

## Effectiveness of Safe Movement Training for Changing Activity Behavior, For Individuals with Osteoporosis

The purpose of this study was to evaluate the effectiveness of one safe movement training program for changing activity behavior in individuals with osteoporosis, as measured by the Spinal Compression Forces score on the Bone Safety Evaluation. This study also examined whether differences between physical and occupational therapy professional orientations impact intervention and lead to different treatment outcomes.

The study involved retrospective review of 125 client charts at the United Osteoporosis Centers. All of the participants had a diagnosis of osteoporosis or osteopenia and participated in the safe movement training program. Results of this study demonstrate that safe movement training is effective in increasing spinal compression forces, indicating an improvement in the adoption of safe movement behavior. Treatment outcomes were not shown to be significantly different for individuals receiving physical or occupational therapy. Further research is necessary to determine if activity behavior change transfers from the clinic to the natural environment.

N=105 (with two tests)	M	SD	t	df	p
SCF Total 2- SCF Total 1	4.24	3.36	-12.94	104	.00

Paired samples t-test: Differences in SCF Total Scores

Group	n	M	SD	t	df	p
<b>Physical Therapy</b>						
SCF Total 1	65	5.29	2.45			
SCF Total 2	65	9.34	3.03			
Difference	65	4.05	2.99	-10.92	64	.00
<b>Occupational Therapy</b>						
SCF Total 1	40	4.83	3.14			
SCF Total 2	40	9.38	3.19			
Difference	40	4.55	3.90	-7.37	39	.00

Paired samples t-test: SCF Total Scores, Sorted by Discipline

Mean initial scores for the group who received physical therapy were 5.29 (SD=2.45), while the scores for the group who received occupational therapy were 4.83 (SD=3.14). After Safe movement training both groups increased their score to approximately 9.3.

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