FACTORS ASSOCIATED WITH COUNSELING THE HEARING IMPAIRED ADULT

C. P. GOETZINGER

It has been estimated that there are more than 15 million people in the United States with impaired hearing (Masland, 1960). Of this total approximately 3 million are children, with the remainder falling in the adult classification. It is further estimated that about 4½ million individuals are seriously handicapped, and that about 200,000 to 250,000 are deaf. It would appear necessary, therefore, first to review some of the factors related to auditory disability, and second, to relate these factors to the consideration of counseling.

Some years ago the Conference of Executives of American Schools for the Deaf proposed definitions in order to differentiate in a broad way the classification of the deaf and hard of hearing. These definitions were as follows:

The deaf — those in whom the sense of hearing is nonfunctional with or without a hearing aid for the ordinary purposes of life. The congenitally deaf are those who were born deaf. The adventitiously deaf are those who were born with normal hearing but whose hearing became nonfunctional later through illness or accident.

The hard of hearing — those in whom the sense of hearing, though defective, is functional with or without a hearing aid for the ordinary purposes of life.

These definitions are of course broad, and have been severely criticized by some authors in the light of what is now known about deafness (Cruickshank, 1963). In consideration of the knowledge which has been gained during the last two decades concerning the effects of

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C. P. GOETZINGER is Professor of Audiology, Audiological Clinic, Department of Otorhinolaryngology, Kansas University School of Medicine, Kansas City, Kansas.

auditory amplification upon language acquisition and the retaining and growth of language already acquired upon educational progress, upon voice quality, and in conjunction with speech reading, it becomes clear that the terms, "the deaf" and "the hard of hearing," as Meyerson maintains, are outmoded (Cruickshank, 1963). However, for the purposes of this discussion these terms will be kept, but with the exception that some of the points of contention which have given rise to the dissatisfaction will be amplified in terms of the definitions.

Recently, Davis and Silverman (1960) have suggested a classification of deafness based upon the average pure tone sensitivity loss at 500-1000-2000 cps. which is recommended for consideration.

Although, as previously noted, the hard of hearing are defined as those in whom the sense of hearing is functional with or without a hearing aid for the ordinary purposes of life, there are degrees of functionality which are contingent upon the age of onset of deafness, degree of sensitivity loss, auditory discrimination, type of lesion (whether conductive, cochlear, retrocochlear, mixed), previous environment, slope of audiogram, etc. Classifications, therefore, which are established on the basis of the pure tone audiogram must be regarded at best as only general guides until further information has been obtained in each individual case. Hence, a child who is born with a 60-65 db. bilateral perceptive hearing loss but who has had early and consistent auditory training will in many instances develop into a hard of hearing child. Yet, there are substantial numbers in this category who, because of the nature of the lesion, etc., will never develop auditorily to the stage where the primary avenue of language acquisition and development throughout life will be via the sense of hearing. These children, then, will not eventually utilize the hearing mechanism in conjunction with auditory amplification as efficiently as others within the same category. As a result, the objectives of the use of auditory amplification with them will be modified, since they will have to be educated basically as deaf children, or children in whom the primary avenue of language acquisition is through the visual channel.

Still another problem of hearing loss is observed in the so-called deafened, or those individuals who have already established language patterns at the time of their auditory insult. As a result of having once heard and of having acquired fully the use of language, they are in a much better position to utilize auditory amplification effectively, even though the hearing loss may be severe. Such cases often show remark-... !- ---- b ---ding and honce in ability to communilists is virtually nil, and absolute speech reading ability poor. Anyone who has had experience in an audiological clinic is well acquainted with these cases.

Concerning the congenitally and adventitiously deaf, mention should be made of the Reamer (1921) and National Health Surveys of years ago (Day, Fusfeld, and Pintner, 1928). Briefly put, children who suffered deafness after ages five or six years showed a definite educational advantage over those who had experienced severe hearing loss at an earlier age. The findings, of course, are subject to modification in the light of early, intensive, educational procedures. It is well, however, to keep them in mind since not all children, even today, are fortunate enough to obtain early diagnosis, and even if so blessed, are not always exposed to preschool programs.

Another point of importance is that children in schools for the deaf are retarded on the average about three to five years educationally, although intelligence as measured by performance tests is usually within normal limits. On nonverbal tests, such as the 1938 Raven's Progressive Matrices there is usually a one-and-a-half to two-year retardation. The latter results appear to be related to the language disability of the deaf. We are currently investigating this hypothesis.

One might ask what bearing the above discussion has on the counseling of hearing impaired adults. The fact remains that hearing impaired children grow up to be adults, and adults seek counseling, and unless the counselor has some knowledge of the impact of deafness relative to onset, he may be hard put either to understand the present behavior, or to bring about a reasonable change in behavior with therapy.

In lieu of the above comments we come now to a consideration of the psychological aspects of impaired hearing. As Barker, et al. (1953) have pointed out, there have been many published opinions by experts concerning the adjustment and personality of the hard of hearing and the deaf. Yet there is still a dearth of well-controlled studies in this area. Numerous people have published observations of the hard of hearing and the deaf. Welles (1932) and Brunschwig (1936) have made surveys of such accounts. Welles' survey covered severely hard of hearing individuals who had suffered their impairment in adulthood. It also included statements from educators of the deaf relative to the psychological effects of deafness.

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The results of these surveys indicated that there were widely different views concerning the psychological effects of deafness. Briefly, some believed that the hearing impaired are uniquely different in personality. Others maintained that they are no different from the person with normal hearing. Personality characteristics not infrequently attributed to the deaf and also to the hard of hearing include: introversion, despondency, sense of inferiority, hopelessness, supersensitivity, fear, brooding, bitterness, suspicion, persecution complex, apathy, listlessness. Cruelty, lack of sympathy, egocentrism and selfishness are additional characteristics, according to Barker, which are generally used to round out the personality description. Other factors such as the extra effort which the hearing impaired must exert to meet the demands of the environment, head noises, the lack of sound per se, threat of limited vocational opportunities—all are purported to affect negatively the behavior of the deaf and hard of hearing.

With reference to the earlier research, three rather extensive studies used the Bernreuter Personality Inventory (Welles, 1932; Pintner, 1933; Pintner, 1937). This particular instrument was designed to assess four traits, i.e., neurotic tendency, self-sufficiency, introversion, and dominance. As Barker noted, some of the items on the inventory would tend to put the hard of hearing in a poor light, irrespective of their intended psychological significance. The general conclusion reached as a result of these investigations is that hard of hearing adults were slightly more neurotic, introverted, and submissive than the hearing. However, the large overlap between the groups was more significant than the differences.

More recently, two studies which employed psychiatric interviews were in agreement that depressive reactions were common among their subjects. Ingalls (1946) reporting on 1100 cases who were admitted to Borden General Hospital during the war stated that 27 per cent were diagnosed as psychoneurotic and less than 5 per cent as psychotic. A great majority of the psychotics were of the anxiety type. Ingalls differentiated between chronic and acute hearing losses. The former referred to hearing losses which had been present since childhood, the latter to deficits recently acquired. Those cases with chronic hearing loss were said to feel injured, isolated, defective, hostile, and depressed. Although audiological therapy was helpful for them it was no substitute for psychotherapy. Conversely, the patients with acute hearing losses responded more easily to audiological therapy which included lip reading lessons, auditory training, and the use of hearing aids. These measures were effective in relieving depressed states.

The second study of Knapp (1960) concerned 510 patients who were admitted to the Deshon Army Hospital. The patients were studied psychiatrically and classified according to the relationship of their hearing loss to their psychiatric disability. In 82.3 per cent of the cases

there was either no psychiatric disease or else the disease was unrelated to the hearing loss. Patients with more severe and chronic hearing loss reacted neurotically to the constricting effects of deafness by overcompensating in outgoing activities, by denial of hearing loss, by withdrawal from society, or by exploitation of the hearing loss. This group amounted to 5.5 per cent of the total: About 2.8 per cent, classified as mixed cases, demonstrated neurotic reaction to hearing loss plus psychogenic exaggeration of the auditory deficit. Another 5.7 per cent manifested psychogenic hearing loss superimposed upon minimal physiological loss. Knapp further noted that cases whose hearing impairment had persisted from childhood manifested poorer adjustment. He concluded that this study showed "no one psychology of deafness." He disagrees with the opinion that deafness in early life favors better adjustment, and maintains that chronicity, or early deafness, although causing a less drastic sense of loss, nevertheless induces a more warping one.

Perhaps the most recent investigation pertaining to the psychology of the hard of hearing and the deaf was that by Myklebust (1960). In his hard of hearing group, who incidentally were individuals attending a Hearing Society, there were 44 males and 83 females, with mean ages of 39.37 and 49.66 years, respectively. The mean hearing loss for the males was 68 db. for the speech frequencies, and for the females 66 db. Age at onset of hearing loss was reported as 18.75 years and 24.12 years, respectively. The study also included information relative to dependency status, marital status, education, self-support status, etc. Comments from the subjects relative to the benefits of lipreading and of hearing aids were analyzed. In addition to the above information each subject wrote an autobiographical account about "What my hearing loss means to me." In summary the hard of hearing adults emphasized the increased stress of daily living which bore upon such factors:

- The considerable patience required at the family level which involved assisting the hearing impaired with messages, in seeking employment and in maintaining friends.
 - 2. The loss of friends, social isolation, and despondency.
- 3. The need to develop identification with other hard of hearing individuals.

Myklebust administered the Minnesota Multiphasic Personality Inventory to 94 of the hard of hearing subjects and 194 deaf students at Gallaudet College. Comparisons in adjustment as measured by the inventory were made between the deaf and hard of hearing, between the

meningitic and nonmeningitic deaf, between the sexes, etc. In essence he found a relationship between sensory deprivation and emotional adjustment which was related to age at onset of deafness, degree of deafness, and sex. Those with profound deafness manifested the greatest emotional deviations. Furthermore, males irrespective of degree of hearing loss and age at onset of deafness showed more personality disorder than the females. In addition, the deaf seemed unaware of deafness as a handicap. Hence, they lacked insight into the significance of hearing loss. Although the hard of hearing estimated deafness to be a greater handicap, and showed more depression because of the disability, nevertheless the naïveté of the deaf could not be regarded as an index of better adjustment. On the contrary those deaf who stated that deafness was no handicap were the very ones who were found to be most disturbed emotionally (Myklebust, 1960).

Myklebust stated:

The personality pattern which emerges is a feeling of severe isolation and detachment with aggressive, almost desperate attempts to compensate and thereby maintain interpersonal contacts. The primary conclusion to be drawn from this study, therefore, is that deafness, particularly when profound and from early life, imposes a characteristic restriction on personality but does not cause mental illness.

With reference to mental illness of the deaf, Altshuler (1962) reported that schizophrenia is the most common form of psychosis in the hospitalized deaf. As with the hearing it accounts for slightly more than 50 per cent of the cases. However, the disease is no more severe in the deaf than in the hearing, but is characterized by impulsive aggressive acts which might be related to their orientation toward action. The most common reasons for referral to the outpatient clinic were acute psychiatric illness, homosexuality, poor work adjustment, social conflicts, and family problems associated with the handicap. According to Altshuler, the ability to communicate manually is a prerequisite for thorough study of these deaf patients.

In the preceding discussion an attempt was made to acquaint the listener with various parameters which are of importance in any consideration pertaining to the counseling of hard of hearing and deaf adults. The term "counseling" implies that the individual who will be engaged in it has some understanding of the dynamics of human behavior and in addition that he possess knowledge of the impact of auditory deprivation upon behavior.

Hadley (1958) has stated that "the entire purpose of clinical and counsel-psychology is to promote the efficiency and the happiness of the

individuals who present; themselves to the psychologist." In terms of this basic purpose it would appear that those who are engaged in audiological consultation should have at least a modicum of training and knowledge in psychological counseling in order to fulfill their roles more effectively in this area of special service. It of course would be impossible in a short presentation to delve into the many theoretical considerations associated with the adjustment and personality of the hearing impaired adult. Since, however, in counseling one aims to effect a better functional relationship between the client and his environment it follows that the counselor must know something of the interaction between the two. Some of the elements of psychological counseling with which we shall be concerned therefore, with special attention to the hearing impaired, are the environment, the role of insight, emotional release and tension, support, socialization and relearning.

THE ENVIRONMENT

The impact of hearing loss is manifested initially by a change in the interaction between the individual and his environment. When the hearing impairment is of sudden onset accompanied, as in most instances, by head noises, dizziness, feelings of fullness in the ears, etc., there is definite realization on the part of the patient that something is wrong, and as a rule he wastes no time in alerting his family and others to his difficulty and in seeking medical consultation. In those instances in which there is no possible medical help, the rehabilitative process is set in motion which includes the fitting of a hearing aid, if this is indicated, instruction in its use, lipreading, auditory and speech training in order to keep the individual in communication with his environment. As research has pointed out, sudden hearing loss, particularly when both ears are involved, frequently precipitates severe spells of despondency. It is highly important then that counseling and therapy extend to the family, relatives, friends, employer, and whomever else is within the immediate life circle of the patient. Manipulation of the environment may involve only minor changes, or in the more serious cases entail a change in occupation, a move to another city. For example, a musician who has suffered severe bilateral nerve deafness could no longer function in his former capacity as a member of a concert orchestra.

In cases where the hearing loss has been insidious and over a considerable period of time, it is not unusual for the patient himself to be

unaware of his growing deficit, even though his family, friends, employer are aware that something is wrong. Not infrequently, the family has already made the diagnosis of deafness, and has either overtly or covertly exhorted the patient to do something about it. Perhaps the most insidious changes in hearing reception are those related to slight sensitivity deficits with superimposed serious discrimination problems. This combination is frequently seen in older individuals, and all too often is judged by the family and friends as either senility or just plain "orneryness."

With reference to the environment, one of the major goals of the counselor is the education of the family and those involved to an acceptance and understanding of the patient's hearing loss, and what is to be expected from him in the light of the special therapeutic techniques. It goes without saying that the miracles attributed to hearing aids by family and friends of the patient are all too frequently superseded only by some dispenser's advertisements. In short, the family of the patient, insofar as this is possible, must be given insight first into the nature of the patient's disability and then into the limitations of hearing aids and lipreading in restoring the patient to his former functioning level. In our clinic we spend a great deal of time explaining in simple terminology the basic types of hearing impairments, the nature of auditory discrimination, recruitment, and other factors connected with successful use of a prosthesis. In conjunction with the discussion we often simulate roughly the patient's hearing loss by means of filters or a masking noise and invite a member of the family (if present) to listen to recorded speech in order to instill an awareness of the problem.

The process of counseling is not a one-shot, one-hour affair. Much misunderstanding might have developed between the patient and family, between the patient and friends, and between the patient and employer. As previously noted, the hearing impaired are often characterized as being suspicious and hypersensitive. They feel that "others are talking about them," and as Knapp (1960) has said, this is certainly very often the case.

Accompanying the aforementioned is the stress engendered in the average person when engaged in conversation with a hearing impaired individual. Stress is even more pronounced when the person with the impairment is deaf. In such instances the problem is compounded. At first in group conversation there may be a real attempt to pitch the tenor of the exchange at a speed and level which is in keeping with the

borious and structured, but rather spontaneous and subject to sudden shift in topic, at the heart of which is repartee. As a consequence, the group will either quickly dissolve or else break forth into the natural mode of exchange with the handicapped individual being left to carry on as best he can. The hearing handicapped individual's reaction to such situations will more than likely be dependent upon his basic personality constellation in conjunction with whatever psychological mechanisms he has developed in the interim. In short, the counselor should be aware of such eventualities and attempt to guide the patient into a realistic acceptance of them. This statement refers to the development of insight which will now be considered.

INSIGHT

The term "insight" has been used in a variety of different ways by workers in the field of psychological counseling. However, as Hadley (1958) points out ". . . there is considerable agreement that the phenomenon represented by it is one of the fundamental aims of psychological treatment." According to Hadley the concept of insight probably originated with Gestalt learning theory, particularly in connection with the comparative psychology of Wolfgang Kohler (1958).

... In his studies of the thought processes of apes Kohler described what he regarded as reorganization of the perceptual field and an integration of a system of cues which are responded to simultaneously. One of the most characteristic aspects of the Gestalt concept of insight is its spontaneous and sudden nature. Kohler believed that his apes, when presented with a novel problem situation, related the various elements of the situation to each other and then perceived the "whole" (Gestalt), thus being able to perform the correct solution.

Much research has been directed toward the validity of the term insight as understood by Kohler. His chief opponent was Thorndike who explained animal behavior on the basis of trial and error. After reviewing the literature McGeoch concluded in 1942, as quoted by Hadley (1958), that:

. . . the abrupt changes which occur are functions of transfer from prior learning, of the subject's experience with the particular problem he is trying to solve, of passage from one level to another in a hierarchy of response, and of many other conditions which are continuous with such concepts as trial and error and association. The subject's trials and errors need not be overt to be trials and errors but may take place symbolically or in some other fashion beyond the direct observation of the experimenter. Actually, many of the descriptions of insight behavior contain rich descriptions of pre-solution trials and errors.

Other workers have shown that chimpanzees either could not master Kohler's problems or else required a great deal of experience with the tools of solution. Harlow's (1949) data with monkeys showed that they learned almost immediately to solve problems only after they had had much training and practice on similar but easier problems. He explained the improvement in performance as the result of experiences.

Hadley (1958) on whom we shall rely heavily in our discussion of the elements of counseling, has stressed the notion that Harlow's findings provide a few leads which can be employed in counseling for insight. If it is assumed that the patient is capable of sudden insight, then it is necessary that he be acquainted with the various elements in the situation. With reference to the hearing impaired this would seem to imply not only a frank and sympathetic discussion of their type of deafness, what they can expect to achieve through the use of hearing aids and speech reading, but in addition, the problems they can expect to encounter in their daily environmental interactions.

There is also the need on the part of the counselor to give the patient direction and set. This may be accomplished by instruction or by suggestion. Recommendations to the hearing impaired as to the type of hearing aid, care in its use, the need for lipreading in conjunction with the hearing aid, literature to read by those who have successfully learned to adjust to their handicap, etc., are possible ways in which direction may be accomplished.

As noted previously, the term "insight" is used in various ways by different writers depending upon their psychological orientation. Hadley, after carefully reviewing most of the theories of insight, maintains that the differences in interpretation are more apparent than real.

Insight then, according to Hadley, may be looked upon as a "process continuous with, and augmenting growth toward an ever-increasing understanding of one's self and one's relations with others." Insight "seems to play an equally significant role in clarifying one's past feelings and motives, one's present strengths and weaknesses, and in the continuous learning and growth that accompanies more adaptive and creative living."

Ingalls' (1966) and Knapp's (1960) psychiatric studies of the hearing impaired in World War II indicated a relatively small percentage of psychoneurotic behavior to be directly associated with the deafness. Furthermore, audiological therapy consisting of hearing aid fitting, speech reading, and auditory training was helpful in cases of acute

in deafness persisting from childhood, nevertheless was no substitute for psychotherapy. In short, the latter cases manifested the infantile and immature behavior consistent with restricted personality development. This finding is consonant with Myklebust's more recent results which indicate, contrary to popular belief, that the longer one has possessed hearing, the more normal is his adjustment. This statement does not imply that individuals who suffer early hearing loss cannot develop a normal, healthy pattern of adjustment. On the contrary, many such individuals do. Myklebust has indicated, however, that there is a relationship between age of onset plus degree of deafness and adjustment. The extent to which this relationship can be negated depends perhaps upon the degree to which insight can be enhanced through very early educational procedures (in infancy) coupled with devices such as hearing aids to bring the world of sound as quickly and efficiently as possible to those who suffer early deafness.

Before leaving the topic of insight, which incidentally permeates all the psychological elements of counseling which are under discussion, mention should be made of Ramsdell's (Davis and Silverman, 1960) elucidation of the three psychological levels of hearing. At the highest level, hearing is utilized to comprehend language. Words are symbols and stand for objects and ideas. Therefore, this level of hearing is referred to as the symbolic level. At the next lower level in the hierarchy of hearing is its use to detect danger in the environment. This has been aptly labelled as the signal, or warning level. For example, when we hear the barking of an enraged dog nearby, we immediately are put on our guard. Finally, there are the sounds making up the background noises which are a part of our daily existence. This basic or primitive level of which we are only vaguely aware creates a "background of feeling" or "affective tone." The importance of this level is that in its absence the world seems dead. According to Ramsdell, it is the absence of this level of hearing, coupling, as it does, an individual to the "aliveness and activity" of the surrounding world, which causes the basic emotional upset and depression in deafness.

EMOTIONAL RELEASE AND TENSION REDUÇTION

The idea that emotional release contributes to mental health and well-being is by no means of recent origin. Aristotle commented that the Greek drama served the purpose of mental catharsis. The Hebrew as well as the Christian religions also relied heavily on this mechanism. Likewise in psychological counseling emotional release has been used to reduce tension and induce a degree of relaxation. In fact, the advice

to "talk it out" when a client is tied up in emotional knots is frequently the first to be given in a counseling session.

Emotional release is felt by the patient when he is able to express himself freely and openly. The need for it is usually greatest in the early stages of counseling. Most individuals obtain both temporary and permanent relief from venting their feelings. As Hadley points out, however, of more importance is the extent to which the patient develops insight into his problem as a result of the emotional release. However, the acting-out of repressed material frequently brings about improvement without conscious understanding of the underlying cause. As with other elements of psychological counseling, the proponents of the various schools of thought explain emotional release in terms of their specific theories.

Over the years, certain techniques have been discovered which tend to foster emotional release and tension reduction. Among them are hypnosis, free association, confession and ventilation (allowing the patient to talk freely), expression of feelings about the problem, group activities, play therapy for children. Other methods used outside the formal therapy situation are indirect or substitute devices such as play, physical exercise, various forms of arts and crafts, books, movies, acting, writing, etc. The latter is exemplified in Watkins' "poison-pen therapy."

Emotional release as a technique of psychotherapy is probably utilized to some extent by every person engaged in counseling of the hearing impaired. As noted above both temporary and permanent benefits are observed from its use. The important point, nevertheless, is that insight be eventually realized.

SUPPORTIVE RELATIONSHIPS

Supportive therapy is probably as old as the human race. Man as a social animal has always dwelled in a group, and as such has drawn support from others of his kind. Clubs, lodges, societies, whether social or professional, give support to their members. Both the deaf and the hard of hearing make copious use of supportive relations as observed in their many clubs, leagues, and societies.

Supportive counseling is self-explanatory. In the individual counseling situation, support is encouraged through the development of a warm, friendly, permissive atmosphere between client and counselor. In the counselor the client has someone to whom he may have recourse when the going gets rough. In support the client is urged to make definite attacks upon his problems. In this respect the counseling

differs from the transference dependence of psychoanalysis. In supportive therapy, the relationship becomes a port in the storm, a haven in which the client can reorganize his resources for his next venture with the environment. Hadley maintains that such a relationship may be sufficient to provide enough security for healthy adjustment. One of the most important aims of counseling psychology according to Alexander, as stated by Hadley, is to help the individual to discover and accept supportive relationships. This of course is what appears to happen when the hearing impaired person seeks membership in one of the societies for the hard of hearing — similarly, when the deaf individual joins one of the clubs for the deaf. It is only when such affiliations engender limiting and circumscribing life spaces that the potential for further growth and adjustment are hindered.

SOCIALIZATION

Socialization in a broad sense is the lifelong process of the individual in learning a culture or cultures. More specifically, as applied to counseling it is a process of learning to interact with people more effectively, i.e., vocationally, socially, and academically. As an aim of counseling it is perhaps the ultimate goal. If all people were able to deal effectively with every individual and group with whom they have contact there would be little need for psychological counseling.

In terms of psychopathology, Hadley has found it convenient to conceptualize behavior disorders on a continuum ranging from extreme social orientation to extreme personal orientation with most of the disorders plotted along the scale. At the extreme end of the scale devoted to social pressure are placed those individual duals with conversion reactions. This category on the continuum is followed by the neurasthenias, the anxiety reactions, and the obsessive-compulsives near the mid-point. On the other side of the mid-point are placed in the order of severity the personal orientation disabilities consisting of the paranoid reactions, the schizophrenics, and finally the catatonic schizophrenics.

It is of course common knowledge that the audiologist possesses tools, such as the delayed feedback tests, the Stenger test, EDR audiometry, which disclose the presence of psychological or functional deafness. It is of course equally common knowledge that it is the rare audiologist indeed who has either the training or the time to effectively carry out a counseling regime in such cases. However, it is contingent upon him to recognize the manifestations from his test results and to initiate

proper referral. When organic hearing loss is present in conjunction with severe emotional disturbance it is the duty of the counseling audiologist to acquaint the therapist with the problems which can be a concomitant of hearing disability as well as the therapeutic steps (lipreading, hearing aids, and their limitations) which might be beneficial in treatment.

That neither the deaf nor the hard of hearing exhibit an excessive incidence of psychosis has been indicated by the previously cited research. In fact, with reference to the deaf, Kallman (Rainer, 1963) states, "At the same time, severe depressions and alcoholic psychoses seemed underrepresented. Hospitalized schizophrenics were estimated at 1.2 per cent of the total deaf population of New York State, while the overall schizophrenic risk was 2.5 per cent." Learning theory techniques, directive and nondirective counseling approaches are said to be effective in socialization.

RELEARNING

To many psychologists, one of the major purposes of psychological counseling is to promote new and altered patterns of behavior and thinking. This then, is a problem of learning. Relearning and socialization, Hadley maintains, come closest to the ultimate goal of counseling which is "promoting changes in behavior and attitude to effect a happier and more efficient adjustment of the individual to his environment."

Learning theories may be placed under two broad classifications, namely, stimulus-response reinforcement theory, and cognitive, or expectancy theory. John Dollard, Neal E. Miller, and O. H. Mowrer are proponents of the former, and E. C. Tolman and Kurt Lewin of the latter. Meyerson (Cruickshank, 1963) has applied Lewinian psychology and Barker's et al. elaboration of it to a psychology of hearing impairment. The reader is strongly urged to read Meyerson's chapters in Cruickshank's Psychology of Exceptional Children and Youth.

Meyerson describes several adjustment patterns which can evolve as a result of impaired hearing. Audition is a tool of behavior. Its loss predisposes the individual more frequently to new psychological situations. New psychological situations, however, are a potential source of poor adjustment. In addition to the above, the loss of hearing imposes on the person overlapping psychological roles. Three patterns of adjustment are presented below in terms of these psychological concepts.

Adjustment pattern I is essentially a retreat by the individual to the

circumscribed world of the disability. In terms of the hard of hearing, it means a withdrawal from the vastly larger life space of the normally hearing into the sheltered and protected atmosphere of societies and clubs for the hearing impaired. With the deaf it may mean staying within the safe and secure confines of deaf society. Hence, these people either reject or are rejected by the world of hearing. Meyerson remarks that this particular pattern of adjustment is condemned by all but those who practice it. He further maintains that withdrawal is not necessarily a maladjustive reaction. In many cases it is appropriate. Although it decreases the variety of satisfactions and gratifications which can accrue from the overlapping normal life space, demands upon the individual are fewer, more easily anticipated, and easier to carry out. Hence, the problem of overlapping roles is solved.

In adjustment pattern 2, the person aspires to the world of the hearing and rejects the world of the hearing impaired. This particular pattern is frequently lauded by hearing persons. They view the handi-

capped individual as having spunk.

At times the barrier between the two worlds can be penetrated successfully by the handicapped person because of a particular skill, because of wealth, or because of social position. But penetration of the barrier does not necessarily mean acceptance. Hostility may be prevalent. He who adopts pattern 2 must develop a high frustration level. A high degree of tension and conflict are certain. He will not have the emotional support of other hard of hearing friends. In brief, while he may make a more or less effective adjustment to normally hearing society, he will be more or less disorganized and maladjusted as a person.

Adjustment pattern 3 is an acceptance of both worlds by the individual. He realizes that there are benefits to be derived from each. He does not evaluate himself as being inferior because of his hearing

disability.

He may perceive that some have skills and privileges that he does not have and others do not have some of the skills and privileges that he has. However, he does not feel the necessity for making value comparisons and does not over-value the former or devalue the latter. He places his highest values on what he can do and on what he has reasonable expectations of achieving. Other abilities may be "a good thing" but they do not make the person who has them "better" nor the person who does not have them "worse." They are neutral.

In summary, an attempt has been made on the part of the writer to

seling, particularly as they would apply in the counseling of the deaf and hard of hearing.

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