

## Lab 12: Practice Variability

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Purpose:** The purpose of this lab is to demonstrate the variability of practice principle.

**Equipment:** 4 kinesthesiometer apparatus and 1 linear slide apparatus

**Variables:** Independent variable is form of practice (variability versus constant) and the dependent variable is positioning movement.

**Procedure:** Divide your lab group into two groups of students. The first group will be the variability practice group. The second group will be the constant practice group.

**Kinesthesiometer Apparatus:** The variability group members will practice according to the randomized schedule provided in the scoring table where they will move 15 degrees, 35 degrees, and 50 degrees using the kinesthesiometer. The constant group members will practice 30 trials learning to move 35 degrees.

All the members will be blindfolded and seated before the kinesthesiometer apparatus. The preferred arm is placed on the tray, with the tray length adjusted to the subject's arm. The tray is positioned at 0 degrees. From this point, the subject will be asked to move the tray the appropriate number of degrees. KR in the form of error information long or short of the criterion *will be given each trial*. After each trial, the tray is held in position while a reading is taken, then move back to the 0 degrees by the experimenter. There should be at least a 5 second interval between trials. After completion of the 15 acquisition trials, 5 additional retention trials will be given. All the retention trials will be at 25 degrees.

**Linear Slide Apparatus:** The variability group members will practice according to the randomized schedule provided in the scoring table where they will move 15 cm, 35 cm and 50 cm using the Linear Slide Apparatus. The constant group members will practice 30 trials learning to move 35 cm.

All the members will be blindfolded and seated before the linear slide apparatus. The preferred arm is placed on the tray, with the tray length adjusted to the subject's arm. The tray is positioned at 30 cm. From this point, the subject will be asked to move the tray the appropriate number of cm. KR in the form of error information long or short of the criterion *will be given each trial*. After each trial, the tray is held in position while a reading is taken, then move back to 30 cm by the experimenter. There should be at least a 5 second interval between trials. After completion of the 15 acquisition trials, 5 additional retention trials will be given. All the retention trials will be 25 cm (linear slide apparatus).

**Data:** The 15 acquisition trials will be divided into 3 blocks of 5 trials each: 1-5, 6-10, and 11-15. Constant error (CE) and variable error (VE) for 3 blocks of acquisition and 1 block of retention trials will be calculated for two conditions. Then the acquisition and retention average block CE and VE scores for each group will be calculated. Use the data form below in data collection and reporting means. Remember to record the

direction (-/+) and magnitude (score) of error from the criterion score as your dependent measure. Record your practice and retention trials on the subject score sheet below.

Table 1: Individual Score Sheet

Constant Group			Variability Group		
Trial	Distance	Score	Trial	Distance	Score
1	35		1	15	
2	35		2	50	
3	35		3	35	
4	35		4	15	
5	35		5	50	
Sum	-		Sum	-	
CE	-		CE	-	
VE	-		VE	-	
6	35		6	35	
7	35		7	15	
8	35		8	35	
9	35		9	15	
10	35		10	50	
Sum	-		Sum	-	
CE	-		CE	-	
VE	-		VE	-	
11	35		11	50	
12	35		12	35	
13	35		13	50	
14	35		14	15	
15	35		15	35	
Sum	-		Sum	-	
CE	-		CE	-	
VE	-		VE	-	
T1	25		T1	25	
T2	25		T2	25	
T3	25		T3	25	
T4	25		T4	25	
T5	25		T5	25	
Sum			Sum		
CE			CE		
VE			VE		

**Average Data**

VARIABILITY PRACTICE

CE: B1. \_\_\_\_\_ B2 \_\_\_\_\_ B3 \_\_\_\_\_ T1 \_\_\_\_\_

VE: B1. \_\_\_\_\_ B2 \_\_\_\_\_ B3 \_\_\_\_\_ T1 \_\_\_\_\_

**Average Data**

CONSTANT PRACTICE

CE: B1. \_\_\_\_\_ B2 \_\_\_\_\_ B3 \_\_\_\_\_ T1 \_\_\_\_\_

VE: B1. \_\_\_\_\_ B2 \_\_\_\_\_ B3 \_\_\_\_\_ T1 \_\_\_\_\_