

Editorial

Aging and Auditory Distraction



Many colleagues cling tenaciously to the conviction that the myriad and complex listening problems of elderly persons can be explained in large measure by loss of sensitivity to high-frequency sounds in the auditory periphery. This leads, inevitably, to the correlative conviction that selective amplification of high-frequency sounds is the appropriate solution to the problem. But in this issue of *JAAA*, Amy Fisher, Murvin Hymel, Jerry Cranford, and Albert DeChiccis remind us that the listening problems of elderly persons may be more complicated. They compared listeners in two age groups (young and elderly) on a speech recognition task directed to one ear in the presence of speech competition to the opposite ear. By means of topographic brain mapping procedures, they studied the N_1 and P_2 components of the evoked potentials (EPs) generated by an “oddball” stimulus train of “da”s and “ga”s. The

speech competition had no effect on the N_1 component of the EP in either group but produced a significantly greater reduction in the amplitude of the P_2 component in the elderly group than in the young group. The fact that the effect was seen for a later but not an earlier EP component suggests that the effect of the competition on speech processing was at a stage of processing later than peripheral analysis.

Listening problems in the presence of competing sounds in the environment are common to virtually all hearing-impaired individuals, but they are particularly troublesome to elderly hearing aid users. Fisher et al. herein provide additional evidence that “specific, age-related electrophysiologic changes may be observed in the human brain when listeners are distracted by competing sounds.”

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