

# Prelingual Profound Deafness and Psychopathology

## Research Section

### Introduction to the Research Section

The Research Section of this volume consists of four pieces of work completed over the duration of the course. The first comprises a review of the literature regarding prelingual profound deafness - exploring the three theoretically distinct ways in which this may impact on psychopathology and observing actual discrepancies between hearing and deaf populations. This review was completed during the first year of training.

The second part provides an evaluative report of a piece of clinical group work undertaken during the child, adolescent and family core placement. The two groups focussed on social competence training for 6-8 and 8-10 year old boys and this is described in detail from conception to evaluation. This piece of work is intended to fulfil British Psychological Society requirements for a piece of research work to be completed whilst on a clinical placement.

The third piece of work forms the small-scale research project completed during the second year of training. This study examines the sensitivity and applicability of an observation scale for measuring the distress exhibited by children during stressful medical procedures, and is presented as a pilot study to a proposed piece of work investigating the effect of the presence of parents during the child's recovery from general anaesthesia. This proposed study became untenable during the latter stages of the pilot study, was not therefore attempted and is not presented in this portfolio.

The fourth study presented in this section forms the main piece of research realised during training and was completed during the third year. It provides the main title to this portfolio. Following on from the pilot study above, this piece of work further explores the amended distress scale by assessing its validity, internal consistency, and underlying structure. It also explores factors proposed to influence the distress of children undergoing moderately painful medical procedures by investigating those predictor variables with established measures and distress with the amended instrument; the results of this exploration also provide a contrast between the amended and original versions of the scale. The introduction to this piece of work provides a comprehensive review of the constructs of anxiety, pain and distress.

## Prelingual Profound Deafness and Psychopathology

Introduction:

What is deafness ?

Deafness, partial or complete loss of hearing, may be described in a number of ways including severity, time of onset, and aetiology. The British Society of Audiology (BSA, 1988) provide audiometric descriptions of the severity of deafness as follows:

Descriptor:	Hearing loss (dB*):	Mild deafness	
20 - 40	Moderate deafness	41 - 70	Severe deafness
71 - 95	Profound deafness	96 +	

\*dB loss in the better ear on pure tone audiometry, average across 250, 500, 1000, 2000, and 4000 Hz. The intensity of conversational speech lies within the range 60 - 70 dB.

Hearing loss may result from a number of different causes such as prenatal rubella, meningitis, prematurity, complications of Rh factor, ototoxic drugs, syphilis, mumps, Ménière's Disease, and exposure to noise (Vernon & Andrews, 1990). Although, as shall be discussed, it is important to consider the aetiology of presenting deafness, the many causes may be divided into four categories as follows (O'Rourke, 1990): a) Conductive losses, which are those which result from a mechanical problem such as malformation of the ear. Because intensity at all frequencies is reduced, amplification can be beneficial. b) Sensori-neural losses which involve the cochlea and/or the auditory nerve and so affect fidelity as well as intensity, resulting in distortion. c) Mixed losses, which are those with both conductive and sensori-neural elements, and d) Progressive loss, which is a rare type that worsens over time (Freeman et al, 1981).

Finally, and perhaps most importantly, time of onset has a significant effect on the degree to which the hearing impairment becomes a disability, in that severe or profound deafness occurring before one year of age can significantly affect the acquisition of spoken language (Hindley, 1993). Kitson and Fry (1990) state both the incidence and prevalence of prelingual profound deafness to be 1 per 1000. Following from Basilier's (1972) definition of 'social deafness' - 'deafness which with the best hearing aids available (that the person will use) does not allow understanding of speech through the ears well enough to take part in a brisk conversation' - Kitson & Fry (1990) describe a more practical system of categorisation:

1. Prelingual (congenital or acquired before language development) a) Profound (no speech reception through the ears) b) Partial (some difficulty in speech)

reception)2. Postlingual (acquired after language development)      a) Profound  
b) Partial.

It is this classification which will be adopted below. However, when discussing the psychological implications of the impairment, it is important also to consider the cultural aspects of deafness, including the use of sign language, lip-reading or cued-speech, and membership of organisations for deaf people (Hindley, 1993). As has recently become standard practice, the essay will refer as far as possible to deaf people, who identify themselves as members of the deaf culture, as Deaf with a capital D, leaving deaf with a lower-case d for those people who may or may not identify with Deaf culture but do have a hearing impairment. It will be assumed that Deaf people communicate in a sign-language, while deaf people may or may not. Except where indicated, 'deaf' or 'deafness' will refer to prelingual profound deafness.

In this study of prelingual profound deafness, the question of whether there is a psychology of deafness, and what that means, will be addressed. The different ways in which deafness impacts on psychopathology will be discussed, and various responses or solutions to this considered.

The Impact of Deafness:

"Deafness before the acquisition of language [is] a greater affliction than blindness." Helen Keller (1929)

A brief look at the literature pertaining to this field quickly gives the impression of deafness as a uniform condition, and of deaf people as an unvarying population. This is clearly not a true picture. However, as a result, it can be inferred that there is a psychology of deafness, distinct from that of hearing people, which either compares deaf with hearing populations, assuming hearing norms, or adopts norms of 'deafness' thus homogenising a demonstrably diverse group. Neither of these conclusions are particularly satisfactory. There are specific difficulties of cross-cultural study which will be outlined later, however, Cole (1991) provides a practical perspective in that

"What makes it possible to talk about a psychology of deafness is that for many Deaf people their experiences have a lot of important factors in common and we can study the psychological effect of these factors."

Cole proposes a model that assumes a normal development throughout childhood and adolescence, which is encroached upon by a variety of experiences associated with deafness. These experiences include the deafness itself, and so the model becomes, to the pedant, somewhat tautologous, however the above model, as a rule of thumb, is a useful maxim to adopt when thinking about the impact of deafness on psychology and psychopathology. This impact may reasonably be expected to take any of three forms: i) The aetiology of the

deafness may bring with it further concomitant disorders or experiences, ii) the deafness per se may give rise to a describable psychological effect, and iii) the deafness may itself lead to an intermediate factor which results in a psychological effect. This essay will consist of an exploration of these three forms. It will become apparent that the distinction between ii) and iii) is impractical, and so will be discussed together (Aspects of Deafness.)

Concomitant effects of certain aetiologies of deafness:

It is estimated that 50% of deaf people are deaf as a result of trauma, and many of those are likely to have suffered some degree of brain damage (Kitson & Fry, 1990). Hindley (1993) describes how powerful the effect of brain damage is in the aetiology of psychiatric disorder, citing among others Seidel et al (1975), Shaffer et al (1975) and Brown et al (1981), and the means by which this effect may occur are described as:

“...impairment of intellectual function, specific learning disabilities, associated social disadvantage, social stigma associated with handicap, the effects of brain damage on temperament, and the effects of anticonvulsant drugs.”

Hindley (1993)

Of these mechanisms, it can be seen that some involve the direct effects of brain damage, such as specific learning disabilities, while others are concerned with secondary results, such as the effects of social stigma or drugs. However, be they direct or otherwise, they are all means by which concomitant brain injury may impact on a person's psychological functioning. Vernon & Andrews (1990) describe how trauma which results in profound deafness can occur as a result of a number of conditions (described above) and these conditions may give rise to further problems not necessarily directly related to the deafness. Outlined below are two examples of such conditions:

Rubella. During pregnancy, the otherwise fairly harmless rubella virus can have pervasive and traumatic effects. It quickly assaults the layers of embryonic tissue and reduces cell division in the developing body parts such as the ear, brain, eye, and heart. Vernon (1969) describes the prevalence of deafness due to rubella in his sample of 1,468 as 139, that is, 9.5%. In examining the IQ distribution of post-rubella deaf children, he identified a mean IQ of 95.3 with a standard deviation of 16.8, significantly less than the general population, and it is suggested that post-rubella deaf children do not succeed educationally as well as their deaf peers (Vernon et al 1980). Feldman et al (1971) distinguished an increase in aphasia among rubella-deafened children, which would also compound communication problems resulting from the deafness, and Chess (1977) identified an increased incidence of autism. Also implicated in rubella are psychosis and behaviour disorders such as poor impulse control, excitability, rigidity, distractibility, instability, and emotional shallowness (Trapp & Himelstein, 1972; Chess & Fernandez, 1980; Vernon, 1969). Although these effects should

be borne in mind, Vernon and Andrews (1990) stress the importance of realizing that the majority of prenatally rubella-deafened persons are, however, behaviourally within the normal range.

**Meningitis.** Meningitis is an infection of the membranes surrounding the brain. It deafens between 3 and 10% of its survivors and is the leading cause of postnatal profound hearing loss (Raivio & Koskiniemi, 1978; Vernon, 1967a&b). Also, as a result of the introduction of antibiotic treatment, the proportion of those deafened by meningitis being so before the acquisition of language is increasing. This is because once the early symptoms may be verbalised, antibiotic treatment may be quickly instituted, whereas the prelingual infant may only be recognised as meningitic once the disease is somewhat advanced. Vernon & Andrews point out that at this stage, even if treatment enables survival, the chance of sequelae such as deafness is greater, especially as, unfortunately, some of the drugs used for treatment have ototoxic effects (Hindley, 1993.)

Vernon (1969) has found the mean IQ of post-meningitic deaf children to be 95, and that 34% had an IQ of less than 90. (He also states that from a study of 26 meningitic deaf children aged between 7 and 12 months, the mean IQ was 91.50 and the percentage of those 'mentally retarded' [sic], 34.6%.) It was also identified that 38% of the post-meningitic deaf sample had additional major disabilities including, in order of prevalence, aphasia, learning disability, emotional disturbance and cerebral palsy, and that these were more likely following an early onset. Of the 8.3% that were dropped from school for 'emotional disturbance', 29.3% had problems such as aggression, hyperactivity, poor impulse-control and distractibility, psychosis, or anxiety as a reaction to aphasia.

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Other aetiologies which may have concomitant effects include prematurity and complications of Rh factor, which both appear to correlate with lower IQ, aphasia, and emotional disturbance, prematurity also being implicated in schizophrenia.

It can be seen from the above studies how the aetiology of a hearing impairment may itself increase the probability of further, psychological, problems, which may be considered in isolation from the deafness. That is, certain sequelae of a particular disorder may manifest in a person whether or not deafness is also indicated, and should not be interpreted as alleged 'symptoms of deafness.' However accompanying deafness must be acknowledged as it may influence the effect of that symptom, as well as the processes of assessment and treatment (see Implications for Services, below).

Aspects of Deafness:

Deafness per se: A number of different authors have suggested that, among other things, concrete thinking, impulsivity, rigidity, and lack of insight, are the direct results of deaf enculturation (Altshuler, 1971; Misiaszek et al, 1985; Kitson & Fry, 1990.) The term coined by Basilier (1964) for describing these behaviours - surdophrenia - which literally translates as 'deaf mind' - suggests that such behaviours are characteristic of deaf people in general, but there are a number of reasons why the term is unhelpful (BC Swaans Joha, 1991):

- It implies that surdophrenia is a mental illness, and is therefore confusing.
- The criteria and characteristics are inadequate.
- The literal translation implies that all deaf people necessarily suffer from mental health problems.
- The deaf community find it offensive.

The surdophrenic condition was simultaneously described by Rainer et al (1963) as 'Primitive Personality' although Vernon (1978) uses this term to describe deaf people who have been inappropriately provided for, such as those who live dependently and overprotected with their parents and who, when those parents die, have to face the double trauma of bereavement and independent living for which they are not prepared. Although the label suggests a particular personality type, as well as being pejorative, Vernon's use of it implies a problem not of a personality type unique to deaf people, but of a failure to adequately provide for the specialised needs of the deaf person. Perhaps as a result of the over-representation of deaf people in mental illness hospitals (that is by a factor of about 10 - Denmark, 1966) or by the assumption that no speech indicates no language which indicates no thought (Cole, 1991), it seems as if there has been an assumption of a problem or personality type peculiar to deaf people. The literature seems to imply that this assumption is unfounded, for example Vernon's (1978) use of Primitive Personality above being read as service deficiency, or John Denmark's (1985) description of problems related to deafness: Denmark describes 250 patients referred to a specialist psychiatry department for deaf people, underlining the need for such specialised services. The problems of these patients are categorised into three types - those suffering from mental illness, those with problems related directly to deafness, and those with communication disorders (which will be discussed later.) Of the prelingually deaf people studied, all of the problems related directly to deafness were behavioural and adjustment problems resulting from the communication difficulties of being deaf in a predominantly hearing world and/or family. It would not be valid to infer from this that such adjustment problems were necessary sequelae of deafness as there are certain other conditions the fulfilment of which effect the presence or extent of the problem; for example being raised in a predominantly oralist (\*) milieu, as Higgins (1987) demonstrates how deaf people from an oralist background are more likely to have a negative-self image, while those from Signing backgrounds are more likely to have a positive self-image.

Rather than supposing that deafness results in its own unique set of psychological problems, it may therefore be more constructive to look at how the

experiences of deaf people differ from those of the hearing, and then it may be possible to deduce reasons for those differences.

Comparative rates of prevalence: In order that one may examine such differences, to explore the possible effects of being born deaf on psychopathology, and to identify any clinical evidence for a psychology of deafness, it will first be necessary to examine rates of prevalence. Vernon & Andrews (1990) provide perhaps the most comprehensive analysis of the comparative prevalence rates of non-psychotic and psychotic behaviours between deaf and hearing people. The following is a brief summary. Where observation is based on research, this will be indicated, otherwise it may be assumed that it is based on Vernon's 1969 paper, or his clinical experience:

Learning disability: There is a similar distribution of IQ scores for both deaf and hearing populations, although Brill (1963) has shown genetically deaf people to have higher mean IQs than the general population. The main problem is one of poor assessment measures, as described later.

Attention Deficit Disorders: There is a higher prevalence of attention deficit disorders among deaf people, as a result of the brain damage or endocrine disorders associated with the aetiologies of deafness (Vernon, 1969).

Substance Misuse: Patterns of the misuse of drugs and alcohol are said to be similar for deaf and hearing populations. Hooten (1978) suggests isolation, unemployment and stress could lead to increased levels of alcoholism in deaf people as they are more prone to these, while Altshuler and Rainer (1970) propose that lack of depression (see below) would reduce the prevalence of drinking problems. Overall, the rates of substance misuse are no different from the general population.

Anxiety Disorders: Obsessive-compulsive disorder, anxiety, post-traumatic stress and phobias occur as frequently among deaf as hearing people.

Somatoform Disorders: According to clinical experience, these are no more prevalent in deaf than hearing populations.

Paraphilias: No research data exists on prevalence rates, but Vernon's clinical experience suggests no difference between deaf and hearing people.

Disorders of Impulse Control: Impulsiveness seems to be found more often in those people who are deaf as a result of organic factors. Harris (1976) and Levine and Wagner (1974) showed that there is no more impulsiveness in deaf people who have early exposure to sign language, deaf parents, or high levels of academic achievement, so, a lack of these factors may raise the likelihood of problems with impulse control.

Paranoid, Schizoid, and Schizotypal Personality Disorders: There appears to be no increased risk of schizoid and schizotypal personality disorders among deaf people. Neither is there an increased risk of paranoid personality disorder despite there being significant mention of connections between deafness and paranoia in the literature, such as DSM III (Spitzer, 1980) and Cooper (1976). Cooper goes on to distinguish between pre- and post-lingual deafness, describing a clearer relationship between post-lingual deafness and paranoia - perhaps as a result of increased (possibly reality based) suspiciousness, or of misunderstanding (Kitson & Fry, 1990.)

Histrionic, Narcissistic, and Borderline Personality Disorders: Vernon and Andrews describe Histrionic Personality Disorder as being no different in deaf than hearing people, although they admit a lack of research data. Narcissism may have an increased prevalence among deaf people, but there is no explanation other than its possibly being caused by naivety. This naivety could reflect a number of the common experiences of deaf people outlined by Cole (1991) - lack of experience, lack of knowledge, and lack of incidental information being picked up which is critical to the development of what many would refer to as 'common sense.' The presence of Borderline Personality Disorder in deaf people does not appear to be mentioned in any literature, while its significant absence is described by Grinker (1969). It is stressed that this absence may be due more to diagnostic difficulty than nonoccurrence.

Avoidant, Dependent, Compulsive and Passive-Aggressive Personality Disorders: The social dynamics of deafness (which are not described) are said to result in a higher prevalence of both Avoidant and Dependent Personality Disorders among deaf people. Compulsive Personality Disorder is no more common, while Passive-Aggressive Personality Disorder is implied to be more prevalent as a result of failures of communication with authority figures, leading to direct, impulsive ways of acting out (which leads to more trouble), which becomes a passive compliance with an underlying resistance. This seems a rational hypothesis, but, reasonably, the increased prevalence is only implied.

Schizophrenia: Kitson and Fry (1990) suggest that schizophrenic psychoses are found equally among deaf as hearing people, quoting Altshuler & Sarlin (1963), although they point out that there are no reliable figures - possibly as a result of problems in diagnosis. Similarly, Vernon and Andrews describe how the proportion of hospital admissions for deaf people for schizophrenia is about the same as for hearing (presumably meaning the proportion of deaf to hearing schizophrenic admissions is the same as the proportion of deaf to hearing people in the general population; the description is ambiguous.) However there are more deaf schizophrenic people in hospitals than hearing (Basilier, 1964) probably as a result of communication problems impeding the monitoring of treatment, and the concurrent misdiagnosis of paranoia or learning disability resulting in admission to more long-stay chronic wards. As an illustration of this,

Timmermans' (1989) study found the average stay in hospital to be 148 days, while deaf inpatients remained for 19.5 years (Kitson & Fry, 1990).

Depression: Altshuler (1971) suggests that depression is rare in deaf people, possibly as a result of deaf children not being so exposed to parental and societal pronouncements, leading to a less developed super-ego and so less depression; that is, it is "suggested that hearing is required for normal development of object relations and conscience." (Kitson & Fry, 1990.) Kitson and Fry go on to suggest that Deaf people with normal language development (in sign) do not appear to suffer delayed personality development, but that this population is too small to effectively study. Evans and Elliot (1987) suggest, also, that "contrary to a commonly held belief about deafness, depression is fairly common in our prelingually deaf patients, particularly in the self-referrals seen in our satellite clinics" - suggesting that referral and presentation patterns may mask depression in this population.

Autism: Autism has not been shown to be any more or less prevalent among deaf than hearing people unless the cause of the deafness was prenatal rubella, in which case the prevalence is 7.4%, compared to 0.7% for the general population (Chess, 1977; Chess & Fernandez, 1980.)

Certain themes are evident in this summary. Perhaps most striking is that, given appropriate (\*\*) assessment tools, there is no reason to suggest that prevalence rates for deaf people are any different than those for hearing people on at least a half of the above disorders, including schizophrenia, certain personality disorders, and anxiety disorders. Of those that are different, two show reduced rates - possibly due to presentation rates and referral pattern, problems of diagnosis, or maybe developmental issues, while six show increases in prevalence - some as a result of common organic aetiology, and others as a result of social factors such as being overprotected or isolated, and frustrating failures of communication. Certain issues of neuropathology have been discussed above, and so will not be dealt with again here, however, the main explanation for certain prevalence rates would therefore seem to be the many different experiences associated with deafness which may impact upon issues of psychopathology. Cole (1991) collates these as follows:

Deafness and background variables: Age of onset                      Degree of deafness  
Speed of loss      Time of diagnosis      Deaf or hearing parents  
Parental attitudes      Other problems...              Individual Character  
General environment (physical, intellectual etc.)

Experiences: Type of education      Attitudes of professionals      Attitudes of  
parents      Communication              Separation  
Friendships      Information input              Deaf or hearing world  
Stigma              Lack of experience              Lack of knowledge  
Limited role models      Fear                              Over protection

Consequences:Feeling rejected	Isolation	Lack of
identityIdentity confusion	Relationships	Fear &
anxietyDepression	Lack of control / power	Hard
workEmployment	Training	Self imageSelf esteem
Confidence	Limited opportunities	Limited social roles

The categorisation of certain items in these lists is debatable, for example some may argue that parental attitudes and time of diagnosis are a resulting experience, and indeed the distinction between experiences and consequences could seem a little arbitrary. However, they provide an excellent aide memoire for items which the professional should consider, and Cole describes how they relate as follows: "Background variables to do with deafness, the individual's characteristics, particular family circumstances and the wider social environment interact to dictate the individual's experiences, some of which can be influential in determining their psychological functioning." She points out that many of these experiences emphasise disability and goes on to describe in detail how development may progress differently for a deaf person, which demonstrates quite clearly how it is the combination of deafness and the environment which impacts on psychological functioning, rather than the deafness per se. There are probably three main aspects from these lists which psychological services should consider: professionals and their attitudes, issues of communication, and deaf or hearing world (culture), for these may have serious implications for assessment and the process of intervention

Implications for services:

Issues of communication:

"Language influences the assessment process more than almost any other variable..."  
Orr et al (1987)

Alice Thacker (1990), a specialist speech therapist in hearing impairment and psychiatry, provides two explanations for the over-representation of deaf people in mental health services described above: the first is a failure to detect the hearing loss at all, such that certain limitations resulting from the deafness such as impoverished vocabulary, rigid structure and little linking of themes are interpreted, for example, as poverty of content, poor insight and withdrawal. The second is a failure to adapt diagnostic procedures and management appropriately. This is pointed out well by Monteiro (1989) who describes how "it is extremely difficult to diagnose even physical illnesses without effective communication between patient and doctor." Clearly, a psychological assessment can be rendered almost impossible without effective communication between therapist and client, which, as Monteiro describes, can render the assessor feeling deskilled and helpless and so, under pressure to offer an opinion, often makes an assessment which has little established basis.

One answer to this problem could be the use of an interpreter. However, this also affects the assessment or therapy session in a number of ways (Orr et al, 1987). For example, the presence of an interpreter turns a dyadic process into a triadic one which Hoyt et al (1981) point out may dilute and distort the relationship, complicating transference issues, and make the interpreter become a centre of authority. Also the interpretation is never a literal word-for-sign conversion as most sign languages, like spoken ones, have different grammatical structures and inferences attached to the concepts. Therefore, the interpreter's job is also to try to capture the hints and flavours of the conversation, which necessarily introduces that person's history, expectations, and understanding of psychological concepts into the situation - to accommodate this, Orr et al emphasise the necessity of using an interpreter with expertise in the mental health situation. There is also a question of confidentiality.

If the psychologist chooses to use sign language, it is clearly important that that language can be used fluently. Orr et al point out that it is easy to slip from ASL or BSL (American and British Sign Language) into signed English, which differs in syntax, thereby unintentionally changing the meaning. It is also necessary to recognise that deaf clients may have variable abilities in the chosen method of communication as a result of a changing educational and familial background. Thus, if for example BSL is the predominant language of choice for a particular client, it may not be the case that that person is fluent in that language, and so may also slip into other signed systems, or indeed other means of communication altogether. Even the most fluent professional would have to be extraordinarily skilled to effectively follow such a conversation. Similarly, though, as a result of a varying background many deaf people are able to adapt their language to the situation. Orr et al, however, describe how this can lead to tension, stress, frustration, misunderstanding, and constriction. Schlesinger and Meadow (1972) point out, also, that communication difficulties can be used as a resistance by clients, for example by signing too rapidly, looking away, or selectively misunderstanding troubling material.

#### Issues of Assessment:

"Misdiagnosis of deaf patients is common. Many are labelled mentally retarded or schizophrenic as a result of their language disability due to deafness, not the actual presence of retardation or psychopathology."

RR Grinker (1969)

As described by Monteiro (1989), there are a number of ways in which communication issues can affect assessment and diagnosis. One is that psychopathology is inferred when in fact there is none, as proposed by Thacker (1990), above, while another is that presenting psychopathology may be missed. The former is further described by Hoyt et al (1981) who demonstrate that "what may appear to be unusual or distorted thinking may actually be a normal and

appropriate locution in ASL” and by Evans and Elliott (1981) who report “the tendency to overdiagnose schizophrenia as a wastebasket classification when confronted by a gesticulating, excited patient who cannot be understood.” Denmark (1966) has also written that “the inability in the deaf to express dissatisfaction or anger in the normal way, or quickly enough, by emotionally tonal verbalisation, often leads to the physical display of such feelings. To those without a knowledge of the psychology of the deaf person these reactions, at times explosive in nature, are incomprehensible and may be mistaken for the manifestation of mental illness.”

Neither positive nor negative misdiagnosis is helped by the standard classification systems such as DSM-IV which often unavoidably have to use symptoms based on a mostly hearing population. As illustration, Evans and Elliott (1981) demonstrated how of the fifteen signs and symptoms of schizophrenia they identified from three separate classification systems, six were present in non-psychotic as well as psychotic deaf people. (This paper therefore provides a good working system for identifying schizophrenia in deaf people.) Thus, even without overriding communication difficulties, strict diagnosis, for those who demand it, becomes problematic in and of itself.

Similarly, of course, assessment tools and psychometric tests are more often than not equally bound up in a hearing milieu. F.R. Zieziula (1982) describes four critical questions to be addressed when selecting a test for use with a deaf person:

1. Does the test consist of verbal test items or performance items ?  
Prelingually deaf people will usually have difficulty with English syntax and vocabulary, indeed, the mean reading level for this population is estimated to be at a third- or fourth-grade level. Performance on verbally loaded test items will therefore be clearly impeded.
2. Do instructions for the test require verbal communication ? Even if the test items are performance-based, the instructions often are strictly verbal. Sometimes, the test developer will allow alternative instruction procedures, which may make translation into sign language a viable option, but even then, the validity of the results must be questioned (see issues of culture, below).
3. Do any test items discriminate against people with an auditory impairment ? Some test items relate to an individual’s ability to hear and function in a hearing world. For example behaviour items in the Vineland Social Maturity Scale include “makes telephone calls” and “talks in short sentences” while the Minnesota Multiphasic Personality Inventory includes statements such as “my hearing is apparently as good as that of most people.”
4. Are hearing impaired people included in the normative sample provided by the test developer ? This can include a separate normative sample of hearing-

impaired people, or even whether deaf people are included in the general normative sample. (Which sample is more appropriate is a matter for debate, and would probably depend on the purpose of testing.) When a test does not satisfy this criterion, interpretation of results should be made very cautiously. Indeed, most tests do not - of those that do, Zieziula identifies the WISC-R Adaptation by Ray (Ray 1979), the Stanford Achievement Test (Hearing Impaired Edition), the Geist Picture Interest Inventory: Deaf: Male Form (Geist, 1962), and the Hiskey-Nebraska Test of Learning Aptitude (Hiskey, 1955), to which Orr et al (1987) add the Leiter International Performance Scale (Leiter, 1948).

#### Issues of Culture:

It is the shared experience of being deaf, described by Cole above, which, partially, determines members of the Deaf community (Higgins 1987), and, while the above criteria relate to the communication issues surrounding deafness, there are also factors of cultural validity to take into account when testing Deaf people. A useful analysis of cross-cultural testing is provided by Flaherty et al (1988) who identify five sorts of validity which should be achieved: The first is Content Validity in which each item of the test is examined to ensure relevance to the culture. The second is Semantic Validity where items in the translated, or otherwise adapted, version of the test continue to mean the same thing after translation (a useful test of this being back-translation where the item is translated back into the original language and examined for equivalence.) Technical Validity is that in which the method of data collection affects the results in different ways, depending on the culture.(Hindley (1993) points out that the interpreter in his research considered a face to face interview to be foreign to deaf children.) Criterion Validity is concerned with whether the test items refer to the same concepts in each culture, and Conceptual Validity considers whether the test items relate to concepts that are not alien to the culture.

While Flaherty et al's study is concerned with research tools, the issues therein are still as pertinent for the hearing professional working at any level with Deaf people. No attempt has been made here to define Deaf culture, as attempts to define any culture must necessarily be so precise as to be lacking depth, or so general as to be uninformative. Higgins (1987) provides a clearer picture, but for the purposes of service provision, recognition that a client may identify with the Deaf culture should render the professional receptive to whatever that may mean for that client.

#### Summary:

Deafness has been described above in a number of ways, for example in terms of time of onset, severity and aetiology. The question of whether there is a 'psychology of deafness' has been discussed and the various means by which a hearing impairment has been said to influence psychopathology identified - common aetiology, aspects of deafness per se and experiences of deaf people.

Many different authors have described this in as many different ways, including the assertion that deafness leads in and of itself to a particular type of person - which seems to be both unfounded and unnecessary. The most practical explanation seems to be one in which deafness can result in different experiences from those of hearing people, and it is this combination of experiences which impacts upon psychopathology. This is not to say that deaf people all share a unique homogenising set of life events, but that there is a set of experiences resulting from being deaf, a subset of which may apply to a particular person. It is also clearly important to consider the cause of the hearing impairment, as this may play a critical role in presenting psychopathology.

Three considerations to observe as a hearing professional when working with a deaf person have been discussed. Communication issues, once identified, may be addressed in a number of different ways, though none of these is without its drawbacks; formal assessment is plagued with pitfalls which cause the assessor to rely almost entirely on qualitative rather than quantitative measures; and Deafness as a culture also has pervasive effects on both formal tools and informal understanding.

To conclude, the question of whether there is a psychology of deafness, of whether prelingual profound deafness affects psychopathology, becomes less meaningful once one acknowledges a culture of deafness. Indeed, when one attempts to delineate a psychology of deafness, recognition of culture becomes unavoidable.

In the absence of comprehensive psychology services, of deaf psychologists, and of appropriately standardised assessment tools, other than by developing as thorough an understanding of deafness as possible the main answer when working with a deaf client must be to be truly client-led.

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This file is a part of: An Amended Form of The Observation Scale of Behavioural Distress (To Investigate Factors Affecting the Distress of Paediatric Outpatients)

A Portfolio of Academic, Clinical and Research work carried out by: J. A. Cromwell

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