953

Donald, K.M (1973). Measuremnt in Physical Education. (pp.36). Philadephia: W.B Saunders Company,

Dubey, H.C. (1990). DPH Sports Series Wrestling. (pp.1-4,17-18) Discovery publication house, New Delhi. *Education (IOSR-JSPE), 5, (3),* 56-58.

Ferrauti, A. et al. (2014). Conducted Fitness testing of tennis players: How valuable is it? Retrieved from https://bjsm.bmj.com/content/48/Suppl_1/i22. http://dx.doi.org/10.1136/bjsports-2013-093152

Gill, S.B. (2008). Comprehensive wrestling. (pp.53-55). Sports education technologies, New Delhi. India. *International Journal of Physiology, Nutrition and Physical Education, 4(1),* 1967-1970

.

Jayavel, S. (2006*). Construction of Badminton Skill Tests and Compilation of Norms for College Men Players*. (Doctoral thesis Alagappa University, Karaikudi). Retrieved from https://shodhganga.inflibnet.ac.in/handle/10603/196628.

Kamble.M. K. (2020). Historical Background of Indian Wrestling. *Juni Khyat UGC Care Group I Listed Journal, ISSN: 2278-4632, 10(5),* 88. Retrieved from https://www.researchgate.net/publication/341279813

Kanniyan, A. (2016). Kicking ability Skills: Construction of norms on kuhn's soccer test, *Ovidius University Annals, Series Physical Education and Sport / Science, Movement and Health, 25(1)*, Romania, 5-10.

Kaur, H and Kumar. P. (2014). Construction of skill test for kicks in taekwondo. *International Educational E-Journal, {Quarterly}, ISSN 2277-2456, 3(3)*,1432-1434.

Kaushik, S. (2022). Construction and Standardization of test for Strength and Endurance in Cricket. *International journal of economic perspectives*, *16*(3), 148-161.

Khodadad , Kashi , Sholeh & Tojari Farshad . (2014). The Construction and Validation of a Test of wrestling Skill. *J. Appl. Sci. & Agric, 9(4).*

Kirby, R. F. (1991). Kirby guide to fitness and motor performance test, *Cape, Girardeau, MO: Ben Ok.*

Kolat, C. (2009, Apr 22). Ankle Lace [Video file]. Retrieved from https://www.youtube.com/watch?v=o8QMvX1rtSg

Kolat, C. (2009, Apr 22). Gutwrench [Video file]. Retrieved from https://www.youtube.com/watch?v=FErwbC09ZsI

Kumar P. (2016). *Construction and Standardization of Taekwondo Skill Test*. (Unpublished Doctoral Thesis). Lovely Professional University Phagwara, Punjab.

Kumar R. P. (2013). *Design and Development of Skill Test Battery in Ball Badminton.* (Doctoral Thesis Bharthidasn University Tiruchirapali, Tamilnadu, India). Retrieved from https://shodhganga.inflibnet.ac.in/handle/10603/210743

Kumar, A.G. I. (2013). *Construction and Standardization of Specific Basketball Skill Test Battery for Senior Boys.* (Doctoral Thesis University of Karala, Thiruvananthapuram). Retrieved from https://shodhganga.inflibnet.ac.in/handle/10603/160714

Kumar, N. (2008). *Play& Learn Wrestling*. (pp. 17). Khel Sahitya Kendra, New Delhi.

Kushti. (n.d). Retrieved May 30, 2021, from http://www.traditionalgamesindia.com/games-list/kushti/

Laxman, S. S., & Wangwad. V.S., (2016). Construction and standardization of kabaddi skill tests for junior state level players of Maharashtra. *AEIJST , 4 (3) ISSN - 2348 – 6732*, 1-2.

Lemmink, K., Gemser, M., & Visscher, C. (2004). Evaluation of the Reliability of two Field Hockey Specific Sprint and Dribble Tests in Young Field Hockey. *Br J Sports Med. 38(2).* 138–142. doi: 10.1136/bjsm.2002.001446.

Majumder, N. (2018). Division of Ancient Period. *IOSR Journal of Sports and Physical Education (IOSR-JSPE) e-ISSN: 2347-6737, p-ISSN: 2347-6745, Volume 5, Issue 3,* 56-58.

Mallappa D.S. (2020). *Construction of skill tests and compilation of norms for college Women Volleyball players*. (Doctoral Thesis). Retrieved from https://shodhganga.inflibnet.ac.in/handle/10603/288862

Mane, H. D. (2014). *Development of skill test of free style wrestling game for junior level male wrestlers.* (Unpublished Doctoral thesis). Swami Ramanand Teerth Marathwada University Nand.

Manjumder, N. (2018). Division of Ancient Period. *IOSR Journal of Sports and Physical*

Mansoor A.K. (2018). *Construction of Tennis Skill Test for Junior National Players*. (Doctoral Thesis). Retrieved from https://shodhganga.inflibnet.ac.in/handle/10603/296868

Mieth, R. (1981). Development of a motor skill test for judoists aged 9-14. In H. Haag, D. Kayser, & B. Bennerr (Eds.), Physical Education and Evaluation, *Proceedings of the XKU JCHPER World Congress ,Schomdorf: Verlag Karl Hofmann,* 23-27.

Ministry of youth affairs and Sports. (2018). Commonwealth Games, gold coast 2018 medalists. Retrieved from https://yas.nic.in/sports

Mirzaei, B. & Akbar Nezhad, A. (2008) . A skill profile of elite Iranian Greco-roman wrestlers. *World Journal of Sport Sciences 1 (1), ISSN 2078-4724, 8-11*.

Murtaza, T.S ,Imran, M, Ahmad, T, Sharique, M, Jabin, F, Ahmad, S, Ravi Singh, R.P, HussBhat, A. B. A, Katiyar, A.K, Khan, A, Kumar,B, Pandey, S,Khan, S.A, Bhat,R.A, Irshad, Malik, I.M, Naikoo,S.A and Mohd. Zakir. (2014). Construction & standardization of fielding test in cricket. Indian Streams Research Journal 4. 8. 2230-7850 Retrieved from www.isrj.net

Pieter, W. & John, H. (2007). Development of a Test for Evaluating Beginning Taekwondo Students' Motor Skills. *2(3), 36-45* Retrieved from http://revpubli.unileon.es/ojs/index.php/artesmarciales/article/view/317

Portolese, A. (2018). List of Moves for Freestyle Wrestling. Retrieved from https://www.sportsrec.com/7834751/list-of-moves-for-freestyle-wrestling

Prabhakar,S. (2019). Construction of Fielding Ability Test in Softball for Junior Boys, *International Journal of Physical Education & Sports Sciences, Physical Education, Health, Fitness & Sports, 14(2),* 59-61.

Professional wrestling throws. (n.d). In *Wikipedia*. Retrieved December 6, 2015 from https://en.wikipedia.org/wiki/Professional_wrestling_throws#Hip_toss

Rohit. (2017). Construction and Standardization of volleyball skill tests for men players. *IJPNPE, 2(2), ISSN: 2456-0057*, 560-561.

Safrit, M. J. & Wood, R. (1989). *Measurement concepts in physical education and exercise science*. Champaign: Human Kinetics.

Saravanan, B. (2018). *Construction of Skill Tests and Compilation of Norms for School Level Kho Kho Players.* (Doctoral Thesis Alagappa University, Karaikudi). Retrieved from http://hdl.handle.net/10603/256095

Sharma, J. P. (2006). *Tests and Measurement and Evaluation in Physical Education*. (pp.310-311). Khel Sahitya Kendra, New Delhi.

Shekhar, C. and Kumar, J. (2019). Wrestling: Essay research paper on wrestling history in India. Retrieved from https://www.guresdosyasi.com/wrestling.html

Singh, H (2001). *Encyclopaedia of wrestling*. (pp.216-24). Discovery publication house, New Delhi.

Singh, T. (2018). Construction and standardization of specific physical fitness test battery for circle style kabaddi players. International Journal of Physical Education & Sports Sciences [IJOPESS] 13 (7). Retrieved from DOI: 10.29070/IJOPESS, http://ignited.in/a/57903.

Songa, D.K, Kishore, Y and Sivananda, K (2020) Construction of Physical Fitness norms for Girl Students of Social Welfare Schools in Andhra Pradesh- A Pilot Study. International Journal of Research in Advent Technology, Vol.8, No.7, E-ISSN: 2321-9637. Retrieved from https://ijrat.org/downloads/Vol-8/July-2020/87202001.pdf.

Sports Performance. (2020). Retrieved from https://www.encyclopedia.com/sports/sports-fitness-recreation-and-leisure-magazines/sport-performance

Sports: Wrestling in India (2015) Retrieved from https://gyaniguruji.wordpress.com/2015/12/14/sportswrestling-in-india/

Suhag, N. S (2015).Wrestling: Glory of India at the Olympics—A Brief History of Indian Wresting Team in the Olympic Games, *Journal of Sports Science 3*, 195-202. doi: 10.17265/2332-7839/2015.04.006.

Takedown (grappling). (n.d.). In *Wikipedia*. Retrieved December 6, 2015, from https://en.wikipedia.org/wiki/Takedown_(grappling)#Single_leg_takedown

Tiwari, R. (2016). *Kho Kho Khel Ke Liye Kaushal Parikshanon Ka Nirman*. (Doctoral Thesis, Pt. Ravishankar Shukla University, Raipur Chhattisgarh). Retrieved from http://hdl.handle.net/10603/255324

United World Wrestling (2015). International Wrestling Rules. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjx7N_7qfHwAhXPzjgGHQSQCuYQFjABegQIAxAD&url=https%3A%2F%2Fuww.org%2Fsites%2Fdefault%2Ffiles%2Fmedia%2Fdocument%2Fwrestling_rules_a_0.pdf&usg=AOvVaw2ha9Qqjm2JtzlEQeCvgXF8

Utter, A., Goss, F., Dasilva, S., Kang, J., Suminski, R., Borsa, P., Robertson, R. and Metz, K. (1997). Development of a wrestling performance test. *J. Strength and Cond. Res.* 11 (2). 88-91.

Waghchoure, M.T. (2006). Measurement and evaluation in physical education, Study on kho-kho game. (pp.42-3). Friends Publication, New Delhi.

Wrestling Encyclopedia Britannica. (2021). Retrieved from https://www.britannica.com/sports/wrestling.

Wrestling in India, Indian Traditional Sport. (2019). Retrieved from https://www.indianetzone.com/20/wrest

Wrestling-gureş history of wrestling. (2020). Retrieved from https://www.guresdosyasi.com/wrestling.html

Yobu, A. (2010). *Test Measurement and Evaluation in Physical Education and Sports*. (pp. 1, 2,27,36,47). Friends Publications, New Delhi.

Zidan, K. (2019). *From Grappling Art to Pharaonic Propaganda: the history of wrestling in Ancient Egypt*. Retrieved from

https://www.bloodyelbow.com/2019/10/9/20903209/from-grappling-art-to-pharaonic-propaganda-the-history-of-wrestling-in-ancient-egypt

APPENDICS

Data collection sheet

Name of skill……. Venue…… Trail…… Date……..

Signature Digitation Mobile No

Sr. No.	Name	Age	Height	Weight	Grip			Stance			Speed			Wrestling Skill			Obtain Score			Total Score
					T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				

Name of Expert

Grades	
5 Points	Excellent
4 Points	Good
3 Points	Average
2 Points	Below Average
1 Points	Poor

Date :06/01/2015

To,

O.P Yadav
Chief Coach NSNIS
Patiala

Subject: **Suggestion for Construction of Free Style Wrestling Skill Test**

Respected sir/madam

Myself Suresh Kumar Singh pursuing Ph.D in the Physical Education under the guidance of Dr. Harmanpreet kaur Associate Professor in the Department ofPhysical Education from Lovely Professional University, Phagwara Punjab.

The problem of the study is **"Construction and Standardization of Free style Wrestling Skill Test"** for the construction part, I required your valuable suggestion for the Selection of Test items to prepare a Test Battery for the wrestling Skill test Based on Wrestling skill test.
Your valuable suggestion will be considered on a priority basis for the improvement and Contribution in the field of Wrestling .
Kindly send the suggestion upto 6th Jan. 2015
Thanks with regards

Yours sincerely

Suresh Kumar
Lovely Professional University
Chehru Phagwara
Kapurthala
Punjab, India

Happykamboj30@gmail.com 09914522058

harmanpreet.kaur@lpu.co.in 09915387153

4. _____

5. _____

6. _____

Signature

Name: O.P Yadav.
Designation: H.O.D (NNIS). Wrestling Patiala.
Address: NSNIS Patiala.
Email : _____
Mobile No: 09417532393