

:

:

:

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 testerreliability
 (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

()