

:

:

:

jnsaraji@tums.ac.ir:

:

:

/ / :

/ / :

:

:

SPSS

(% / ± / )

:

(% / )

(% / )

( $p < /$  )

:

-

-

-

:

Reliability

Validity

Rose Hart

Intra tester reliability

S1 L1

Icc= /

(Hart and rose 1986)

Hinman

( )

( )

(IK)

(IL)

(IL)

(IK)

(ICCS) Intraclass

( )

/

Lovell / ICCS / IK  
 Inter tester Intra tester ICCS . IL  
 / IL  
 /  
 inter tester reliability  
 ( )  
 Icc= / Icc= /  
 inter tester reliability  
 (Lovell 1989) (Hinman 2003,2004)  
 Uoudas Harrison  
 intra tester Interexaminer,  
 Icc= / Interaexaminer  
 Uoudas ) (< / ) Interaexaminer  
 (1995 Interaexaminer  
 Frey Burton / )  
 Uoudas Bennet ( /  
 Leavine (ICC< / )  
 ( ) (Harrison 2005)  
 Walker  
 Intra tester  
 ICC = / reliability  
 (walker 1987)

cm

/ ± /  
/ ± /  
/ ± /  
/ ± /

( )  
( )

.( )

T-test

(% / )

(% / )

(% / )

(% / )

(% / )

(% / )

SPSS

Microsoft Excel

.( ) (p < / )

.(p < / )

.( )

.( )

.(% / )

( / )

( / )

(% / / )

.(% / )

(p = / ) .

/ )

( /

.(% / / )

) % /

.(

/ ± /

( )

/ ± /

/ ± /

/ ± /

.( )

/

t

(p < / )

.(p = / )

( )

-

% / )

( )

(% /

/

-

t

/

-

( $p < /$  )

) /

-

( / / :%

MSDs

( )

-

( )

/ / )

(

( $p = /$  )

(% / )

( $p = /$  )

% / )

(% /

% / )

(% /

ok

/ Levine / Hart  
Uoudas. /

/

Uoudas

/ /

/ /

/ /

/

/ /

/ / )

(

( )

( )

CKD

Back school



---

-

P_value			
	( )	( )	( )
/	( / )	( / )	( / )
/	( / )	( / )	( / )
/	( / )	( / )	( / )
/	( / )	( / )	( / )
/	( / )	( / )	( / )
/	( / )	( / )	( / )
/	( / )	( / )	( / )
/	( / )	( / )	( / )
/	( / )	( / )	( / )

---

-

P_value			
	( )	( )	( )
/	( / ) /	-	( / ) /
/	( / ) /	( / ) /	( / ) /
/	( / ) /	( / ) /	( / ) /
/	( / ) /	( / ) /	( / ) /
/	( / ) /	-	( / ) /
/	( / ) /	( / ) /	( / ) /
/	( / ) /	( / ) /	( / ) /
/	( / ) /	( / ) /	( / ) /

---

---

P_value				
	( )	( )	( )	
/	( / ) /	( / ) /	( / ) /	( )
/	( / ) /	( / ) /	( / ) /	( )
/	( / ) /	( / ) /	( / ) /	( )
/	( / ) /	( / ) /	( / ) /	

---

=

---

P_value				
	( )	( )	( )	
/	( / ) /	( / ) /	( / ) /	( )
	( / ) /	( / ) /	( / ) /	
/	( / ) /	( / ) /	( / ) /	
	( / ) /	( / ) /	( / ) /	
/	( / ) /	( / ) /	( / ) /	( )
	( / ) /	( / ) /	( / ) /	
/	( / ) /	( / ) /	( / ) /	
	( / ) /	( / ) /	( / ) /	
/	( / ) /	( / ) /	( / ) /	( )
	( / ) /	( / ) /	( / ) /	
/	( / ) /	( / ) /	( / ) /	
	( / ) /	( / ) /	( / ) /	

---

Harrison, DE., 2005. Sagittal skin contour of the cervical spine: interexaminer and intraexaminer reliability of the flexicurve instrument, *J manipulative physiol ther.* **28**(7), pp. 516- 9.

Hart, DI. and Rose SJ., 1986. Reliability of a noninvasive method for measuring the lumbar curve. *J.O.S.P.T.*, **8**(4), pp. 180-4.

Lovell, FW., 1989. Reliability of clinical measurement of lumbar lordosis taken with a flexible ruler. *Phy ther*, **69**, pp. 96-105.

Hinman, M.R., 2003-2004. Interrater reliability of flexicurve postural measures among novice users.

Uoudas, YW., 1995. Reliability of measurement of lumbar spine sagittal mobility obtained with the flexible curve. *Jospt*, **21**, pp. 20-31.

Walker ML., 1987. Relationship between lumbar lordosis pelvic tilt and abdominal muscle performance. *The Phy.* **67**(4), pp. 512-16.

OCRA

( )