

## Article Abstract

Title:	Effect of multi axis vibration and subject postures on sketching distortion
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Abstract:	Sedentary activities such as reading, writing, sketching, etc. are affected due to the train vibrations. Therefore, the present study investigates the extent of perceived difficulty and distortion in a sketching task by seated subjects in two postures under low frequency, multi axial random vibrations. Thirty male voluntary subjects sketched geometric figures such as rectangles, circles and triangles in two sitting postures while exposed to multi-axis stimuli of vibration magnitudes 0.4, 0.8 and 1.2 m/s <sup>2</sup> r.m.s. in 1–20 Hz frequency range. Performance was evaluated both subjectively and objectively by two specifically designed objective methods. The deviation in distortion with respect to the given figures is represented in terms of percentage distortion. The percentage distortion and sketching difficulty increased with an increase in vibration magnitudes and was affected more while sketching on table. The sketching difficulty was found independent of geometric figures.
Keywords:	whole body vibration, multi axis vibration, distortion in sketching.