

tone audiogram screening and the speech in noise test. The people who presented otoscopy without alterations and tympanogram Type A have been included in the study. After the initial evaluation, all the people have undergone a hearing training programme of 10 sessions during 5 weeks, where 8 have undergone the speech in noise test (G1) and 8 have undergone the training with a filtered speech test (G2).

**Results:**

Comparing the results obtained before and after the hearing training, we can verify statistically significant differences in the speech in noise test in all the conditions of the test (relation signal/noise 10dB, 15 dB and total) in both ears ( $p < 0,05$ ). As far as the training type is concerned, the G1 reveals statistically significant differences in all the conditions of the test ( $p < 0,01$ ). As far as the G2, only statistically significant differences are observed in the left ear in the condition signal/noise 10dB ( $p = 0,006$ ).

**Conclusions:**

The hearing training revealed improvement in the hearing processing abilities, namely in the discrimination of speaking in noisy ambiance in seniors.

## Study of hearing processing in seniors before and after hearing training

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**Introduction:**

The Central Auditory Processing (CAP) corresponds to the perception of the hearing information in the Central Nervous System and to the neurobiological activity involved and is carried out through a set of stages characterized by specific abilities on which the person depends to interpret what he hears. With aging, alterations at the level of perception and detection of the sound in the central and peripheral system occur and have effects on the senior's communication process. The hearing process permits to minimize the difficulties in the information processing and to enhance the identification and discrimination of sound patterns.

**Objectives:**

This study aims at evaluating the effect of hearing training on the seniors speaking comprehension skills.

**Methods:**

The sample consists of 16 people, aged from 58 to 91. All the people have undergone an otoscopy, a tympanogram, a pure