Although the two papers on this subject were specifically requested by our program chairman, not to be presented as a debate, inevitably a degree of debate-like flavor creeps in. When contrasting papers are presented back to back, each author attempts to present his side of the issue in a most effective way. Thus, to my surprise Dr. Hartford did,-temporarily prove my argument from the narrow rather than from the more broad viewpoint. I hope I have resisted the temptation somewhat.

Our professional literature and the literature of the hearing aid industry is well stocked with technically correct and proficiently written papers of related significance. In one of several papers written about twenty years ago, Carhart (1950) described what has continued to be the usual mode of operation of most audiology clinics regarding hearing aids. The basic concept rest on the need to be an impartial person selecting with the client the proper instrument for a given aural loss. He claimed for the primary role of the audiology clinic to assess the client's needs and to advise him regarding probable benefits from acoustic amplification, and that form a audiological testing procedures are valid.

While it is true that Shore, Stilger, and Blau (1960) concluded that tests for hearing aid evaluation are not sufficiently valid, and that differences among hearing aids are not adequately measured by usual audiology clinic tests, in the same year Neconeit, Silver, and McDonald (1960) reported opposite findings, namely that the clinical testing of hearing aids is an adequately reliable procedure.

That the audiological community has continued to search for valid hearing aid ranging and advisory procedures is exemplified by papers by Jeffers (1960) on quality judgements in hearing aid selection; by Hinrichs and Becker (1960) who described the audiology clinic function as one of testing, and with hearing aid selection delegated exclusively to the dealer; by Shore and Kramer (1960) who evaluated clinical testing and hearing aid advisement procedures; and who recommended that the hearing aid purchase in the hands of the dealer; and more recently Jerger, Speaks, and Malmojord (1968) who demonstrated that the development of more sensitive and valid tests for hearing aid testing are feasible.

While we may severely criticize our own professional literature for not being complete, comprehensive, not definitive, it is closely differentiated from what is seen in the hearing aid trade journals, with their emphasis on moving a product off the shelves increasing the profit margin, and the concept of the hearing aid industry. In the trade journals there are professional articles about some technical aspects of audiology, but all are written by professional audiologists, and are at a relatively lesser level of technical complexity.
Typically, these articles are summaries of the state of the art, written for consumers of audiological research.

Other articles in the trade journals are exemplified by the items which describe a program of broad offers and buying cooperative arrangement. In both of these cases, hearing aid dealers, franchised by hearing aid companies, have developed what appear to be professionally responsible and competent hearing testing and hearing aid dispensing operations (Novi. Brag. Aid 2, 1971). However, even in these descriptions of exemplary programs, concern for the commercial operation is primary.

Obviously, my first argument against audiologists selling hearing aids is with respect to the temptations of the commercial market.

The person with a hearing loss (or his family) is vulnerable. He rarely is in a position to evaluate independently either the status of his problem, or the effectiveness of remedial measures, such as hearing aids. It is fairly easy for a hearing aid salesman to demonstrate benefits from at least one of his instruments when worn by a client.

But the demonstration of some small, albeit convincing, benefit from a hearing aid is not the equivalent of leading the client through a program of imperial clinical procedures to evaluate his hearing, educational, vocational, and social handicaps and realistic evaluation of the results obtained through a hearing aid or other means of remediation. I hold that the clinical audiologist, who is free from maintaining his income by the sale of hearing aids, is in a proper position to offer such services to the hearing handicapped, while another group more properly should dispense hearing aids to clients on the basis of independent determination of the advisability of a hearing aid by the audiologist.

It is appropriate to comment about the role of codes of ethics in this matter. I presume the two that pertain are the Code of Ethical Trade Practices for the Hearing Aid Industry, and the Code of Ethics of the American Speech and Hearing Association. I do not intend to rest my argument upon the point that the American Speech and Hearing Association's code of Ethics at present prohibits the sale of hearing aids by audiologists. This would be a misappropatation, or a code of ethics is made by a group of individuals to represent the ideals of their group at one time. The ASHA Code of Ethics can be changed to reflect revised viewpoints regarding ethical practices.

The Code of Ethics of the Hearing Aid Industry, prepared by the Hearing Aid Conference and the Society of Hearing Aid Audiologists, is entirely concerned with trade practices. That code was developed by hearing aid dealers as a protective device against those who they consider to be unscrupulous trade practices by members of their industry. It says nothing regarding the auditory welfare of the client.

This leads to my second point, and to what is always a dangerous practice, namely, predicting the future. One such fearless soul, apparently, is W.C. Williams (1971) from the University of Texas Speech and Hearing Center. He predicted the demise of the hearing aid dealers as well as of the audiologist. He based his argument on the premise that, in the past, audiologists have been heavily subsidized by university and governmental agencies, and therefore, in the absence of guaranteed governmental support, they will not be able to continue as before. Meanwhile, the hearing aid dealers will lose their business because
audiologists will go into private practice with physicians and eventually dispense hearing aids from their offices. I am sure that possibilities Dr. Williams describes will provide us all with anxious moments in the years ahead.

Now I ask your indulgence while making another prediction of the future, depending in part upon a definition of terms. My prediction is that the audiologist of the future will be one who practices some aspect of the science of hearing. He will be in contrast to the audiological technician, whose days will be spent routinely doing hearing tests, to be interpreted by a professional such as an otologist or audiologist, and fitting hearing aids according to prescription, much in the way opticians fit eyeglasses or prosthesis supply nurses fit artificial limbs.

As one proceeds through academic training and, especially through professional experience following the completion of the usual professional preparation requirements, one realizes that many of the hearing test procedures, which earlier appeared so intriguing and esoteric, in fact are mundane, routine, procedures. A high level of skill can be developed rather quickly in the administration of such audiological tests, and in fact the mark of a good procedure is the degree to which it can be carried out readily by technicians. The more routinely a test can be administered, the more general its applicability and reliability, the less its ambiguity, and the more objective its interpretations.

Thus it also becomes obvious that audiological technicians can be trained to do very adequate testing; that a doctoral degree or even a master's degree is not a requirement, and that probably the only prerequisite is that the test technician be reasonably intelligent, have personal integrity, and exercise a high level of self evaluation so that he recognizes errors as he practices his techniques. This is the situation within fields such as the medical technician, the dental technician and much of nursing. While we professional audiologists may baulk at the thought, the hard truth is that much of what we do can be accomplished, often even more effectively than by ourselves, by technician level individuals.

Thus the prediction that the future of audiology will involve at least two levels of practitioners.

The first level and I am not sure whether it is lower or the higher, is that of the audiology technician. This individual will administer routine audiology tests, report the test results on standard report forms, and submit these to a professional individual who will make the appropriate interpretations, make judgments about rehabilitative procedures, and assume responsibility for continued care of the patient.

We already have with us the vanguard of the audiological technician. The technician's role is now being served by people who are known as audiologists, especially in some medical settings where the orientation is toward serving the diagnostic and other supportive needs of otolaryngologists. Many otolaryngologists train their nurses to test the hearing of office clients, and I have known of several instances where the receptionist or secretary in an office competently does the required testing. There currently is a grant from ADA to the National Association of Speech and Hearing Agencies to train former armed services medical personnel to be audiological technicians.

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Whether or not audiology technician might also become frustrated to self hearing aids from a given manufacturer remains as a future development in the field, eventually probably be determined by the interplay among vested interests as they attempt to influence our governmental agencies, and as audiologists further develop our ability to prescribe or recommend hearing aids accurately for individual clients. To say that the audiometric technician, whether or not he dispenses hearing aids, in an audiologist in a most pure and may test upon a semantic definition. For the present, I would prefer one to apply the term audiologist in such people. I would prefer that they be allowed to do both hearing aids.

Certainty, the level of academic training for audiology technicians can be far below the present master's level, probably below the four year baccalaureate degree, and may well be accomplished in so many as one or two year technical training program comparable to the training presently offered for the medical or dental technicians.

We also are seeing serious questions being raised regarding whether or not the present audiologist, holding the master's degree and the Certificate of Clinical Competence from the American Speech and Hearing Association, can be entrusted with the full level of responsibility, which the mature rehabilitative audiologist would prefer, and which the client deserves. Too often, the CCC audiologist has had only a one-year or two training program specifically in the field, with heavy emphasis upon administration of audiological tests, and one year of poorly directed professional experience. Typically his training has included little about the overall communication process, the psychological aspect of human behavior, the emotions and social requisites, the counseling procedures, and the rehabilitative procedures other than hearing aids. Dissatisfaction with this type of audiologist led to the founding of this Academy. In addition, there has been at least one conversation among ASHA circles regarding the need for a higher level certification which would be granted for preparation and experiences beyond the present CCC requirements.

Whether or not a traditional doctorate is required, or whether one year or two of training beyond the master's degree would be appropriate for the complete audiologist, is not the critical issue. What is clear is that audiologists, if they are to avoid becoming hamstrung of medical or other professions, or to become little more than our trained hearing aid specialists, must support and develop a leadership cadre who practice as independent professionals, responsible for patient care. Such professionals may function within the academic sphere, or deliver services to the public. However, their services to the public should not be limited to the technical or testing level, nor should the services include direct provision of hearing aids. Rather, the services should emphasize making independent judgements, and assuming responsibility for the patient free from the demands of commercialism, the continued researching or the sciences of hearing and its rehabilitation and the teaching of persons to be audiologists or audiology technicians. A distinction between audiology technician and audiologist, would, of course result in fewer individuals being known as audiologists. On the other hand, what is proposed here not only would stimulate new methods for the effective delivery of services to the public, but also would be a progressive step toward solving a number of
problems in our field.

In summary, I propose that we recognize on a formal basis, with whatever legal and academic trappings are appropriate, an individual to be known as an audiologist. He may also have competence and the facilities for the direct sale of hearing aids to the public, or he may continue to function only as a test technician. He would enjoy the benefits and the limitations imposed by licensure, and would be directed by the professional audiologist. We would recognize the professional audiologist whose level of training and technical skills, self-regulation by his professional organizations, and overall level of activity would far exceed those of the licensed audiology technician, (and exceed the present CCC standards). This latter individual would properly be known as the audiologist. He would not dispense hearing aids.

REFERENCES


Carhart, "Hearing Aid Selection by University Clinics," JSOH, 15, 1954: 196-203.


