

Rumore e attività lavorativa negli uffici

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KEY WORDS

Noise annoyance; acoustic survey; noise indices

SUMMARY

«**Noise and office work**». **Background:** *The problem of the assessment of noise annoyance in the workplace has long been a topic of discussion. Several studies led to the definition of a set of descriptors suitable to describe noise in the workplace and its effects in terms of annoyance of the subjects exposed.* **Objectives:** *The aim of the study was to analyse the performance of different indices in terms of correlation with subjective sensation, taking into account those indices which combine both the intensity and the spectral quality of noise.* **Method:** *A noise survey was carried out in ten office buildings, covering 85 rooms. Objective measurements of environmental noise were made together with subjective evaluations collected through questionnaires. Subjective ratings were then averaged and correlated with objective parameters. Linear regression analyses were performed in order to assess the reliability of objective noise indices.* **Results:** *The most important sources of noise were face-to-face and telephone conversations. All spectra had excess high frequency content. Regression analysis showed that under these conditions most noise indices provide a reliable prediction of subjective annoyance. However, the best performing parameter was the A-weighted equivalent sound pressure level followed by the Combined Noise Index which combines noise intensity and its spectral quality.*