

## **ABSTRACT**

### **Interrater and Intrarater Reliability of Seven Selected Sacroiliac Joint Tests**

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#### **Purpose**

The purpose of this study was to determine the extent to which physical therapists agreed with each other (interrater reliability) and with themselves (intrarater reliability) when they employed selected tests in the evaluation of the sacroiliac joint dysfunction among patients with low back and/or buttock pain.

#### **Methodology**

Two research designs were employed in this study. In order to determine the extent of interrater reliability, a two rater correlational design with independent measures was utilized. In order to determine the extent of intrarater reliability, a one rater correlational design with repeated measures was utilized. Independent and repeated measures consisted of the standing and sitting pelvic test for palpation of the PSCSs and ASISs, forward bending test in standing and sitting, and the Gillet's test.

The 20 patients who participated in the study met the criterion of sacroiliac joint dysfunction and were compatible with the other inclusion and exclusion criteria. Physical therapists who participated in the study were the researcher and a professional colleague.

The data analysis technique utilized with each of the research designs was the kappa statistic, which produced a measure of agreement that was corrected for chance. Degree of agreement was tested statistically and in relation to a classification system in which kappa statistics that were 80% or greater were considered favorable; between 79% and 40% were considered acceptable.

#### **Findings**

In two of the reliability tests the results were statistically significant. First, interrater reliability was demonstrated to a statistically significant extent on the sitting pelvic test for palpation of the ASIS. Second, interrater reliability was demonstrated to a statistically significant extent on the Gillet's test. With the exception of two of the intrarater reliability comparisons, all the other reliability statistics were strong enough to be classified as 'acceptable', even though they did not achieve the degree of agreement needed to be considered statistical significant.

## **Conclusions**

Literature cited by the researcher was not in agreement to begin with, although her findings tended to agree with those of previous researchers who found results that were either statistically significant or acceptable. Recommendations for further research focused on screening potential patients to insure they do have a true sacroiliac dysfunction, developing an assessment protocol that accurately specifies the approach to palpating bony landmarks, and studying the relationship between changes in soft tissue and the perception of changes in boney landmark symmetry.