

- C. Jessie Jones, Roberta E. Rikli, Julie Max, and Guillermo Nofall. (1998). **The Reliability and Validity of a Chair Sit-and-Reach Test as a Measure of Hamstring Flexibility in Older Adults.** *Research Quarterly for Exercise and Sport*, 69 (4).

The purpose of this study was to examine the test-retest reliability and the criterion validity of a newly developed chair sit-and-reach (CSR) test as a measure of hamstring flexibility in older adults. CSR performance was also compared to sit-and-reach (SR) and back-saver sit-and-reach (BSR) measures of hamstring flexibility. To estimate reliability, 76 men and women (M age=70.5 years) performed the CSR on 2 different days, 2-5 days apart. In the validity phase of the study, scores of 80 men and women (M age=74.2 years) were obtained on three field test measures of hamstring flexibility (CSR, SR, and BSR) and on a criterion test (goniometer measurement of a passive straight-leg raise). Results indicate that the CSR has good intraclass test-retest reliability ( $R=.92$  for men;  $r=.96$  for women), and has a moderate-to-good relationship with the criterion measure ( $r=.76$  for men;  $r=.81$  for women). The criterion validity of the CSR for the male and female participants is comparable to that of the SR ( $r=.74$  and  $r=.71$ , respectively) and BSR ( $r=.70$  and  $r=.71$ , respectively). Results indicate that the CSR test produces reasonably accurate and stable measures of hamstring flexibility. In addition, it appears that the CSR is a safe and socially acceptable alternative to traditional floor sit-and-reach tests as a measure of hamstring flexibility in older adults.