Another Gender Difference?

Why is there so much variation in the benefit that different individuals obtain from the use of amplification? This question has plagued audiologists for more than half a century. Clinicians have often noted that, even though two persons may have similar degrees of loss, one will be a successful user whereas the other will not seem to get much benefit from amplification at all. More than a decade ago, Anna Nabelek and her research group at the University of Tennessee–Knoxville thought that a crucial factor might be the maximum amount of background noise that the user could tolerate when listening to speech. To quantify this level, Dr. Nabelek and her colleagues devised a measurement procedure in which listeners adjust the level of running speech to comfort level (MCL), then adjust background noise to the level they are willing to accept while listening to the running speech (BNL). Acceptable noise level (ANL) was then defined as the difference between MCL and BNL (MCL-BNL). The hope was that differences in ANL would predict differences in the successful use of amplification. The jury is still out on that question, but in the course of their research two things about ANL became clear. First, it is reliable, and second, it is surprisingly variable.

This latter factor led authors Deanna Rogers, Ashley Harkrider, Sam Burchfield, and Anna Nabelek to ask, in this issue of JAAA, whether gender might be one reason for the wide variation they observed in ANL. They tested 25 young men and 25 young women with normal hearing. As it turned out, there was no particular gender difference in the ANL. That is, the difference between MCL and BNL was about the same in the two groups. But an interesting gender difference did emerge from the data. Both the MCL and the BNL were 6–7 dB higher in men than in women. Apparently men like to listen to speech, and can tolerate noise, at higher intensity levels than women. Why should this be? Several hypotheses come to mind.

**Evolutionary biology:** In their role as nurturers, have women evolved a more sensitive auditory system in order to detect signs of distress from babies or the sound of the front door opening and closing followed by muffled footsteps on the stairs after midnight?

**Culture:** Does men’s preference for sports in which a mighty din is ever present (e.g., basketball, football, hockey) condition them to high levels of meaningful discourse?

**Multi-source monitoring:** As men attempt to follow their favorite teams on TV, their spouses patiently and continuously offer good advice on a variety of subjects. Forced to turn up the volume on the TV set, have men eventually become acclimatized to the more favorable signal-to-noise ratio?

Students may take note that there is no shortage of researchable topics in audiology.

_James F. Jerger  
Editor-in-Chief_