EXS 297 Motor Behavior
Individual Differences and Motor Abilities Lab

Introduction
People vary on their ability to perform different skills. A number of factors contribute to the fact that each of us come into a performance situation with unique backgrounds, experiences and genetic profiles. The study of individual differences examines the factors which account for these differences – in particular, one examines the stable, enduring characteristics across individuals. These stable, genetically determined characteristics are known as abilities. Abilities determine one’s potential for performance success. Individuals with higher levels of important abilities for a specific skill have greater potential to be success – with practice of course. The purpose of this lab is to examine several basic tasks to better understand the types of abilities that can contribute to success and to note differences in these ability levels across individuals.

Equipment
Chop sticks, elastic bands, fishing game, left-handed (and right-handed) golf clubs, golf balls, paper cups, hacky sacs, catch-ball toys, stopwatches, paper, pencil.

Procedures
With a partner, circulate around the room and perform each of the following tasks. At each station, perform the task with your nondominant hand/arm and record your scores. In addition, make note of difficulties encountered with your nondominant limb. Was the task easy? Difficult? Why?

Station 1 – Chop Sticks
Using the chopsticks, attempt to pick up the elastic bands with your nondominant hand. See how long it takes you to pick up 5 in a row.
Your score ____________ sec.
Personal comments regarding task:

Station 2 – Hacky Sac
Tossing the sac upward with your nondominant hand, attempt to kick the sac with the top of your nondominant foot so that you can catch it again with your nondominant hand. How many can you catch out of 5 attempts?
Your score ____________
Personal comments regarding task:

Station 3 – Golfing
Using the left-handed golf club (or right-handed club if you are left-handed), attempt to gently stroke the ball into the cup. How many times can you put the ball in the cup in 5 attempts?
Your score ____________

Personal comments regarding task:

Station 4 – Catch ball game
Holding the toy in your nondominant hand, attempt to toss and catch the ball in the cup. How many can you catch out of 5 attempts?
Your score ____________

Personal comments regarding task:

Discussion Questions

1. At your table, compare scores for each of the tasks with others. Did you find differences? Why? Why did some people find the tasks easier?

2. What abilities were important for success in each of the tasks? Did differing levels of these abilities among those at your table attribute to differences in your scores?

3. Would you have been more successful in doing the tasks with your dominant arm? Why?
EXS 297 Motor Behavior
Creating a Recipe for Skilled Performance†

Directions:
A. From the list provided, identify three motor skills at which you are skilled and three motor skills at which you are unskilled (and have difficulty in performing well).

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<tr>
<th>Proficient Motor Skills</th>
<th>Difficult Motor Skills</th>
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B. Now, attempt to partner up with a classmate who is either proficient in a skill you find difficult or who is unskilled in a skill for which you are skilled.

C. Complete the table below for your skill so that you both gain a better understanding of your abilities and what is necessary for success in your skill.

Motor Skill: ____________________________________

In detail, describe the task/skill:

What is the goal of the movement?

What basic actions are required?

What contributing factors are involved (from table 2.1 in text)?

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<tr>
<th>Factor</th>
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