

COMPARATIVE STUDY OF PHYSICAL VARIABLES BETWEEN GRECO-ROMAN AND FREESTYLE WRESTLERS OF PUNJAB, PAKISTAN

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ABSTRACT: The purpose of this study is to make a comparison between physical variables elite Greco-Roman and Freestyle wrestlers of all weight categories. A total of One hundred twenty eight wrestlers (n=128), Greco-Roman (n=64) and Freestyle (n=64) were selected for this study from three district of Sheikhpura, Lahore and Gujranwala, Pakistan. The Greco-Roman wrestlers age Mean/SD=23.50±1.51, height, Mean/SD=1.70±5.21 and Freestyle wrestlers age Mean/SD=23.12±.35, height Mean/SD= 1.71±6.78. In this study, comparison was made between six physical variables (Flexibility, Strength, Power, Speed, Agility, and Endurance), Greco Roman wrestlers and Freestyle wrestlers of all weight categories. All physical variables testing were completed in one day with a rest of 15minutes between each test. Strength variable results revealed that there was a significant difference (p=.005) between Greco Roman and Freestyle wrestlers of all weight categories. Power variable results revealed that there was a significant difference (p=.005) between Greco Roman and Freestyle wrestlers of all weight categories. Agility variables results revealed that there was a significant difference (p=.005) between Greco Roman and Freestyle wrestlers all weight categories. Flexibility variables results revealed that there was significant difference (p=.005) between Greco Roman and Freestyle wrestlers, except two categories. Speed variable results revealed that there was a significant difference (p=.005) between Greco Roman and Freestyle wrestlers, except two weight categories. Endurance variable results revealed that there was a significant difference (p=.005) between Greco Roman, Freestyle wrestlers except one category. The researcher concluded that overall performance of freestyle was better than Greco-Roman wrestlers.

Key terms: Wrestlers, Greco-Roman, Freestyle, physical variables.

INTRODUCTION

A healthy man always makes use of his environment. He has well concord between mind and body; he executes daily routine work very well without any stress and exhaustion. Through physical fitness our body accomplishes all the activities splendidly. Surely it has important variables to enhance the performance of any player. In track and field physical variables play an imperative role to upsurge the performance for each event [1].

Physical fitness plays a significant role in performing daily activities of life. Health and skill associated components are not only used for players but are also used in daily activities of life. We can control our weight, BMI through daily physical activities [2].

In a survey by The National College Health Risk Behavior, it is observed that thirty five percent college students are overweight in America [3] and two third of American youth are overweight [4] Many people are suffering from diverse diseases due to overweighting. Body fitness is total experience of different variables like cardio-vascular endurance, speed, flexibility strength, agility, etc [5].

The performance of a player of any game entirely depends on health and skill related variables. Progress and maintenance is the most crucial purpose of training [6].

Health fitness is a state of welfare which includes two types of variables, one is skill related and the other is health related. When a person is physically fit, then he enjoys his life without any exhaustion. For adult a very vital thing is that they have to increase their health fitness level to relish their life very well [7].

Skill related variables (balance, power, speed, agility, coordination and reaction time) are very important elements to enhance the play of individuals like athletes and tennis players etc. Performances and health related variables (cardiovascular endurance, muscle strength, strength endurance, flexibility and body composition) are also important for conditioning the body [8].

We can measure body fitness level with different tests. Some are specific and usually normative based. Thus one point remains undecided that how much body fitness is required for a better life [9].

To increase the performance of any player many factors are included. Body physique plays a very important role for the development of a player's performance [10]. The performance of a player of any game is directly depended on body fitness. Body fitness is the sum of all physical and skill components. So in sports training, entire components are included to amplify the performance [6].

Muscular power is a combination of strength and speed. It's also called explosive power which is a very imperative element to enhance performance. We can change our body direction with the help of agility. Agility depends on reaction time, strength, speed, and muscle coordination. These elements play an imperative role in athletic start and other games such as wrestling, basketball etc. Speed factor is not only important in athletics but it's also important in every field game. With speed we can dodge any his /her opponent player. Physical fitness plays a vital role for the enhancement of player's performance. If we are physically fit, then we can perform well with much slighter effort. Physical fitness not only affects physical and mental development but also has a positive effect on personal and social issues [11].

In the reign of Alamgir, wrestling was supported by him as a game on national level. The famous great wrestler Ghulam Muhammad (Gama Pehlwan) belonged to Punjab. He became world champion in 1910. In 1953 PWF (Pakistan Wrestling Federation) was formed in Pakistan at Lahore. PWF is affiliated with the FILA (International Wrestling Federation). Two types of wrestling are conducted in the Olympics (1) Greco-Roman (2) Freestyle wrestling. Greco-Roman started from European continent and freestyle wrestling started from Great Britain and the USA.

In Greco-Roman wrestling, there are eight weight categories like 57 kg., 61 kg., 65 kg., 70 kg., 74 kg., 86 kg., 97 kg., and

97 to 125 kg and in freestyle wrestling are 59 kg., 66 kg., 71 kg., 75 kg., 80 kg., 85 kg., 98 kg., and 98 to 130 kg. Freestyle wrestling is commonly playing in Pakistan. Pakistani wrestler got one bronze medal in Rome Olympics in 1960. Pakistani wrestlers also got (18) Gold, (10) silver and (8) Bronze medals in Common Wealth Games during (1954-2008). In Asian games Pakistani wrestlers earned (6) gold, (14) silver and (14) bronze medals during (1954-2006) and in South Asian games Pakistani wrestlers got (26) gold, (35) silver and (10) bronze medals.

The pre-requisites for accomplishment in this sport; strength, endurance, flexibility, skill; coordination and good general body condition are a natural outcome of wrestler's learning during effective training. Physical, psychological and personality development all are features of Wrestling. Self-discipline and self-reliance are demanded from a good wrestler. It's an individual event and a wrestler triumphs this event by his intelligence, speed, strength and skill. Each wrestler has to take decision in every round and doing hard training with the determination of gaining success. The secret of success in wrestling is depended on the adaptation of health and skill related valuable trainings [12].

Wrestling also demands discipline like other sports. A wrestler needs discipline for his preparation [13]. In the Olympics two wrestling styles for male are used (i) Freestyle (ii) Greco-Roman. In Pakistan commonly used is Freestyle. There is a big difference between both the wrestling styles. In the freestyle wrestling upper and lower body portions are used for the takedown and in Greco-Roman only upper body portions is used for the takedown. Freestyle wrestling consists of two bouts. Each one is of three minutes duration. Freestyle wrestling is a high intensity event in a short duration. Freestyle wrestling used anaerobic activity and explosive power is used in each bout [14, 15]. In Greco-Roman wrestling high upper body strength is used and this event consists of two bouts. Each bout duration is of three minutes. Strength endurance of arm and trunk muscles plays a vital role in wrestling [16]. Upper and lower body power is important for lifting the opponent wrestler and also of producing resistance.

Professional wrestlers have strong muscles of their leg and arm and generate high max explosive power [17]. A small number of studies have been done making comparison of health variables in both the wrestling style [18, 19, 20] But this study was conducted on comparison of selected health variables of Freestyle and Greco-Roman professional wrestlers at Lahore division in Pakistan. The present study has been conducted in three districts of Lahore division because a majority of wrestlers belongs to this area and a tremendous wrestling trend is set there.

LITERATURE REVIEW

A comparative study was conducted to investigate the differences in physical fitness among women wrestlers of different weight categories. The researcher selected one hundred and sixty seven wrestlers of different level and divided them into three categories; Heavy weight - middle weight and low weight. The researcher selected five different

physical fitness variables; (strength, speed, agility, power and Endurance & took the test of these five variables among all the three weight wrestlers. The results showed that heavy weight category wrestlers had greater strength than the low and middle weight category wrestlers where as middle weight wrestlers had better explosive power than the low and heavy weight category wrestlers. At the end middle weight wrestlers had other three variables (Endurance, Agility and Speed) better than the low and heavy weight category wrestlers [21].

Another comparative study was conducted to compare the physical fitness variables between urban and rural female students at the Punjabi University India. The researcher selected a total of one hundred female students (Fifty rural & fifty urban) and took test of physical fitness variables like (jumping, stepping, running, flexibility). The results revealed that rural female university students had better strength, endurance, speed and agility than the urban female university students while the urban female university students were more flexible rather than rural female university students [22].

In a study to compare health related physical fitness components between teaching staff and non-teaching staff of Dibrugarh University, India, the researcher selected thirty male staff of the age of 30-45 years in this university and divided into two groups (i) fifteen teaching staff and (ii) fifteen non-teaching staff. The researcher took the test of two physical fitness components (endurance and flexibility) and compiled the data. The results showed that there was no significant difference ($p < 0.5$) between both the groups [23].

In a study to compare physical fitness components between two games (i) Kabaddi (ii) Kho-Kho, the researcher selected one hundred female players of 10-15 years in different districts of Haryana and divided them into two groups; fifty players of Kabaddi and also fifty players of Kho-Kho. The researcher took a test of the components; speed, power and agility. The results showed that there was a significant difference ($p < 0.05$) between the players of both games [24].

In another study to compare the physical fitness components between medalist and non-medalist weight lifters of Haryana state, the researcher selected forty eight participants for this study and divided them into two groups (i) Medalist- 24, (ii) Non-medalist-24. The researcher took the test of the variables; Endurance, Strength, Power, Speed, Agility and Flexibility. The results showed that there was significant difference among variables between both the groups. Results also showed that medalist weight lifters had better fitness in variables like speed, agility, power, flexibility and endurance than non-medalist weight lifters [25].

In a study to compare selected physical fitness components between Govt. school boys & Non-govt. school boys, the researcher selected 60 participants of 16-18 years for this study and divided them into two groups; (i) Govt. school boys (n=30) (ii) Non-govt. school boys (n=30). The researcher took the test of three components like cardiovascular endurance, muscular endurance & explosive strength. The results revealed that there was no significant difference between the variables of both the groups [26].

In another study, to investigate the difference of physical fitness variables (Strength, Endurance, Speed, Flexibility and Coordination), the researcher selected 30 professional female players of Tamil Nadu and divided them into two groups (Basketball-15) and (Hockey-15). The results showed that in speed and endurance components Hockey players performed better than the Basketball players and in shuttle run, Bent and Reach variable, Hockey players gave better performance than the basketball players [27].

In another study, comparison of physical fitness level among students in Islamic Azad University (IAU). The researcher selected four hundred and fifty (male-250) & (female-200) student for this study and took test of six activities (12-minute run, sit-up, vertical jump, shuttle run, flexibility and push up). The results showed that male students performed better rather than female and female students performed healthier in flexibility test rather than male [28].

A study was conducted to compare the effect of selected physical fitness components between individual game and team game players. The researcher selected 30 players of age group, 18-25 years of different games and divided into two groups, 15 players each. The researcher took the tests of muscular strength, agility, power, speed and cardiovascular endurance and results showed that there was a significant difference ($p < 0.01$) between both the groups. The individual athletes showed better performance in all the physical fitness components than team game players [29].

In another study to investigate the difference between physical fitness components of two games (i) table tennis and (ii) badminton, male players from different educational institutions were selected. The researcher took a total of fifty players and divided them into groups table tennis ($n=25$) and basketball ($n=25$). The researcher took the test of all the variables; explosive strength, speed, endurance, agility, flexibility and also collected the data of age, height, and weight. The results showed that the difference between badminton and table tennis players of speed, with agility were significant and other variables were insignificant with insignificant explosive strength, endurance and flexibility variables [30].

In a study, to make a comparison of physical fitness variables (speed, strength, endurance, agility and flexibility) between rural and urban female students, the researcher selected one hundred participants for this study and divided them into two groups (i) rural ($n=50$) urban ($n=50$) of Delhi University. The researcher took the tests and also collected data of height and weight. The results revealed that female students of rural ($n=50$) were much better in strength, endurance, speed and agility except flexibility whereas the female students of urban ($n=50$) were better in flexibility [31].

In a comparison study of physical fitness components between athletes and footballers, who belonged to District Panipat, the researcher randomly selected 40 male athletes ($n=20$) and football ($n=20$) the age group of 17-19 years. The researcher took tests of all the variables like speed, explosive power, agility and muscular strength. The speed, explosive power and agility results showed that athletes were

better than the footballers and in muscular strength test both groups were the same [32].

In another study to compare physical fitness components among footballers, the researcher selected eighty participants of 18 to 25 years from four districts. Each district had twenty athletes; these athletes represented different colleges and district teams. The population was selected from Mohindergarh, Rewari, Rohtak and Bhiwani districts of Haryana. The researcher used AAPHER Youth Fitness Test (1976) [33] to measure all the physical fitness variables. The results showed that those footballers belonging to Rohtak were better in all variables than those of other district footballers [34].

In another comparative study physical fitness variables among attacker and defender male players in inter district Kabaddi competition, the researcher selected randomly forty Kabaddi players, attackers ($n=20$), defenders ($n=20$) between 14 to 17 years. The researcher took test of all the variables like speed test, Agility test and endurance test. The results showed that there was a significant difference between both the groups and male attacker players had better fitness than the male defender players in inter districts Kabaddi competition [35].

In a comparison study of physical components between junior Freestyle and Greco-Roman wrestlers, the researcher selected 126 wrestlers, Freestyle ($n=70$), Greco-Roman ($n=56$). There was no difference in physical features and anthropometric of both the groups. Greco-Roman wrestlers were better in leg power, relative average arm power, relative peak arm power, peak arm power, speed, agility and leg strength than the freestyle wrestlers. Freestyle wrestlers had more flexibility than that of Greco Romans [36].

EXPERIMENTAL DESIGN

One hundred twenty-eight ($n=128$) elite wrestlers were randomly selected for this study, Greco Roman wrestlers ($n=64$), Freestyle wrestlers ($n=64$) for all the eight weight categories. The sample was selected are best elite athletes of the Pakistan who belongs to different famous wrestling "akhara" like Pehlwan Usman Majeed (Rustam-e-pakistan) etc. These wrestlers were selected from three districts Sheikhupura, Lahore and Gujranwala. The basic objective of selecting from these cities was that these districts are known, best for wrestling and produce great wrestlers every year. Before the test, all the wrestlers took complete rest of 24 hours and that day they did not participate in daily training sessions. All the physical variable testing was completed in one day with a break period of 15 minutes. The researcher had already informed all the wrestlers and trainers about these physical variable tests. In this comparison study six physical variables were tested on Greco Roman wrestlers and Freestyle wrestlers of all weight categories.

Following Six physical variables were tested;

1. Flexibility test;

Sit and reach box to check the flexibility level of all the different weight category wrestlers (Greco Roman and Freestyle) [36].

2. Strength test: Shot Put (7.260) kg was used to notice the strength of all the different weight category wrestlers (Greco Roman and Freestyle) [21].
3. Power test: Standing Broad Jump was used to observe the lower body power of all the different weight category wrestlers (Greco Roman and Free-style) [21].
4. Speed test: 60 m dash race was used to note the speed of different weight category wrestlers (Greco Roman and Freestyle) [21].
5. 5. Agility test: Shuttle Run test was used to test the agility of body of all different weight category wrestlers (Greco Roman and Freestyle) [21].
6. 6. Endurance test: 600m run test was used to check the endurance of all the different weight category wrestlers (Greco Roman and Freestyle) [29].

One chance was given to all the wrestlers to perform these items as a trail. Before all testing a proper time was given for warm up. The reliability of test variables was 0.91. Statistical Package for Social Sciences (SPSS) was used to analyze the data, Descriptive Statistics and independent sample t-test was used for this study to compare all the different variables on all the weight category wrestlers (Greco Roman and Freestyle).

RESULTS SUMMARY

Table-1 Age and Height of wrestlers

Variable	Style	M/SD
Age(year)	Greco Roman	23.50±1.51
	Freestyle	23.12±.35
Height(cm)	Greco Roman	170±5.21
	Freestyle	171±6.78

The table 1 shows that the age (year) and height (cm) of Greco Roman and Freestyle wrestlers. Greco Roman wrestlers age $M/SD=23.50±1.51$ and height (cm) $M/SD=170±5.21$. Freestyle wrestlers age (year) $M/SD=23.12±.35$ and height $M/SD=171±6.78$.

Table-2 Comparison of Physical variable (Flexibility) (cm) on all weight categories of Greco Roman & Freestyle wrestlers

Style	Weight Category	N	Mean	SD	t	p
Greco Roman	57 kg	8	25.75	2.49	3.29	.005
Freestyle	59 kg	8	29.75	2.17		
Greco Roman	61 kg	8	26.00	2.14	3.56	.003
Freestyle	66 kg	8	29.50	1.77		
Greco Roman	65 kg	8	24.37	2.13	3.92	.002
Freestyle	71 kg	8	28.50	2.07		
Greco Roman	70 kg	8	23.87	2.69	3.57	.003
Freestyle	75 kg	8	28.00	1.85		
Greco Roman	74 kg	8	23.75	2.37	3.66	.003
Freestyle	80 kg	8	27.75	1.98		
Greco Roman	86 kg	8	22.25	.886	3.57	.003
Freestyle	85 kg	8	25.12	2.10		
Greco	97 kg	8	14.12	1.25	2.71	.017

Roman						
Freestyle	98 kg	8	16.25	1.83	.261	.798
Greco Roman	97-125 kg	8	13.25	2.19		
Freestyle	98-130 kg	8	13.50	1.60		

Table-2 reveals the results of comparison of physical variables (Flexibility) between Greco Roman and Freestyle wrestling through independent sample t-test on all weight categories. In first weight category comparison between Greco-Roman (57 kg) wrestlers and freestyle (59 kg) wrestlers, Greco-Roman (57 kg) wrestler $Mean=25.75$ and freestyle (59 kg) wrestlers $Mean=29.75$ with significant difference ($p=.005$) between both weight categories of Greco-Roman (57 kg) and freestyle (59 kg) wrestlers which indicates that freestyle (59 kg) wrestlers are more flexible than Greco-Roman (57 kg) wrestlers.

In second weight category comparison for Flexibility between Greco-Roman (61 kg) wrestlers and freestyle (66 kg) wrestlers, Greco-Roman (61 kg) wrestlers $Mean=26.00$ and freestyle (66 kg) wrestlers $Mean=29.50$ significant difference ($p=.003$) between both weight categories Greco-Roman (61 kg) and freestyle (66kg) wrestlers which indicates that freestyle (66kg) wrestlers are more flexible than Greco-Roman (61 kg) wrestlers.

In third weight category comparison (Flexibility) between Greco-Roman (65 kg) wrestlers and freestyle (71 kg) wrestlers. Greco-Roman (65 kg) wrestlers $Mean=24.37$ and freestyle (71 kg) wrestlers $Mean=28.50$ with significant difference ($p=.002$) between both weight categories Greco-Roman (65 kg) and freestyle (71kg) wrestlers which indicates that freestyle (65kg) wrestlers are more flexible than Greco-Roman (71 kg) wrestlers.

In fourth weight category comparison (Flexibility) between Greco-Roman (70 kg) wrestlers and freestyle (75 kg) wrestlers. Greco-Roman (70 kg) wrestlers $Mean=23.87$ and freestyle (75 kg) wrestlers $Mean=28.00$ with significant difference ($p=.003$) between both weight categories Greco-Roman (70 kg) and freestyle (75kg) wrestlers which indicates that freestyle (71kg) wrestlers are more flexible than Greco-Roman (70 kg) wrestlers.

In fifth weight category comparison (Flexibility) between Greco-Roman (74 kg) wrestlers and freestyle (80 kg) wrestlers. Greco-Roman (74 kg) wrestlers $Mean=23.75$ and freestyle (80 kg) wrestlers $Mean=27.75$ with significant difference ($p=.003$) between both weight categories Greco-Roman (74 kg) and Freestyle (80kg) wrestlers which indicates that freestyle (80kg) wrestlers are more flexible than Greco-Roman (74 kg) wrestlers.

In sixth weight category comparison (Flexibility) between Greco-Roman (86 kg) wrestlers and freestyle (85 kg) wrestlers. Greco-Roman (86 kg) wrestlers $Mean=22.25$ and freestyle (85 kg) wrestlers $Mean=25.12$ with significant difference ($p=.003$) between both weight categories Greco-Roman (86 kg) and freestyle (85kg) wrestlers which indicates that freestyle (85kg) wrestlers are more flexible than Greco-Roman (86kg) wrestlers.

In seventh weight category comparison (Flexibility) between Greco-Roman (97 kg) wrestlers and freestyle (98 kg) wrestlers. Greco-Roman (97 kg) wrestlers *Mean*= 14.12 and freestyle (98 kg) wrestlers *Mean*=16.25 with non-significant difference ($p=.017$) of flexibility level between both weight categories Greco-Roman (97 kg) and freestyle (98kg) wrestlers.

In eighth weight category comparison (Flexibility) between Greco-Roman (97 to 125 kg) wrestlers and freestyle (98 to 130 kg) wrestlers. Greco-Roman (97 to 125 kg) wrestlers *Mean*= 14.12 and freestyle (98 to 130 kg) wrestlers *Mean*=16.25 with non-significant difference of flexibility level ($p=.017$) between both weight categories Greco-Roman (97 to 125 kg) and freestyle (98 to 130 kg) wrestlers.

Table-3 Comparison of Physical variable (Speed) (sec) on all weight categories of Greco Roman & Freestyle wrestlers

Style	Weight Category	N	Mean	SD	<i>t</i>	<i>p</i>
Greco Roman	57 kg	8	8.47	.71	3.30	.005
Freestyle	59 kg	8	7.51	.41		
Greco Roman	61 kg	8	8.54	.75	3.43	.004
Freestyle	66 kg	8	7.51	.41		
Greco Roman	65 kg	8	8.54	.70	3.37	.005
Freestyle	71 kg	8	7.58	.41		
Greco Roman	70 kg	8	8.72	.92	3.37	.005
Freestyle	75 kg	8	7.51	.42		
Greco Roman	74 kg	8	8.77	.50	3.30	.005
Freestyle	80 kg	8	7.86	.60		
Greco Roman	86 kg	8	10.07	.60	3.87	.002
Freestyle	85 kg	8	9.19	.24		
Greco Roman	97 kg	8	11.35	.48	1.06	.309
Freestyle	98 kg	8	11.08	.55		
Greco Roman	97 to 125 kg	8	11.48	.57	1.01	.330
Freestyle	98 to 130 kg	8	11.24	.37		

Table-3 reveals that the results of comparison of physical variables (speed) between Greco Roman and Freestyle wrestling through independent sample t-test on all weight categories. In first weight category comparison (Speed) between of Greco-Roman (57 kg) wrestlers and freestyle (59 kg) wrestlers. Greco-Roman (57 kg) wrestlers *Mean*= 8.47 and freestyle (59 kg) wrestlers *Mean*=7.51 with significant difference ($p=.005$) between of both weight categories Greco-Roman (57 kg) and freestyle (59 kg) wrestlers indicates that freestyle (59 kg) wrestlers are faster than Greco-Roman (57 kg) wrestlers.

In second weight category comparison (Speed) between Greco-Roman (61 kg) wrestlers and freestyle (66 kg) wrestlers. Greco-Roman (61 kg) wrestlers *Mean*=8.54 and freestyle (66 kg) wrestlers *Mean*=7.51 with significant difference ($p=.004$) between both weight categories Greco-Roman (61 kg) and freestyle (66kg) wrestlers which indicates that freestyle (66kg) wrestlers are faster than Greco-Roman (61 kg) wrestlers.

In third weight category comparison (Speed) between Greco-Roman (65 kg) wrestlers and freestyle (71 kg) wrestlers. Greco-Roman (65 kg) wrestlers *Mean*=8.54 and freestyle (71 kg) wrestlers *Mean*=7.58 with significant difference ($p=.005$) between both weight categories Greco-Roman (65 kg) and freestyle (71kg) wrestlers which indicates that freestyle (65kg) wrestlers were faster than Greco-Roman (71 kg) wrestlers.

In fourth weight category comparison (Speed) between Greco-Roman (70 kg) wrestlers and freestyle (75 kg) wrestlers. Greco-Roman (70 kg) wrestlers *Mean*=8.72 and freestyle (75 kg) wrestlers *Mean*=7.51 with significant difference ($p=.005$) between both weight categories Greco-Roman (70 kg) and of freestyle (75kg) wrestlers which indicates that freestyle (71kg) wrestlers are faster than Greco-Roman (70 kg) wrestlers.

In fifth weight category comparison (Speed) between Greco-Roman (74 kg) wrestlers and freestyle (80 kg) wrestlers. Greco-Roman (74 kg) wrestlers *Mean*=8.77 and freestyle (80 kg) wrestlers *Mean*=7.86 with significant difference ($p=.005$) between both weight categories Greco-Roman (74 kg) and freestyle (80kg) wrestlers which indicates that freestyle (80kg) wrestlers are faster than Greco-Roman (74 kg) wrestlers.

In sixth weight category comparison (Speed) between Greco-Roman (86 kg) wrestlers and freestyle (85 kg) wrestlers. Greco-Roman (86 kg) wrestlers *Mean*=10.07 and freestyle (85 kg) wrestlers *Mean*=9.19 with significant difference ($p=.002$) between both weight categories Greco-Roman (86 kg) and freestyle (85kg) wrestlers which indicates that freestyle (85kg) wrestlers are faster than Greco-Roman (86kg) wrestlers.

In seventh weight category comparison (Speed) between of Greco-Roman (97 kg) wrestlers and freestyle (98 kg) wrestlers. Greco-Roman (97 kg) wrestlers *Mean*=11.35 and freestyle (98 kg) wrestlers *Mean*=11.08 with non-significant difference ($p=.309$) of speed between of both weight categories Greco-Roman (97 kg) and freestyle (98kg) wrestlers.

In eighth weight category comparison between of Greco-Roman (97 to 125 kg) wrestlers and freestyle (98 to 130 kg) wrestlers. Greco-Roman (97 to 125 kg) wrestlers *Mean*= 11.48 and freestyle (98 to 130 kg) wrestlers *Mean*=11.24 with non-significant difference ($p=.330$) of speed between both weight categories Greco-Roman (97 to 125 kg) and freestyle (98 to 130 kg) wrestlers.

Table-4 Comparison of Physical variable (Endurance) (min) on all weight categories of Greco Roman & Freestyle wrestlers

Style	Weight Category	N	Mean	SD	t	p
Greco Roman	57 kg	8	2.46	.29	3.50	.004
Freestyle	59 kg	8	2.09	.08		
Greco Roman	61 kg	8	2.32	.21	3.70	.002
Men's freestyle	66 kg	8	2.05	.05		
Greco Roman	65 kg	8	2.39	.13	5.54	.000
Freestyle	71 kg	8	2.10	.06		
Greco Roman	70 kg	8	2.39	.13	3.88	.002
Freestyle	75 kg	8	2.18	.07		
Greco Roman	74 kg	8	2.47	.07	4.89	.000
Freestyle	80 kg	8	2.27	.10		
Greco Roman	86 kg	8	3.27	.21	3.52	.003
Freestyle	85 kg	8	2.75	.35		
Greco Roman	97 kg	8	3.51	.08	4.23	.001
Freestyle	98 kg	8	3.22	.18		
Greco Roman	97 to 125 kg	8	4.10	.18	2.20	.045
Freestyle	98 to 130 kg	8	4.39	.32		

Table-4 reveals that the results of comparison physical variables (Endurance) Greco Roman and Freestyle wrestling through independent sample t-test on all weight categories. In first weight category comparison (Endurance) between of Greco-Roman (57 kg) wrestlers and freestyle (59 kg) wrestlers. Greco-Roman (57 kg) wrestlers *Mean*=2.46 and freestyle (59 kg) wrestlers *Mean*=2.09 with significant difference ($p=.004$) between both weight categories Greco-Roman (57 kg) and freestyle (59 kg) wrestlers which indicates that freestyle (59 kg) wrestlers have more endurance than Greco-Roman (57 kg) wrestlers.

In second weight category comparison (Endurance) between Greco-Roman (61 kg) wrestlers and freestyle (66 kg) wrestlers. Greco-Roman (61 kg) wrestlers *Mean*=2.32 and freestyle (66 kg) wrestlers *Mean*=2.05 with significant difference ($p=.002$) between both weight categories Greco-Roman (61 kg) and freestyle (66kg) wrestlers which indicates that freestyle (66kg) wrestlers have more endurance than Greco-Roman (61 kg) wrestlers.

In third weight category comparison (Endurance) between Greco-Roman (65 kg) wrestlers and freestyle (71 kg) wrestlers. Greco-Roman (65 kg) wrestlers *Mean*=2.39 and freestyle (71 kg) wrestlers *Mean*=2.10 with significant difference ($p=.000$) between both weight categories Greco-Roman (65 kg) and freestyle (71kg) wrestlers which indicates that freestyle (65kg) wrestlers have more endurance than Greco-Roman (71 kg) wrestlers.

In fourth weight category comparison (Endurance) between Greco-Roman (70 kg) wrestlers and freestyle (75 kg)

wrestlers. Greco-Roman (70 kg) wrestlers *Mean*=2.39 and freestyle (75 kg) wrestlers *Mean*=2.18 with significant difference ($p=.002$) between both weight categories Greco-Roman (70 kg) and freestyle (75kg) wrestlers which indicates that freestyle (71kg) wrestlers have more endurance than Greco-Roman (70 kg) wrestlers.

In fifth weight category comparison (Endurance) Greco-Roman (74 kg) wrestlers and freestyle (80 kg) wrestlers. Greco-Roman (74 kg) wrestlers *Mean*=2.47 and freestyle (80 kg) wrestlers *Mean*=2.27 with significant difference ($p=.000$) between both weight categories Greco-Roman (74 kg) and freestyle (80kg) wrestlers which indicates that freestyle (80kg) wrestlers have more endurance than Greco-Roman (74 kg) wrestlers.

In sixth weight category comparison (Endurance) between Greco-Roman (86 kg) wrestlers and freestyle (85 kg) wrestlers. Greco-Roman (86 kg) wrestlers *Mean*=3.27 and freestyle (85 kg) *Mean*=2.75 with significant difference ($p=.003$) between both weight categories Greco-Roman (86 kg) and freestyle (85kg) wrestlers which indicates that freestyle (85kg) wrestlers have more endurance than Greco-Roman (86kg) wrestlers.

In seventh weight category comparison (Endurance) between Greco-Roman (97 kg) wrestlers and freestyle (98 kg) wrestlers. Greco-Roman (97 kg) wrestlers *Mean*=3.51 and freestyle (98 kg) wrestlers *Mean*=3.22 with significant difference ($p=.001$) between both weight categories Greco-Roman (97 kg) and freestyle (98kg) wrestlers which indicates that Greco-Roman (98kg) wrestlers have more endurance than freestyle (97kg) wrestlers.

In eighth weight category comparison (Endurance) between Greco-Roman (97 to 125 kg) wrestlers and freestyle (98 to 130 kg) wrestlers. Greco-Roman (97 to 125 kg) wrestlers *Mean*=4.10 and freestyle (98 to 130 kg) wrestlers *Mean*=4.39 with no significant difference ($p=.045$) of endurance between both weight categories Greco-Roman (97 to 125 kg) and freestyle (98 to 130 kg) wrestlers.

Table-5 Comparison of Physical variable (Strengths) (m) on all weight categories of Greco Roman & Freestyle wrestlers

Style	Weight Category	N	Mean	SD	t	p
Greco Roman	57 kg	8	5.81	.44	3.33	.005
Freestyle	59 kg	8	5.25	.19		
Greco Roman	61 kg	8	6.41	.60	4.48	.001
Freestyle	66 kg	8	5.34	.32		
Greco Roman	65 kg	8	7.36	.91	3.67	.003
Freestyle	71 kg	8	5.89	.69		
Greco Roman	70 kg	8	7.77	.48	5.60	.000
Freestyle	75 kg	8	6.22	.61		
Greco Roman	74 kg	8	7.87	.46	4.45	.001
Freestyle	80 kg	8	6.60	.66		
Greco Roman	86 kg	8	8.32	.32	4.23	.001
Freestyle	85 kg	8	7.09	.76		
Greco	97 kg	8	8.80	.55	3.68	.002

Roman						
Freestyle	98 kg	8	7.71	.63		
Greco Roman	97 to 125 kg	8	10.01	.44	3.62	.003
Freestyle	98 to 130 kg	8	8.95	.70		

Table-5 reveals that the results of comparison of physical variables (Strength) Greco Roman and Freestyle wrestling through independent sample t-test on all weight categories. In first weight category comparison (strength) between Greco-Roman (57 kg) wrestlers and freestyle (59 kg) wrestlers. Greco-Roman (57 kg) wrestlers *Mean*=5.81 and freestyle (59 kg) wrestlers *Mean*=5.25 with significant difference ($p=.005$) between both weight categories Greco-Roman (57 kg) and freestyle (59 kg) wrestlers which indicates that Greco-Roman (57 kg) wrestlers have more strength than freestyle (59 kg) wrestlers.

In second weight category comparison (strength) between Greco-Roman (61 kg) wrestlers and freestyle (66 kg) wrestlers. Greco-Roman (61 kg) wrestlers *Mean*=6.41 and freestyle (66 kg) wrestlers *Mean*=5.34 with significant difference ($p=.001$) between both weight categories Greco-Roman (61 kg) and freestyle (66kg) wrestlers which indicates that Greco-Roman wrestler's (61 kg) have more strength than freestyle (66kg) wrestlers.

In third weight category comparison (strength) between Greco-Roman (65 kg) wrestlers and freestyle (71 kg) wrestlers. Greco-Roman (65 kg) *Mean*=7.36 and freestyle (71 kg) wrestlers *Mean*=5.89 with significant difference ($p=.003$) between both weight categories Greco-Roman (65 kg) and freestyle (71kg) wrestlers which indicates that Greco-Roman (71 kg) wrestlers have more strength than freestyle (65kg) wrestlers.

In fourth weight category comparison (strength) between Greco-Roman (70 kg) wrestlers and freestyle (75 kg) wrestlers. Greco-Roman (70 kg) wrestlers *Mean*=7.77 and freestyle (75 kg) wrestlers *Mean*=6.22 with significant difference ($p=.000$) between both weight categories Greco-Roman (70 kg) and freestyle (75kg) wrestlers which indicates that Greco-Roman (70 kg) wrestlers have more strength than freestyle (71kg) wrestlers.

In fifth weight category comparison (strength) between Greco-Roman (74 kg) wrestlers and freestyle (80 kg) wrestlers. Greco-Roman (74 kg) wrestlers *Mean*=7.87 and freestyle (80 kg) wrestlers *Mean*=6.60 with significant difference ($p=.001$) between both weight categories Greco-Roman (74 kg) and freestyle (80kg) wrestlers which indicates that Greco-Roman (74 kg) wrestlers have more strength than freestyle (80kg) wrestlers.

In sixth weight category comparison (strength) between Greco-Roman (86 kg) wrestlers and freestyle (85 kg) wrestlers. Greco-Roman (86 kg) wrestlers *Mean*=8.32 and freestyle (85 kg) wrestlers *Mean*=7.09 with significant difference ($p=.001$) between both weight categories Greco-Roman (86 kg) and freestyle (85kg) wrestlers which indicates that Greco-Roman (86kg) wrestlers have more strength than freestyle (85kg) wrestlers.

In seventh weight category comparison (strength) between Greco-Roman (97 kg) wrestlers and freestyle (98 kg) wrestlers. Greco-Roman (97 kg) wrestlers *Mean*=8.80 and freestyle (98 kg) wrestlers *Mean*=7.71 with no significant difference ($p=.002$) between both weight categories Greco-Roman (97 kg) and freestyle (98kg) which indicates that Greco-Roman (98kg) wrestlers have more strength than freestyle (97kg) wrestlers.

In eighth weight category comparison (strength) between Greco-Roman (97 to 125 kg) wrestlers and freestyle (98 to 130 kg) wrestlers. Greco-Roman (97 to 125 kg) *Mean*=10.01 and freestyle (98 to 130 kg) wrestlers *Mean*=8.95 with no significant difference ($p=.003$) between of both weight categories Greco-Roman (97 to 125 kg) and freestyle (98 to 130 kg) wrestlers which indicates that Greco-Roman (97 to 125 kg) wrestlers have more strength than freestyle (98 to 130 kg) wrestlers.

Table-6 Comparison of Physical variable (Power) (m) on all weight categories of Greco Roman & Freestyle wrestlers

Style	Weight Category	N	Mean	SD	t	p
Greco Roman	57 kg	8	2.66	.25	4.12	.001
Freestyle	59 kg	8	2.15	.26		
Greco Roman	61 kg	8	2.70	.21	5.32	.000
Freestyle	66 kg	8	2.12	.23		
Greco Roman	65 kg	8	2.75	.17	5.18	.000
Freestyle	71 kg	8	2.19	.25		
Greco Roman	70 kg	8	2.86	.07	5.06	.000
Freestyle	75 kg	8	2.34	.29		
Greco Roman	74 kg	8	2.86	.07	5.06	.000
Freestyle	80 kg	8	2.34	.29		
Greco Roman	86 kg	8	2.35	.37	3.30	.005
Freestyle	85 kg	8	1.84	.22		
Greco Roman	97 kg	8	2.09	.10	4.22	.001
Freestyle	98 kg	8	1.73	.22		
Greco Roman	97 to 125 kg	8	1.91	.25	4.53	.000
Freestyle	98 to 130 kg	8	1.44	.14		

Table-6 reveals that the results of comparison of physical variables (Power) Greco Roman and Freestyle wrestling through independent sample t-test on all weight categories. In first weight category comparison (power) between Greco-Roman (57 kg) wrestlers and freestyle (59 kg) wrestlers. Greco-Roman (57 kg) wrestlers *Mean*=2.66 and freestyle (59 kg) *Mean*=2.15 with significant difference ($p=.001$) between both weight categories Greco-Roman (57 kg) and freestyle (59 kg) wrestlers which indicates that Greco-Roman (57 kg) wrestlers have more power than freestyle (59 kg) wrestlers.

In second weight category comparison (power) between Greco-Roman (61 kg) wrestlers and freestyle (66 kg) wrestlers. Greco-Roman (61 kg) wrestlers $Mean=2.70$ and freestyle (66 kg) wrestlers $Mean=2.12$ with significant difference ($p=.000$) between both weight categories Greco-Roman (61 kg) and freestyle (66kg) wrestlers which indicates that Greco-Roman wrestler's (61 kg) have more power than freestyle (66kg) wrestlers.

In third weight category comparison (power) between Greco-Roman (65 kg) wrestlers and freestyle (71 kg) wrestlers. Greco-Roman (65 kg) wrestlers $Mean=2.75$ and freestyle (71 kg) wrestlers $Mean=2.19$ with significant difference ($p=.000$) between both weight categories Greco-Roman (65 kg) and freestyle (71kg) wrestlers which indicates that Greco-Roman (71 kg) wrestlers have more power than freestyle (65kg) wrestlers.

In fourth weight category comparison (power) between Greco-Roman (70 kg) wrestlers and freestyle (75 kg) wrestlers. Greco-Roman (70 kg) wrestlers $Mean=2.86$ and freestyle (75 kg) wrestlers $Mean=2.34$ with significant difference ($p=.000$) between both weight categories Greco-Roman (70 kg) and freestyle (75kg) wrestlers which indicates that Greco-Roman (70 kg) wrestlers have more power than freestyle (71kg) wrestlers.

In fifth weight category comparison (power) between Greco-Roman (74 kg) wrestlers and freestyle (80 kg) wrestlers. Greco-Roman (74 kg) wrestlers $Mean=2.86$ and freestyle (80 kg) wrestlers $Mean=2.34$ with significant difference ($p=.000$) between both weight categories Greco-Roman (74 kg) and freestyle (80kg) wrestlers which indicates that Greco-Roman (74 kg) wrestlers have more power than freestyle (80kg) wrestlers.

In sixth weight category comparison (power) between Greco-Roman (86 kg) wrestlers and freestyle (85 kg) wrestlers. Greco-Roman (86 kg) wrestlers $Mean=2.35$ and freestyle (85 kg) wrestlers $Mean=1.84$ with significant difference ($p=.005$) between both weight categories Greco-Roman (86 kg) and freestyle (85kg) wrestlers which indicates that Greco-Roman (86kg) wrestlers have more power than freestyle (85kg) wrestlers.

In seventh weight category comparison (power) between Greco-Roman (97 kg) wrestlers and freestyle (98 kg) wrestlers. Greco-Roman (97 kg) wrestlers $Mean= 2.09$ and freestyle (98 kg) wrestlers $Mean=1.73$ with significant difference ($p=.001$) between both weight categories Greco-Roman (97 kg) and freestyle (98kg) wrestlers which indicates that Greco-Roman (98kg) wrestlers have more power than freestyle (97kg) wrestlers.

In eighth weight category comparison (power) between Greco-Roman (97 to 125 kg) and freestyle (98 to 130 kg). Greco-Roman (97 to 125 kg) wrestlers $Mean=1.91$ and freestyle (98 to 130 kg) wrestlers $Mean=1.44$ with significant difference ($p=.000$) between of both weight categories Greco-Roman (97 to 125 kg) and freestyle (98 to 130 kg) which indicates that Greco-Roman (97 to 125 kg) wrestlers have more power than freestyle (98 to 130 kg) wrestlers.

Table-7 Comparison of Physical variable (Agility) (sec) on all weight categories of Greco Roman & Freestyle wrestlers

Style	Weight Category	N	Mean	SD	t	p
Greco Roman	57 kg	8	21.08	.41	5.30	.000
Freestyle	59 kg	8	20.24	.16		
Greco Roman	61 kg	8	21.04	.39	6.47	.000
Freestyle	66 kg	8	20.13	.06		
Greco Roman	65 kg	8	20.99	.48	5.22	.000
Freestyle	71 kg	8	20.08	.08		
Greco Roman	70 kg	8	20.40	.51	3.41	.004
Freestyle	75 kg	8	19.56	.47		
Greco Roman	74 kg	8	20.37	.54	4.76	.000
Freestyle	80 kg	8	19.29	.35		
Greco Roman	86 kg	8	21.79	.62	4.72	.000
Freestyle	85 kg	8	20.58	.38		
Greco Roman	97 kg	8	22.54	.47	4.67	.000
Freestyle	98 kg	8	21.12	.72		
Greco Roman	97-125 kg	8	23.17	.80	3.53	.003
Freestyle	98-130 kg	8	21.84	.70		

Table-7 reveals that the results of comparison of physical variables (Agility) Greco Roman and freestyle wrestling through independent sample t-test on all weight categories.

In first weight category comparison (Agility) between Greco-Roman (57 kg) wrestlers and freestyle (59 kg) wrestlers. Greco-Roman (57 kg) wrestlers $Mean=21.08$ and freestyle (59 kg) wrestlers $Mean=20.24$ with significant difference ($p=.000$) between both weight categories Greco-Roman (57 kg) and freestyle (59 kg) wrestlers which indicates that freestyle (59 kg) wrestlers have more agility than Greco-Roman (57 kg) wrestlers.

In second weight category comparison (Agility) between Greco-Roman (61 kg) wrestlers and freestyle (66 kg) wrestlers. Greco-Roman (61 kg) wrestlers $Mean=21.04$ and freestyle (66 kg) wrestlers $Mean=20.13$ with significant difference ($p=.000$) between both weight categories Greco-Roman (61 kg) and freestyle (66kg) wrestlers which indicates that freestyle (66kg) wrestlers have more agility than Greco-Roman (61 kg) wrestlers.

In third weight category comparison (Agility) between Greco-Roman (65 kg) wrestlers and freestyle (71 kg) wrestlers. Greco-Roman (65 kg) wrestlers $Mean=20.99$ and freestyle (71 kg) wrestlers $Mean=20.08$ with significant difference ($p=.000$) between both weight categories Greco-Roman (65 kg) and freestyle (71kg) wrestlers which indicates that freestyle (65kg) wrestlers have more agility than Greco-Roman (71 kg) wrestlers.

In fourth weight category comparison (Agility) between Greco-Roman (70 kg) wrestlers and freestyle (75 kg) wrestlers. Greco-Roman (70 kg) wrestlers $Mean=20.40$ and freestyle (75 kg) wrestlers $Mean=19.56$ with significant

difference ($p=.004$) between both weight categories Greco-Roman (70 kg) and freestyle (75kg) wrestlers which indicates that freestyle (71kg) wrestlers have more agility than Greco-Roman (70 kg) wrestlers.

In fifth weight category comparison (Agility) between Greco-Roman (74 kg) wrestlers and freestyle (80 kg) wrestlers. Greco-Roman (74 kg) wrestlers $Mean=20.37$ and freestyle (80 kg) wrestlers $Mean=19.29$ with significant difference ($p=.000$) between both weight categories Greco-Roman (74 kg) and freestyle (80kg) wrestlers which indicates that freestyle (80kg) wrestlers have more agility than Greco-Roman (74 kg) wrestlers.

In sixth weight category comparison (Agility) between Greco-Roman (86 kg) wrestlers and freestyle (85 kg) wrestlers. Greco-Roman (86 kg) wrestlers $Mean=21.79$ and freestyle (85 kg) wrestlers $Mean=20.58$ with significant difference ($p=.000$) between both weight categories Greco-Roman (86 kg) and freestyle (85kg) wrestlers which indicates that freestyle (85kg) wrestlers have more agility than Greco-Roman (86kg) wrestlers.

In seventh weight category comparison (Agility) between Greco-Roman (97 kg) wrestlers and freestyle (98 kg) wrestlers. Greco-Roman (97 kg) wrestlers $Mean=22.54$ and freestyle (98 kg) wrestlers $Mean=21.12$ with significant difference ($p=.000$) between both weight categories Greco-Roman (97 kg) and freestyle (98kg) which indicates that freestyle (97kg) wrestlers have more agility than Greco-Roman (98kg) wrestlers.

In eighth weight category comparison (Agility) between Greco-Roman (97 to 125 kg) wrestlers and freestyle (98 to 130 kg) wrestlers. Greco-Roman (97 to 125 kg) wrestlers $Mean= 23.17$ and freestyle (98 to 130 kg) wrestlers $Mean=21.84$ with significant difference ($p=.330$) between both weight categories Greco-Roman (97 to 125 kg) and freestyle (98 to 130 kg) which indicates that freestyle (98 to 130 kg) wrestlers have more agility than Greco-Roman (97 to 125 kg) wrestlers.

DISCUSSION

The main purpose of this study was to compare physical variables (Speed, Agility, Endurance, Power, Strength, and Flexibility) of all weight categories between Greco Roman wrestlers and freestyle wrestlers. The six physical variables test were taken among elite wrestlers from three districts (Sheikhupura, Lahore and Gujranwala). The majority of studies of comparison in this area support physical component on different variables, women wrestlers [21], Urban & rural female university students [22]. Teaching staff & non-teaching staff [23], Kabaddi & kho-kho players [24], medalist & non-medalist weight lifters [25], Govt. school boys & non-govt. school boys [26], Basketball & hockey players [27]. University students (IAU) [28], Individual & team games players [29], Table tennis & badminton male players [30], Rural & urban female students [31], Athletes & footballer [32], Footballers [34], Offensive & defensive Kabaddi players [35], Freestyle and Greco-Roman junior wrestlers [36].

In this study comparison of six physical variables on all weight categories between Greco Roman wrestlers and freestyle wrestlers. Sit and reach box to check the flexibility, Shot Put (7.260) kg was used to check the strength, standing broad jump was used for checking the lower body power, 60 m dash race was used to check speed, shuttle Run test was used to check the agility, 600m run test was used to check the endurance, of all weight categories (Greco Roman and Freestyle) wrestlers.

In this study flexibility of all weight categories of Greco Roman wrestlers 57 kg category ($M/SD= 25.75\pm 2.49$), 61 kg category ($M/SD= 26.00\pm 2.14$), 65 kg category ($M/SD= 24.37\pm 2.13$), 70 kg category ($M/SD= 23.87\pm 2.69$) and 74 kg category ($M/SD= 23.75\pm 2.37$), 86 kg category ($M/SD= 22.25\pm .886$), 97 kg category ($M/SD= 14.12\pm 1.25$), 97 to 125 kg category ($M/SD= 13.25\pm 2.19$). The flexibility of all weight categories of freestyle wrestlers 59kg category ($M/SD= 29.75 \pm 2.17$), 66kg category ($M/SD= 29.50\pm 1.77$), 71kg category ($M/SD=28.50 \pm 2.07$), 75 kg category ($M/SD= 28.00\pm 1.85$) and 80kg category ($M/SD= 27.75\pm 1.98$), 85kg category ($M/SD= 25.12\pm 2.10$), 98 kg category ($M/SD= 16.25\pm 1.83$), 98 to 130 kg category ($M/SD= 13.50\pm 1.60$). These results supported the study [36] comparison of Physical Fitness component between Greco Roman wrestlers and freestyle wrestlers. The mean of all Greco Roman wrestlers Mean and SD were 30 and 6.2 respectively. All free style wrestlers Mean and SD were 34 and 7.0 respectively. The independent -samples t-tests were performed to compare flexibility between Greco Roman wrestlers and freestyle wrestlers of all weight categories. There was a significant difference ($p<.005$) between the mean scores of Greco Roman & freestyle wrestlers except two categories. These results also validated and closed to the study of [22, 28, 25, 34] of flexibility test.

In this study the strength of all weight categories of Greco Roman wrestlers 57 kg category ($M/SD= 5.81\pm .44$), 61 kg category ($M/SD= 6.41\pm .60$), 65 kg category ($M/SD= 7.36\pm .91$), 70 kg category ($M/SD= 7.77\pm .48$) and 74 kg category ($M/SD= 7.87\pm .46$), 86 kg category ($M/SD= 8.32\pm .32$), 97 kg category ($M/SD= 8.80\pm .55$), 97 to 125 kg category ($M/SD= 10.01\pm .44$). In this study the flexibility of all weight categories of freestyle wrestlers 59kg category ($M/SD= 5.25\pm .19$), 66kg category ($M/SD= 5.34\pm .32$), 71kg category ($M/SD= 5.89\pm .69$), 75 kg category ($M/SD= 6.22\pm .61$) and 80kg category ($M/SD= 6.60\pm .66$), 85kg category ($M/SD= 7.09\pm .76$), 98 kg category ($M/SD= 7.71\pm .63$), 98 to 130 kg category ($M/SD= 8.95\pm .70$). These results supported the study [21] comparison of Physical Fitness component between of women wrestlers of different weight categories. The Light weight (Mean=6.63), Middle Weight (Mean=7.55) and Heavy Weight (Mean= 8.70). The independent -samples t-tests were performed to compare strength between Greco Roman wrestlers and freestyle wrestlers of all weight categories. There was a significant difference ($p<.005$) between the mean scores of Greco Roman & freestyle wrestlers. The results of current study supported the results of the study of [25, 34] of strength test.

In this study the power of all weight categories of Greco Roman wrestlers 57 kg category ($M/SD= 2.66\pm.25$), 61 kg category ($M/SD= 2.70\pm.21$), 65 kg category ($M/SD= 2.75\pm.17$), 70 kg category ($M/SD= 2.86\pm.07$) and 74 kg category ($M/SD= 2.86\pm.07$), 86 kg category ($M/SD= 2.35\pm.37$), 97 kg category ($M/SD= 2.09\pm.10$), 97 to 125 kg category ($M/SD= 1.91\pm.25$). In this study the power of all weight categories of freestyle wrestlers 59kg category ($M/SD= 2.15\pm.26$), 66kg category ($M/SD= 2.12\pm.23$), 71kg category ($M/SD= 2.19\pm.25$), 75 kg category ($M/SD= 2.34\pm.29$) and 80kg category ($M/SD= 2.34\pm.29$), 85kg category ($M/SD= 1.84\pm.22$), 98 kg category ($M/SD= 1.73\pm.22$), 98 to 130 kg category ($M/SD= 1.44\pm.14$). These results supported the study [21] comparison of Physical Fitness component of women wrestlers of different weight categories. The Light weight (Mean=2.11), Middle Weight (Mean=2.38) and Heavy Weight (Mean=2.06). The independent-samples t-tests were performed to compare strength between Greco Roman wrestlers and freestyle wrestlers of all weight categories. There was a significant difference ($p<.005$) between the mean scores of Greco Roman & freestyle wrestlers. The results of current study supported the results of the study of [22, 24, 25, 26, 29, 32] of power test.

In this study the speed of all weight categories of Greco Roman wrestlers 57 kg category ($M/SD= 8.47\pm.71$), 61 kg category ($M/SD= 8.54\pm.75$), 65 kg category ($M/SD= 8.54\pm.70$), 70 kg category ($M/SD= 8.72\pm.92$) and 74 kg category ($M/SD= 8.77\pm.50$), 86 kg category ($M/SD= 10.07\pm.60$), 97 kg category ($M/SD= 11.35\pm.48$), 97 to 125 kg category ($M/SD= 11.48\pm.57$). In this study the speed of all weight categories of freestyle wrestlers 59kg category ($M/SD= 7.51\pm.41$), 66kg category ($M/SD= 7.51\pm.41$), 71kg category ($M/SD= 7.58\pm.41$), 75 kg category ($M/SD= 7.51\pm.42$) and 80kg category ($M/SD= 7.86\pm.60$), 85kg category ($M/SD= 9.19\pm.24$), 98 kg category ($M/SD= 11.08\pm.55$), 98 to 130 kg category ($M/SD= 11.24\pm.37$). These results supported the study [21] comparison of Physical Fitness component of women wrestlers of different weight categories. The Light weight (Mean=8.10), Middle Weight (Mean=7.89) and Heavy Weight (Mean=8.12). The independent -samples t-tests were performed to compare speed between Greco Roman wrestlers and freestyle wrestlers of all weight categories. There was a significant difference ($p<.005$) between the mean scores of Greco Roman & freestyle wrestlers except two categories. The results of current study supported the results of the study of [22, 24, 25, 27, 29, 32, 34, 35] of strength test.

In this study the agility of all weight categories of Greco Roman wrestlers 57 kg category ($M/SD= 21.08\pm.41$), 61 kg category ($M/SD= 21.04\pm.39$), 65 kg category ($M/SD= 20.99\pm.48$), 70 kg category ($M/SD= 20.40\pm.51$) and 74 kg category ($M/SD= 20.37\pm.54$), 86 kg category ($M/SD= 21.79\pm.62$), 97 kg category ($M/SD= 22.54\pm.47$), 97 to 125 kg category ($M/SD= 23.17\pm.80$). In this study the agility of all weight categories of freestyle wrestlers 59kg category ($M/SD= 20.24\pm.16$), 66kg category ($M/SD= 20.13\pm.06$), 71kg category ($M/SD= 20.08\pm.08$), 75 kg

category ($M/SD= 19.56\pm.47$) and 80kg category ($M/SD= 19.29$

$\pm.35$), 85kg category ($M/SD= 20.58\pm.38$), 98 kg category ($M/SD= 21.12\pm.72$), 98 to 130 kg category ($M/SD= 21.84\pm.70$). These results supported the study [21] comparison of Physical Fitness component between of women wrestlers of different weight categories. The Light weight (Mean=23.57), Middle Weight (Mean=22.96) and Heavy Weight (Mean=23.87). The independent -samples t-tests were performed to compare agility between Greco Roman wrestlers and freestyle wrestlers of all weight categories. There was a significant difference ($p<.005$) between the mean scores of Greco Roman & freestyle wrestlers. The results of current study supported the results of the study of [22, 24, 25, 27, 28, 29, 32, 34, 35, 36].

In this study the endurance of all weight categories of Greco Roman wrestlers 57 kg category ($M/SD= 2.46\pm.29$), 61 kg category ($M/SD= 2.32\pm.21$), 65 kg category ($M/SD= 2.39\pm.13$), 70 kg category ($M/SD= 2.39\pm.13$) and 74 kg category ($M/SD= 2.47\pm.07$), 86 kg category ($M/SD= 3.27\pm.21$), 97 kg category ($M/SD= 3.51\pm.08$), 97 to 125 kg category ($M/SD= 4.10\pm.18$). In this study the endurance of all weight categories of freestyle wrestlers 59kg category ($M/SD= 2.09\pm.08$), 66kg category ($M/SD= 2.05\pm.05$), 71kg category ($M/SD= 2.10\pm.06$), 75 kg category ($M/SD= 2.18\pm.07$) and 80kg category ($M/SD= 2.27\pm.10$), 85kg category ($M/SD= 2.75\pm.35$), 98 kg category ($M/SD= 3.22\pm.18$), 98 to 130 kg category ($M/SD= 4.39\pm.32$). These results supported the study [21] comparison of Physical Fitness component of women wrestlers of different weight categories. The Light weight (Mean=2.99), Middle Weight (Mean=3.06) and Heavy Weight (Mean=2.74). The independent -samples t-tests were performed to compare endurance between Greco Roman wrestlers and freestyle wrestlers of all weight categories. There was a significant difference ($p<.005$) between the mean scores of Greco Roman & freestyle wrestlers except one category. The results of current study supported results of the study of [25, 26, 27, 29, 35] of endurance test.

CONCLUSION

In this study, the comparison of six physical variables, (flexibility, strength, power, speed, agility, endurance) between Greco Roman wrestlers and Freestyle wrestlers of all weight categories. Greco-Roman and freestyle wrestlers have same age and height with the respect of all weight categories. First variable flexibility test results showed that there was significant difference ($p=.005$) between Greco Roman, Freestyle wrestlers, except two categories. Second variable strength results showed that there was significant difference ($p=.005$) of between Greco Roman, Freestyle wrestlers among all weight categories. Third variable showed that power test results showed that there was a significant difference ($p=.005$) between Greco Roman, Freestyle wrestlers among all weight categories. Fourth variable speed test results showed that there was a significant difference ($p=.005$) between Greco Roman, Freestyle wrestlers, except two weight categories. Fifth variable agility results showed

that there was a significant difference ($p=.005$) between Greco Roman, Freestyle wrestlers all weight categories. Sixth variable results showed that there was a significant difference ($p=.005$) between Greco Roman, Freestyle wrestlers except one category. Freestyle wrestlers were significantly better in all physical variables as compare to Greco-Roman. According to researcher point of view the main factor of freestyle wrestler's performance was better because freestyle wrestling is common in Pakistan.

RECOMMENDATION

The main purpose of this study to compare six physical variables on Greco-Roman ($n=64$) and freestyle wrestlers ($n=64$). In future studies needs to apply both health related and skill related variables on different games with similar pattern and on both genders. Further research also needs to focus on applying different physical components on professional and novice players of different games.

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