

VALIDATION OF THE MOBILITY SUBSCALE OF THE BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK

Powers GC, Zentner T, Nelson F, Bergstrom N.

St. Francis Medical Center, Grand Island, Nebraska, USA.

BACKGROUND: The Braden Scale for Predicting Pressure Sore Risk has been tested extensively for reliability and validity, but the validity of each subscale has not been evaluated. Because subscale scores are intended to guide patient care decisions, validity is an important issue. **OBJECTIVE::** To establish the convergent construct validity of the mobility subscale of the Braden Scale. **METHODS:** The study evaluated 16 members at a veterans' home (4 members representing each score on the mobility subscale). Movement, as recorded by a Motionlogger Actigraph, a wristwatch-sized accelerometer and microprocessor that measures physical movement (activity), was measured continuously. Each person wore an Actigraph on the nondominant ankle for 72 hours. **RESULTS:** The mean activity for each of the four subscale score groups was plotted, producing a histogram in which higher scores were associated with greater activity ($F[3, 15] = 31.69; p < .001$, one-way analysis of variance), as expected. Pair wise multiple comparisons between groups showed that only the subgroup with a score of 4 was significantly different in mean activity ($p < .001$) from the other three score groups. **CONCLUSIONS:** Convergent construct validity for the Braden mobility subscale was supported. A larger sample and establishment of a threshold to eliminate minor, ineffective movements from Motionlogger Actigraph measures may distinguish between significant and nonsignificant movement.