### **CHAPTER 4**

### **RELIABILITY STUDY**

# 4.1 Reliability of the lumbopelvic stability test

The lumbopelvic stability was evaluated using pressure biofeedback unit. The reliability of the lumbopelvic stability was tested in 20 subjects. Measurement was carried out twice with one hour between sessions. The finding showed that 15 subjects failed both tests, four subjects passed both tests, and only one subject failed the first test but passed the retest (table 4.1).

Table 4.1 Test-retest repeatability of lumbopelvic stability test

		Total			
		pass	failed	1000	
Test	pass	4	0	4	
	failed	1	15	16	
Total		5	15	20	

Intra-examiner reliability was assessed using kappa coefficient. The value of 0.86 represents excellent agreement within the same examiner (table 4.2). The result represents the repeatability of lumbopelvic stability test by the same examiner.

Table 4.2 Kappa coefficient for intra-examiner reliability test

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of agreement Kappa	0.86	0.14	3.88	0.00
N of valid cases	20			

# 4.2 Reliability of the flexibility test

Flexibility was measured using sit and reach test. The method was performed according to YMCA guidelines. All of subjects were instructed to warm up before testing by walking at comfortable speed for five minutes. The measurement was performed on two times with one hour between sessions.

The reliability of the flexibility was evaluated using ICC (1,1). High correlation between test and retest was found with ICC = 0.979, which supported the stability of the measure and the reliability of the examiner when performed this test.

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