Laboratory # 1

Skill Acquisition

Introduction: Paul M. Fitts says that learning moves through three stages (1) cognitive (2) fixation period (3) autonomous. During this lab, you should observe behavioral changes associated with motor learning. This assignment requires two types of data: (1) the subject’s performance (2) recording of your subject’s thoughts, opinions and evaluations about the learning process.


Problem: To examine motor learning development by learning to juggle three silk scarves in two hands.

Procedure:

1. Attempt to juggle three silk scarves continuously in both hands in a daily practice period of 5 minutes duration on each of 5 consecutive days.
2. At the end of each practice period record your frustrations, problems, pleasures, insights and comments about the method. Do not discuss this experience with classmates. Concentrate on your own thoughts and performance.

Results:
Day 1: 57, 116, 100, 39, 35, 17, 11, ---Average 53, Range 105, Total 375
Day 2: 92, 370, ---Average 231, Range 278, Total 462
Day 3: 215, 306, ---Average 260, Range 91, Total 521
Day 4: 533, ---Average 533, Range 0, Total 533
Day 5: 542, ---Average 542, Range 0, Total 542

![Juggling Progress Graph]
Observations:

**Day 1:** Today was our first trial of juggling. It was a little frustrating because it has been a while since I have juggled scarves. I started out really slow and I was moving all over the gym trying to keep juggling my scarves. I kept motivating my self to try and beat the number of consecutive tosses I had in a row. I started to feel a little fatigued but not much. I think I did a pretty good job for the first day of juggling. The conditions we had in the gym were the lights were on and the only distractions were having others trying to juggle in a small area.

**Day 2:** The number of trials dropped to only two today. I also increased my total of tosses. Juggling was a lot easier for me today. I had more confidence and I started to juggle a lot faster. I found it fun and exciting trying to get as many consecutive tosses in a row. The lights were off in the gym, which made the environment different, but I don’t think it bothered me too much.

**Day 3:** Today the number of trials stayed the same for me, but my total increased. I’m gaining confidence and speed with my juggling. I didn’t feel at all fatigued during the five minutes. The different environment I had today was the light was off and there was music playing in the background. The music had a constant tempo, which helped me keep a beat. I also had to count for myself, but I think it also helped me keep a beat and a constant pace.

**Day 4:** I did my juggling today in my room. I think this helped me out a bunch since I was in an environment all by myself without distractions. Also, I found that if I focused on dropping the scarves right in front of my head I could increase my speed and my accuracy of juggling. I improved on my trials and I did not miss a toss today. I also increased my number of tosses. I have gained total confidence in juggling and my performance has improved so much.

**Day 5:** I did my juggling in my dorm room again today. I also did not drop a single toss today, but I did improve on my total tosses for five minutes. I had the same amount of confidence as I did yesterday and I felt like I was in complete control while I was juggling. I didn’t have any fatigue as I juggled and I had a fun time juggling today.

Discussion:

1. What I learned about learning a motor skill was that is easier to learn it in a step-by-step process. When starting out learning a motor skill such as juggling, you need to have patience and determination to keep improving in the skill. It is easy to learn juggling also using the whole-part-whole teaching procession. This was a good lab because it taught us educators about showing how to juggle, breaking it down, and then having each student juggling on their own. It is much easier to learn a motor skill this way.

2. First of all, I had a lot of previous knowledge of juggling because I learned juggling at a young age. But, with repetition of the skill I found that I improved. I also learned about the whole-part-whole breakdown of juggling which will be useful to me in the future. As I juggled the 5 consecutive days, I found the more I practiced the easier it became.

3. During the 5 consecutive days of juggling my trials decreased and the total number of my tosses increased. I become more comfortable with juggling and
improved every day I performed the skill. My range fluctuated a bunch only because there were a large number of tosses for very few trials. Also, the range stayed the same for the last 2 days because I was able to juggle for 5 minutes straight.

4. I learned that it is easier to juggle with a positive attitude. Also if you have confidence in yourself and are motivated to beat the previous record that you set from before, you will improve over the five days of juggling. At first juggling is a little frustrating because you need complete concentration on the skill, but once you start to perfect the skill it becomes fun. Fatigue didn’t bother me too much because my arms are used that type of motion. Also my performance improved and I excelled the last two days because I have juggled before and I have become good at it.

Conclusion:
I enjoyed the lab test of juggling because I like to juggle. Like what was covered in the textbook, many things determine if you will succeed at juggling. Speed and accuracy is a key role in juggling and so is performance curves and fatigue. Juggling is an important motor skill to learn and is something that should be incorporated into each physical education class.

Resource: