

Virtual Learning

Effects of fatigue on ankle biomechanics during jumps

Biomechanics of Sports

5/13/2020



Lesson: 5/13/2020

Objective/Learning Target:

1. The student will learn about the effects of fatigue on ankle biomechanics during jumps.

Jumping Fatigue

Fatigue is common during physical activity and can have an effect on ankle biomechanics during different actions, such as a jump.



Jumping Fatigue

What changes in the jumpers performance are actually due to fatigue?

Is fatigue more mental or is it physical in its affect on performance?



Ankle Fatigue

Specifically, what does ankle fatigue affect on a jumpers performance?



Ankle Fatigue

Fatigued ankles in athletes results in a reducing of dorsiflexion, from initial contact to maximum knee flexion at landing, and loss of power during the jump takeoff.



Application

How many jumps does a professional High Jumper take in each competition on average?

How might ankle fatigue create a strategy for starting heights among the competitors?

