

*

(10)

(0.05≥) (30 70 90)

(0.05≥) (30 90)

(0.01≥)

(57.6) (70)

(59.7) (50)

(46.8) (30)

(29.2) (52)

(19.7) (70)

(30 90)

(Tanaka et al., 1982) al. 2002; Lohman, 1989)

(Body Surface Area)

(Body Mass index)

(1997)

(Bordom et al., 2008; Cynthia et al., 2008; Armstrong, 2006; Sturm and Datar, 2005; Heymsfield et al., 2005; Lee et al., 2005; Tremblay and Willms, 2000; Shumei et

(2004)

2009/5/26

(2006)

.2010/3/1

*

(Rayan,1992)

)

(2006

Leroyer, 2002)
et.al.,1993; Tuyn, and Kooi, 1993; Baker and Mclean,
1994)

()

(Apostolidis et al., 2004; Tsunawake et al.,
2003; Jelcic et al., 2002; Kinnunen et al., 2001; Hoare et
al., 2000)

)

(

,(Jallon,1999,Kanpp,1972)
(Knapp, 1972)
(Koo-hyoung,1986)

- -

(Jallon, 1999)

:

(240) (24)

(1)

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(2)

4 -1) ()

(2009 31-28) (1430

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)

(3)

(

(0.1) (Seca)

(0.5) (1)

(2 /)

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(Harpenden)

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(3)

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/100x (4.500- 4.950) =

(1993)

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=(100/ ×)

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(+ +)

(1997)

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44 -24) (10)

.(

(1)

(Grip

Dynamometer)

2008

2006

2007

.(1997

±	
6.67±33.90	()
0.09±1.73	()
12.58±78.32	()

(1430/4/4-1)) :(
 (FITA)
 (144) (36)
 (70) (90) ()
 (6) (4)
 .6x6 (4) (Leg
 (12) (30) (50) Dynamometer)
 (3)
 .(12x3)
 90)
 (10) .(1993) (

(Muscular Endurance)

.(Douglas, 2005)

2007) (1)

2008
.(2001

(Flexibility)

(SPSS) (17)

: ()

Mean (1 x48,30)

Std. Deviation (48,30 x 48,30

(22.86)

Spearman's Nonparametric (3

Correlations ()

(22.86)

(Analysis Stepwise (4

Multiple Regression)

(

.(1993)

(30 50 70 90)

(2)

±		
2.73±13.90	()	
6.72±20.40	()	
7.25±21.20	()	
4.43±26.29	(2 /)	
5.27±21.98	()	
5.27±78.02	()	
6.60±17.66	()	
7.24±60.65	()	
3.34±80.00	()	
3.40±28.70	()	
6.40±44.48	()	
3.62±24.70	()	
26.58±118.00	()	
6.91±25.00	()	
6.07±30.50	()	
40.89±226.40	() 90	
29.98±258.40	() 70	
29.57±237.10	() 50	
32.10±260.70	() 30	

(3.40) (2)

(6.40 ±44.48) (2)

(3.62 ±24.70)

(26.58 ±118) (2.73 ±13.9)

±30.50) (6.91 ±25) (4.43 ±26.29)

(3) (6.07) (5.27 ±21.98)

(40.89 ±226.40) 90 (5.27 ±78.02)

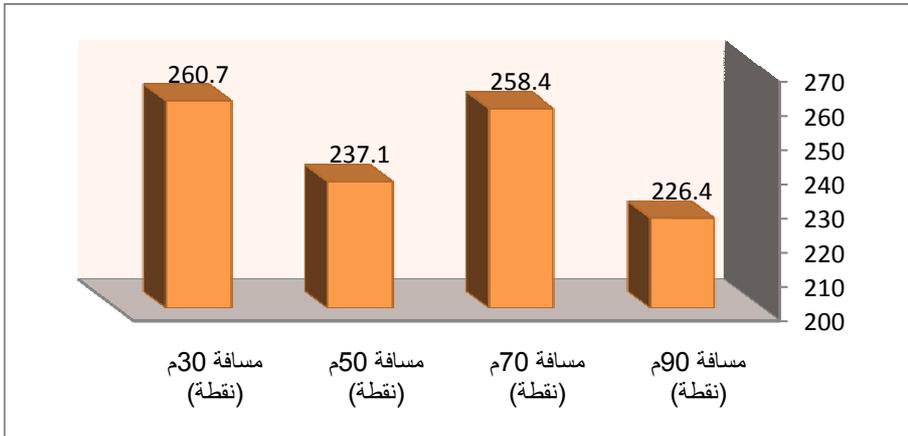
(32.10 ±260.70) 30 ±28.70) (3.34 ±80)



(1)



(2)



(3)

(3)

()

30	50	70	90	
0.15	0.30-	0.35-	0.01	()
0.30-	0.10-	0.04-	0.01-	()
0.04-	0.24-	0.05-	0.12	()
**0.72	0.36	0.21	*0.59	()
0.27	0.07-	0.03	0.30	()
0.31	0.05	0.12	0.38	()
0.19	0.26-	0.01	0.14	(2 /)
0.39	0.02	0.01-	0.37	()
0.39-	0.02-	0.01	0.37-	()
0.36	0.01	0.06	0.38	()
0.18-	0.36-	0.02-	0.01	()
0.03-	0.37	0.22	0.01-	()
0.02	0.26-	0.07-	0.10	()
0.33	0.06	0.03-	0.30	()
*0.60-	0.11-	*0.60-	*0.67-	()
0.08-	0.06	*0.57-	0.09-	()
**0.72-	0.45-	0.54-	**0.72-	()
0.40-	0.02	0.13-	0.08-	()

.(0.05) *
 .(0.01) **

(3)

)
 90 ()
 70 (0.67 ==) (30 50 70 90)
 (0.60 - =)
 .(0.60--=) 30
 (0.05))
 70 (0.05)
 (0.01) 90 (0.59=)
 90 30 (0.01)
 (0.72--=) .(0.72=)
 .(0.72--=) 30
 (0.05)

(4)

()

()	" "	()	" "			adj.R ²	(R ²)	(R)		
*0.011	3.30-	*0.006	11.95	28.23	57.6	0.52	0.576	0.76		90
*0.043	2.47-			22.07	19.7	0.71	0.773	0.88		
*0.009	3.44-	*0.000	27.92	20.19	59.7	0.55	0.597	0.77		70
*0.004	4.28-			11.35	29.2	0.86	0.889	0.94		
*0.019	2.95-	*0.019	8.68	21.72	52	0.46	0.52	0.72		50
*0.029	2.66-	*0.029	7.05	24.83	46.8	0.40	0.468	0.68		30

.(0.05) *

(4)

(2 / 26.29) (0.05 90)

-18.1 (Meredith and Welk, 1999) 2 / 25 .(19.7) (57.6)

(0.05 70)

(25.8.26.1) .(1996) (30.6) (59.7) (29.2)

50 (0.05 50) (52)

30 (0.05 30) (46.8)

(1993) (25)

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. 30 70 90

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	(30)	(50)		(2002 2006)
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	(0.05)			(59.7)
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	90			
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		(0.05)		" " " "
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		70		(0.05)
		(59.7)		
		(29.2)		(0.40 -0.86)
)			.6	" "
		(0.05)		
(52)		50		
				" "
	30			" "
	(46.8)			
:			.1	(90)
				(70)

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The Relationship between Some Physical Measurements, Characteristics, and Skill Performance of Saudi Bow and Arrow Players.

*Ali Mohammad Jbbari**

ABSTRACT

This study aimed to identify the relationship between physical, measurements, characteristics, and skill performance of Saudi bow and arrow players. In addition to identify the best elements that contributed in predicting the level of skill performance. The sample of this study contained (10) players whom forming the Saudi team of bow and arrow (men).

The results of the study indicated that there is a significant relationship of the level of (0.05) between the thickness of skin of the triceps muscles with the level of skills performance at shooting distance of (90, 30m), the results also a indicated significant negative correlated relationship at the level of (0.05) between the push-ups test and the skill performance at the distance of (90, 70, 30m), there is also a significant negative relationship at the level of (0.05) between the strength of leg muscles and the skill performance at the distance of (70 m), and also there is a same type of relationship at the level of (0.01) between the endurance and skill performance level at the distance of (90.30m).

The study results indicated also that there is a predictable significant relationship between skill performance of bow and arrow players at the distance of (90m) and muscular endurance with an affect ratio of (57.6%), and with legs muscular strength with an effect ratio of (19.7%), and at the distance of (70m) with an effect ratio of (59.7%). Also between muscular endurance (29.2%), and skill performance level at the distance of (50 m), with an effect ratio of (52%), and the distance of (30 m) with an effect ratio of (46.8%).

Keywords: Physical Characteristics, Level of Performance Skills, Bow and Arrow Sport.

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