EVALUATION AND COMPARISON OF IMMEDIATE EFFECT OF THE ORTHOPEDIC SHOE WITH VIBRATION MECHANISM ON BALANCE PARAMETERS IN ELDERLY AND YOUNG SUBJECTS.

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RESULTS
In two groups, there was a tendency to lower COP parameters while wearing shoe with vibration mechanism. There was reduction in COP variables especially with eyes-closed and foam surface by using vibration in healthy elderly subjects and this effect was greater in young subjects with decreased plantar foot sensation. The vibration significantly improved performance on Berg Balance Test (P=0.005; SMD: -0.6, confidence interval (CI): -1.42 to -0.21), but there was not significant changes on TUG in healthy elderly subject with wearing vibrating shoe (P=0.059; SMD: 0.23, CI:-0.57 to 1.03)

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KEYWORDS
Foot orthoses, Insole, Shoe, Medical shoe, Balance, Falling, Elderly, Vibration, Aging.
CONCLUSION
This study showed that subthreshold vibration can improve static and dynamic balance in elderly people and young people with decreased plantar foot sensation. Using these shoes in patients with plantar sensation problems such as diabetes and neuropathy may be useful. Therefore, it is suggested that future studies to assess the efficacy of vibrating shoe in patient with neuropathy to illustrate clinical value of this footwear.