

# [Chapter 8 motor behavior](https://assignbuster.com/chapter-8-motor-behavior/)

Define motor behaviorthe study of how motor skills are learned, controlled and developed to assist people as they practice and experience physical activityMotor behavior guides us in:- providing better situations for learning and practice
- understanding why some cues and feedback are better than othersWhat are the goals of motor behavior? 1. to understand how motor skills are learned
2. to understand how motor skills are controlled
3. to understand how the learning and control of motor skills change across the life spanSubdisciplines of motor behaviormotor learning, motor control and motor developmentWhat are the goals of motor learning?- To explain how processes such as feedback and practice improve the learning and performance of motor skills
- To explain how response selection and response execution become more efficient and effectiveWhat are the goals of motor control?- To analyze the mechanisms of response selection and response execution control the body's movement
- To explain how environmental and individual factors affect the mechanisms of response selection and response executionWhat are the goals of motor development?- To explain how motor learning and control improve childhood and adolescence
- To explain how motor learning and control deteriorate with agingExamples of motor behavior beyond sports- babies learning to use for and spoon
- dentists learning to control the drill while looking in a mirror
- surgeons controlling a scalpel
- children learning to ride a bike
- pilots learning to control an airplane
- children learning to control a pencil for writing5 themes that have persisted over the years in motor behavior research1. knowledge of results (feedback)
2. distribution of practice
3. transfer of training
4. retention
5. individual differenceGlassow, Rarick, and Espenschade's research focused on... how children acquired motor skills:
- formation of movement patterns
- effect of growth on motor performanceWho was Father of Motor Behavior and what was his theory? Franklin Henry, Memory Drum Theory stated that reaction time was slower complex movements because those movements took more planning time. 1960sHistory of motor behavior from 1970s to present- The influence of growth and maturation on motor performance
- Developmental patterns of fundamental movements
- Information Processing Theory
- The study of motor learning and control in childrenDescribe the different types of motor behavior research studies.- Between Group: different treatment/intervention; test on same task
- Within Group: same, multiple treatments; test on same task
- Descriptive: no treatment, participants are measured or observedAdvantages and disadvantages of novel learning tasks in early stages of learning- allows to study improvement and have helped us understand a great deal about how movements are learned
- However, outcome of movement (product)t is studied rather than nature of movement (process)
- NOT helpful in researching PA or sport tasks in which performers have had thousands of trialsLearning = retention and transferTransfer = doing slightly different version of the task2 important variable for motor learningpractice and feedbackCorrect practice-- improves performance and supports learning.
Before practice:
- goal setting
- intructions
- demonstrations
- mental practice
During practice:
- scheduling of practice
- context of practiceFeedbackGoal: helps performers detect and correct own errors
Intrinsic- information obtained by self
Extrinsic- information provided by outside source (teacher, coach)Knowledge of Results vs. Knowledge of Performance
Which would be more helpful for novice or expert? Novice- KoP
Expert- KoRWhat is the goal of motor control?- to reduce role of decision-making centers in brain once movement has been initiated to produce things faster. Summary of Motor ControlBrain --> CNS --> Muscle --> MovementMotor Programs- proposed memory mechanisms that allow movements to be controlled
- motor programs become more automatic as they are developed, allowing the performer to concentrate on the use of the movement in performance situations. Goal of developmental motor learning and control- to understand skill acquisition across the life spancontinuous vs discrete- continuous movements
- stopped motion in movementstopics in developmental motor learning and control- Developmental changes in the mechanics of movement
- Life span development
- Experience
- Changing neuromuscular systems across the life spantwo principles of developmental motor learning and control- children are not equal to mini adults
- children are more alike than different ONCHAPTER 8 MOTOR BEHAVIOR SPECIFICALLY FOR YOUFOR ONLY$13. 90/PAGEOrder Now