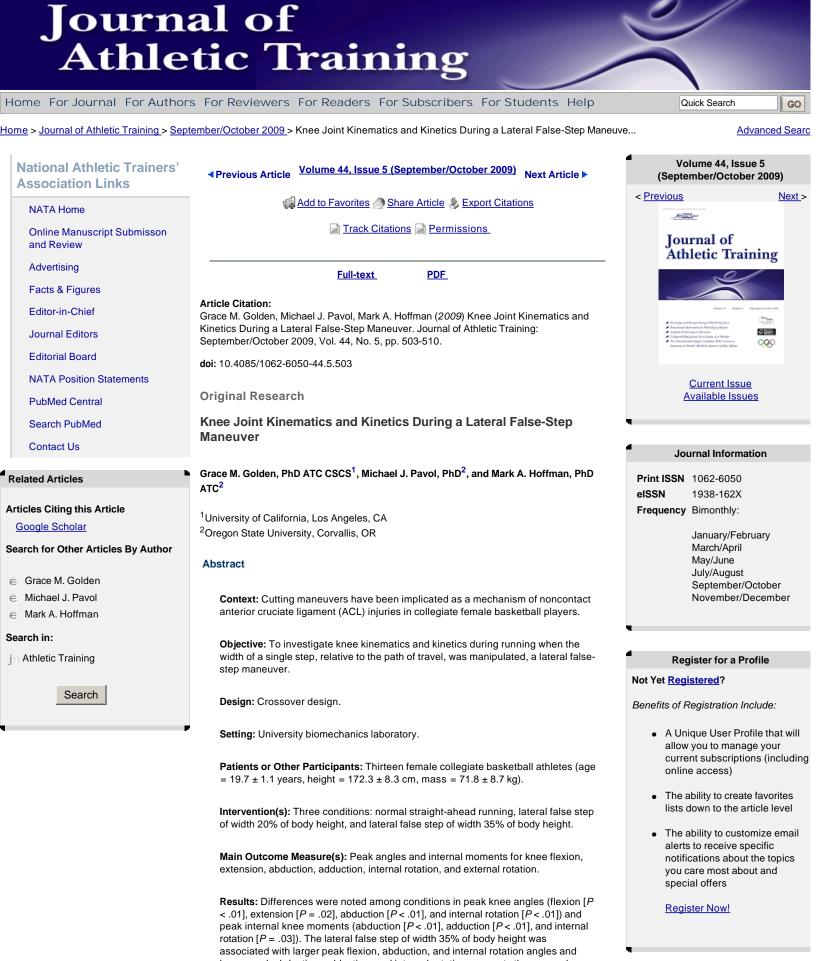
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larger peak abduction, adduction, and internal rotation moments than normal running. Peak flexion and internal rotation angles were also larger for the lateral false step of width 20% of body height than for normal running, whereas peak extension angle was smaller. Peak internal rotation angle increased progressively with increasing step width.

Conclusions: Performing a lateral false-step maneuver resulted in changes in knee kinematics and kinetics compared with normal running. The differences observed for lateral false steps were consistent with proposed mechanisms of ACL loading, suggesting that lateral false steps represent a hitherto neglected mechanism of noncontact ACL injury.

Keywords: noncontact injury mechanisms, anterior cruciate ligament, sidestep cutting

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