

# The Effect of Eight Weeks of Selected Sensorimotor Exercises and Comprehensive Postural Reeducation on Lumbar Lordosis Angle and Postural Control in Women with Lower Crossed Syndrome




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## 1. Round 1

### 1.1 Reviewer 1

Reviewer:

You state that core stability exercises “have long been considered a key therapeutic strategy,” but it would strengthen the argument to include more recent systematic reviews or meta-analyses beyond the 2021 references. Consider updating with 2023–2025 literature to ensure the introduction reflects the most current evidence base.

The formula [ $\theta = 4 \times \arctan(2H/L)$ ] is provided but not referenced. Please cite the original validation study or guideline for using this equation with a flexible ruler to allow replication.

You describe “meaningful improvements” but do not provide effect sizes for SEBT outcomes. Including partial eta squared or Cohen’s d would quantify the magnitude of change beyond p-values.

The pretest covariate accounted for  $\eta^2 = 0.89$  in lumbar lordosis. This is unusually high and suggests most variance is explained by baseline. Discuss the potential for regression to the mean and its impact on interpretation.

This section introduces prayer-based programs but does not link directly to LCS or the studied interventions. Clarify the rationale for including this cultural adaptation note or consider integrating it with a clear translational recommendation.

Authors revised the manuscript and uploaded the updated document.

## 1.2 Reviewer 2

Reviewer:

The recruitment strategy is described as “purposive and convenience sampling,” yet participants were “randomly assigned” to groups. Please clarify how randomization was conducted after a non-probabilistic recruitment process to avoid selection bias concerns.

The exclusion criteria mention “neurological involvement signs,” but no standardized neurological screening tool or test battery is cited. Specify which assessments were used to confirm the absence of neurological disorders.

The postural control differences between postural reeducation and control groups are not significant. Consider explicitly discussing the clinical relevance of these non-significant findings rather than focusing only on statistically significant contrasts.

While citing Hayat et al. (7) and Rafique (6) is appropriate, these populations differ (mechanical low back pain vs postpartum women). Discuss the generalizability limitations of comparing LCS to these other conditions.

The interpretation of greater non-dominant leg improvement is interesting but speculative. Consider referencing neuromuscular adaptation literature to substantiate this asymmetry claim or acknowledge it as a hypothesis needing confirmation.

Authors revised the manuscript and uploaded the updated document.

## 2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.