

Increasing hearing aid adoption through multiple environmental listening utility

By Sergei Kochkin

Recently, in an attempt to motivate an influential physician to write a positive opinion piece about hearing aids for a nationally prominent magazine, we discussed his personal experience with hearing aids. I learned that his high-end digital hearing aids did not provide him much value or benefit on the phone, while using a stethoscope, at the theater, in public places where the signal was processed through a PA system (e.g., place of worship, medical or news conference, etc.), or, sadly, when he was with his grandchildren due to their high-pitched voices.

Given my intent, I was embarrassed. In light of his experience, how could I expect him to recommend hearing aids to the 24 million Americans who have hearing loss but do not use amplification? Is this individual an anomaly or is he the norm? Most likely, he is like many hearing aid users: He is disappointed in its utility, but he simply cannot live without it.

It is my thesis that hearing aid adoption rates cannot improve appreciably without a corresponding increase in the utility of the device.

I think it is useful to summarize consumer perceptions of hearing aids from previous MarkeTrak studies. In the U.S., hearing aids have only modest utility to people with

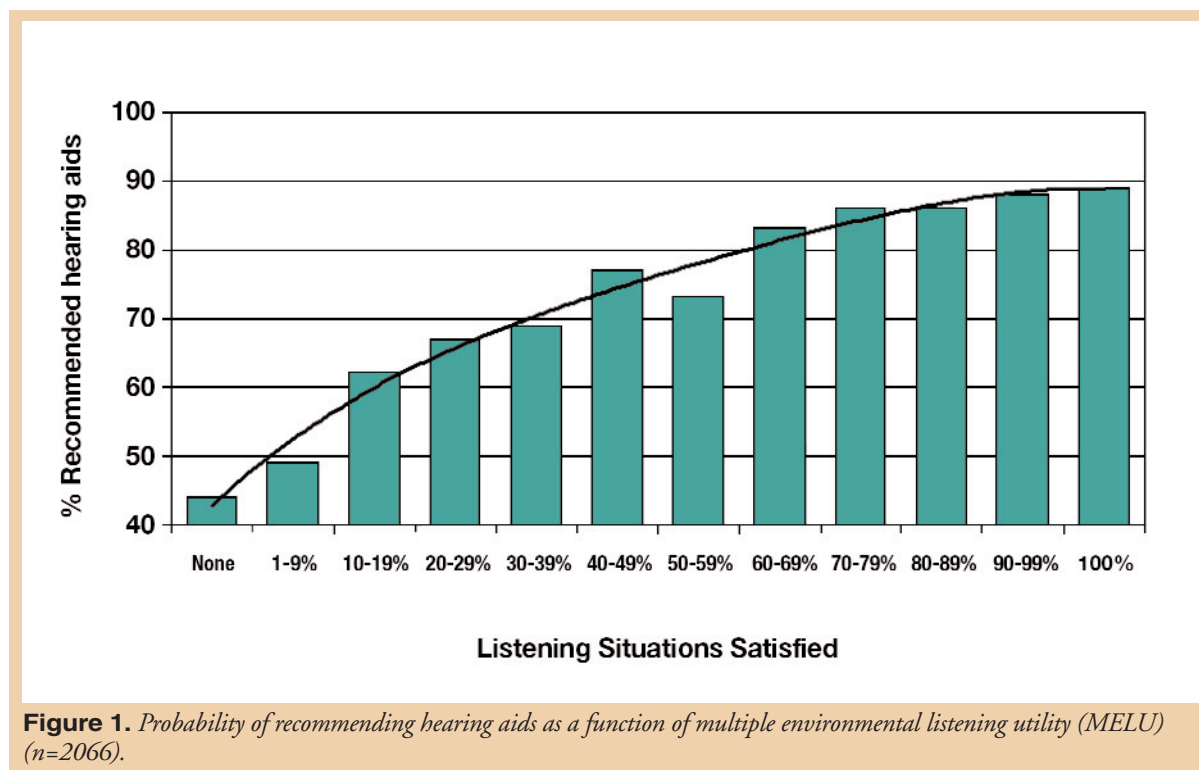
hearing loss, especially in noisy situations and public places. In a recent survey of adult hearing aid users, only 29% of the respondents indicated satisfaction (*defined as either "satisfied" or "very satisfied"*) with hearing aid use in noisy situations. This was the second lowest rating among the performance/value dimensions studied by the survey.¹

THE IMPORTANCE OF "MELU"

Customer satisfaction with hearing aids is strongly associated with what we call "multiple environmental listening utility" or MELU. When consumers are satisfied with their ability to function in many listening situations, their overall satisfaction is very high. When they are satisfied in few situations, their overall satisfaction is very low.

We have previously shown a very strong relationship between satisfaction and the number of environments in which consumers derive utility from their hearing aids. We are estimating that overall satisfaction with hearing aids will not reach a respectable 80% level until consumers are at least "somewhat" satisfied with their hearing aids in at least 70% of the listening environments important to them.¹

Despite increasingly impressive gains in penetration by



digital technology, one in six consumers still keep their hearing aids in the drawer.¹ Previous research has shown that poor benefit and performance in noise are among the top three reasons that hearing aids remain in the drawer.²

In a recent survey of non-adopters, half of those who returned hearing aids reported they did so because of “poor benefit.”³ While there are a number of reasons why people with hearing loss do not use hearing aids, it should be recognized that nearly seven out of ten non-adopters hold poor attitudes toward the devices, with the most serious obstacles to adoption being: performance in noise, perception of the ability of hearing aids to restore hearing to normal, picking up background noise, whistling and feedback, and ability to work well in crowds.

In fact, one out of four non-adopters who decided not to use hearing aids based their decision on the experience of a disappointed hearing aid user in their social network.³ Given the younger age (by nearly 15 years) of non-adopters, the binaural rate, and the expected repurchase cycle (5 years), if the hearing health industry is unable to convince non-adopters that hearing aids have greater utility, it could lose the equivalent of 19 years of hearing aid sales from this hold-out group, whose experienced friends have told them not to try hearing aids.

Would greater hearing aid utility result in more recommendations for hearing aids and possibly convince people in need to consider hearing solutions? In other words, does satisfaction *per se* result in more positive word-of-mouth advertising? I would think so, especially in light of the data in Figure 1.

Here we have plotted the percentage of hearing aid users who say they would “definitely recommend hearing aids to their friends” as a function of the percentage of listening situations in which they are satisfied with their hearing aids (*defined as “somewhat satisfied” or better for the 15 situations we measure in MarkeTrak*). There is only a 40% probability that individuals will recommend hearing aids if they are not satisfied in any of the listening situations measured in our surveys (*they could be neutral*). However, the probability of a recommendation doubles to approximately 80% when the person is satisfied in 60% or more of the listening environments.

A WIRELESS APPROACH TO INCREASING MELU

Clearly the utility of hearing aids must be improved if we are to achieve wider-scale acceptance of hearing aids as a solution to hearing loss. In an earlier paper, a wireless solution was proposed for hearing aid users.⁴ In simple terms, this paper recommended:

- ❖ Miniaturized internal wireless receivers in *every* hearing aid.
- ❖ Simplicity of operation and transparency to the user.
- ❖ Low-cost wireless transmitters for public places.

One could view the internal receiver as the razor and the transmitter as the razor blade. Without extensive public accessibility via a universal wireless standard, the wireless receiver is of minor utility. That’s similar to the situation with the T-coil today—unless you live in Holland, Michigan, where a concerted grassroots effort has inductively looped all important public buildings.

The key recommendation from this paper is that greater access to public places should not be viewed as a means of increasing the cost of hearing or listening for the hearing-impaired person, but as a means of increasing the functionality and therefore the

value of hearing aids. Increasing the functionality of hearing aids will result in more positive word-of-mouth, as shown in Figure 1. And that will lead to greater adoption of hearing aids.

Imagine a world where people with all degrees of hearing loss can:

- ❖ Hear a performance in a theater, opera, movie house, or concert.
- ❖ Communicate with loved ones in noisy situations, such as at a restaurant (*with companion wireless microphone*).
- ❖ Understand conversation on phones and cell phones.
- ❖ Enjoy their stereo, television, or radio through their hearing aids anywhere in their house and even in their backyard while on the patio reading a book or sipping a drink.
- ❖ Listen to their MP3 players with their hearing aid without wires.
- ❖ Communicate in public places, for example, in a taxi or limo, while talking to a teller at a bank or a clerk at the counter in a noisy food store, or in government buildings such as courtrooms.
- ❖ Communicate in any drive-through in America, whether it is a pharmacy, bank, or fast-food restaurant.
- ❖ Comprehend worship services or speeches at convention centers delivered through a PA system as clearly and easily as if they were 6 inches from the speaker.
- ❖ Understand important messages while in a train, subway, airport, or plane.

Do you think the hearing aid adoption rate would increase if people with hearing loss could function in the listening situations mentioned above? You bet it would! In fact, I would predict that even normal-hearing people would want such a hearing enhancer, especially those in demanding auditory environments (e.g., court reporters).

In looking forward, it is useful also to look back 10 years, when we were contemplating the same adoption rates and issues that we face today. Let’s recall the words of Andreas Rihs:⁵

What does it take to turn the hearing instrument industry around?

- ❖ *The underdeveloped hearing instrument market can only reach its potential if the hearing instrument becomes a true personal communication device.*
- ❖ *The stigma of hearing instruments will decrease parallel to the increase in the hearing performance.*
- ❖ *The degree of user satisfaction is directly related to hearing performance and not to cosmetics.*
- ❖ *The negative image of the hearing instrument will disappear only when hearing comfort and communication in all environments are guaranteed.*

Sergei Kochkin, PhD, is Executive Director of the Better Hearing Institute. Readers may contact Dr. Kochkin at skochkin@betterhearing.org.

REFERENCES

1. Kochkin S: MarkeTrak VII: Consumer satisfaction with hearing instruments in the digital age. *Hear J* 2005; 58(9):30-43.
2. Kochkin S: MarkeTrak V: Why my hearing aids are in the drawer: The consumer’s perspective. *Hear J* 2000;53(2):34-42.
3. Kochkin S: MarkeTrak VII: Obstacles to adult non-user adoption of hearing aids. *Hear J* 2007;60(4):27-43.
4. Boothroyd A, Fitz K, Kindred J, et al: Hearing aids and wireless technology. *Hear Rev* 2007;14(6):44-47.
5. Rihs A: Perspective: Is the hearing industry on the right track? In Strom K, Kochkin S, eds., *High Performance Hearing Solutions*. 1997;2:47-49.