

## Effect of bracing pattern of guitar's front plate on modal behaviour

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## ABSTRACT

Teaching and training of spatial orientation and mobility (SOM) is an important element of their education. Despite progress in supporting equipment technology and study on spatial orientation, blind people use still old, not always effective methods. Therefore, a method of SOM training based on environmental sounds may be a huge step in "opening" a surrounding world for them. The method will be a supplement, not a substitution, of a popular orientation method based on a white cane. A basic tool for the method is 'a library of sound events and vibrations'. In the library both vibration and acoustic signals, which may be helpful or disturbing for SOM are collected as well as specific sounds of places and objects, which are often visited by persons with disabilities of sight. In the first step an identification of necessary signals was done, i.e. a questionnaire about various aspects of signals helping/disturbing spatial orientation was administered to blind and visually impaired. In the next step potential signals for recording were classified according to estimated level of teaching. Next, signals were recorded using artificial head or in-the-ear microphones at the attitude of 1.6 m and 0.9 m. A survey of collected signals and their classification will be presented.

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