

Chapter 8: motor learning and control



**ASSIGN
BUSTER**

motor learning concerned with the interactions of all the body's systems physical structure

ON CHAPTER 8: MOTOR LEARNING AND CONTROL SPECIFICALLY FOR YOU FOR ONLY \$13.90/PAGE Order

Now physiological function psychological/mental cognitive functioning motor control biomechanics

physical components of the skill

without the psychological component discrete movements have a distinct beginning and a distinct ending (tennis serve, golf swing, shooting a basketball, writing your name) continuous movements have no distinct ending and cannot be completely preplanned (attempting to catch a parakeet in a cage, tackling in football, guarding an opponent in basketball) closed environments relatively stable such that conditions do not change from moment to moment (bowling) open environment the conditions are continually changing (tennis, football, etc.) cognitive stage not only do we need to learn the gross motor skills, but also what stimuli (sounds, colors, etc.) ignore and which to focus upon associative stage focus on refining the skill and being more efficient or accomplished autonomous stage muscle memory motor program (engram) specific learned motor patterns stored in the brain interference theory of memory proactive interference retroactive interference proactive interference what you do before retroactive interference after context effects on learning things that are happening around you

environment

external context

internal context serial position curve the first and last items will be remembered best

primacy effect

recency effect
jost's law if two memories are a different age, a new

repetition/experience will be more beneficial to the older memory

strength paradox the weaker the memory trace the more beneficial a

repetition/experience will be to it (the newer the memory the less

beneficial) von restorff effect if you can do something that you can make

unique you will have the tendency to remember it

selective attention the ability to focus on relevant information and not focusing on irrelevant

information over exclusive stage ages 2 - 6 year over inclusive stage ages 6 -

9 years selective attention 9 - 12 years speed-accuracy trade off as we increase

the speed with which we do something, we tend to increase the number of

errors we make

fitt's law also known as speed-accuracy hick's law the time it

takes for a person to make a decision is a function of the possible choices he

or she has available knowledge of result to extent to which a response

accomplished the intended movement goal knowledge of performance

information received about the actual performance and execution of the movement

intrinsic feedback usually gained through senses

extrinsic feedback information gained from external source such as coaches, teachers, special devices (camera, pictures, etc.)