Psychological Evaluation of Children who are Deaf-Blind: An Overview with Recommendations for Practice

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Psychological Evaluation

Psychological Evaluation is the process of gathering information to help us understand who a person is—important information for determining that person's educational goals. An evaluation should seek to identify strengths as well as needs. It can document the progress a person has made, and it can suggest interventions that may support further growth. For young people who are deaf-blind, meaningful psychological evaluations are critical. They can help determine what instructional goals are most appropriate and what educational services and resources will help the person achieve those goals. In addition, these assessments must carefully consider how vision and hearing losses affect a student's learning style, social behaviors, and communication skills.

Evaluation of students who are deaf-blind is a challenge to all concerned. From the psychologist's point of view, there are few professional standards to go by. Most psychological tests are inappropriate because they have been developed for students with normal vision and hearing. Often, communication barriers exist and the psychologist cannot reliably determine the student's cognitive, social, and functional capabilities. From the student's point of view, the evaluation process can be frustrating if the tasks are not meaningful and if the materials cannot be easily perceived. For the educator and parents, test scores, such as age levels or IQs, can mask a person's true skills and competencies. Assessment reports may not provide an accurate profile of a student, and may not provide information that will be helpful.

Through this fact sheet we hope to lessen the challenge. By providing answers to frequently asked questions about psychological evaluations for infants, children and adults who are deaf-blind, we hope to clarify the evaluation process and the active roles that may be taken by everyone who is involved—family members, professionals, educators, and the student. Finally, by discussing quality indicators and desired outcomes, we present ways to view and use the evaluation process so it will benefit the student to the greatest degree possible.

Frequently Asked Questions

What skills and abilities are assessed in psychological evaluations?

Psychological evaluations can provide information about an individual's cognitive, sensorimotor, communication, academic, and social skills, as well as behavioral and emotional functioning. Psychologists use observations, interviews, tests, scales, checklists, and other instruments to assess these and related skills. Tests of *intelligence and cognition* typically measure skills involving general knowledge, memorization, calculation, reasoning, visual-motor coordination (e.g., writing, drawing), classification, problem solving (e.g., puzzles), and perceptual organization. Such abilities are thought to be closely related to academic achievement. Measures of early *sensorimotor development* provide information about how infants and toddlers explore and manipulate objects in their environments; perceive and respond to visual, tactile, and auditory events around them; coordinate motor actions (e.g., reaching and grasping); acquire new concepts; and engage in social play. Evaluation of these skills helps educators and therapists to consider appropriate goals and activities in early intervention programs.

Many children and adolescents who are deaf-blind express themselves in forms other than speech. Since *communication and language* skills are involved in virtually all academic and social activities, it is especially important for psychologists to understand how a student communi-

cates with others. Psychologists may examine an individual's means of expression (e.g., gestures, words, tactual signs), vocabulary, comprehension, use of symbols, and social interaction skills. *Personality, behavioral, and emotional functioning* may be assessed when there are concerns about self-esteem, problem behaviors, anxieties, attention span, mood swings, disturbances in basic routines (e.g., sleep, mealtime), and adjustments to changes and transitions. Some instruments are used to obtain information about a student's sense of identity, thoughtfulness, motivation, moral reasoning, interpersonal feelings, and attitudes. Others can help educators and parents understand patterns of behaviors that interfere with learning or social interaction, or that may be self-injurious. Educational tests, or measures of *academic achievement*, assess proficiency in reading, arithmetic, spelling, concept learning, braille, and other areas that are directly relevant to school learning. Results provide information about students' degrees of progress, areas of difficulty, appropriate levels of curricular instruction, and special aptitudes.

Measures of *social and adaptive abilities* focus on basic life skills involved in self-care, orientation and mobility, play, domestic chores and routines, dressing, eating, community experiences, leisure, work, and interpersonal relationships. Assessment of these skills must always be included in the psychological evaluation of a person who is deaf-blind. Results help determine in what areas and to what extent interventions or adaptations may be required to promote one's independence. Some psychologists also evaluate *vocational aptitudes* to help define a person's work interests and talents. In transition planning, or the consideration of services that an individual who is deaf-blind will require after leaving school, vocational assessment may suggest the environment, supports, and training program in which work skills can best be enhanced.

Can students who are deaf-blind be meaningfully evaluated?

Some children and adolescents who are deaf-blind are "untestable" in the sense that standard psychological tests involving language, reading, problem solving, memory, eye-hand coordination, and abstract thinking, do not correspond to the students' actual capabilities, educational priorities, and learning experiences. Put another way, certain tests may not be relevant for certain students. However, even if standard tests cannot be used, psychological evaluations are still

important. They can be designed to address such concerns as the following:

♦ What procedures best support this person's learning?

♦ What strategies or materials promote a student's attention or motivation?

♦ How can the student use multisensory information to approach new tasks?

♦ How are instructions best communicated to the student?

♦ What factors contribute to problem behaviors?

♦ How do spatial memory skills affect orientation and mobility training?

♦ What assistive devices would enhance classroom performance?

♦ Is a student able to associate specific meaning to a hand sign?

♦ To what degree does the student understand and take part in various work and self-care routines?

♦ What procedures will enhance social interests and interactions?

A psychological evaluation can be meaningful for students who are deaf-blind, but it must be combined with careful consideration of relevant educational and psychosocial concerns for the individual student.

Is there a preferred method for evaluating an individual who is deaf-blind?

Because people who are deaf-blind are so diverse in sensory capabilities, learning and communication skills, interests, education, and experiences, there is no "best" approach to psychological evaluation. However, all evaluations must be guided by pragmatic and relevant concerns, such as an individual's ability to communicate, acquire new information in school, interact with others, carry out meaningful routines, and solve problems. Although there are many different assessment approaches, they can be categorized by some common characteristics.

Psychometric. The *psychometric* approach involves the use of formal tests which yield quantitative scores such as IQ, mental age, percentile ranking, and grade level. These tests are usually administered using a "standard" procedure so that a student's scores can be compared to those of typical students. Two of the most common

tests of intelligence are the **Wechsler Intelligence Scale for Children** and the **Stanford-Binet Intelligence Scale**. Since no formal tests of intelligence have been developed specifically for use with children and adolescents who are deaf-blind, psychologists often adapt tests for use with students. However, if a test is adapted, the psychologist must be extremely cautious interpreting the results. Scores may not be valid once there is departure from standard procedures; they may underestimate or overestimate an individual's true potential. But more important, adaptations may be appropriate only if using the test is relevant in the first place, that is, if the test measures the types of skills that correspond to the student's educational goals and school experiences. A test of vocabulary or word knowledge, for instance, would not be relevant to a student who is just learning to meaningfully associate objects or events to simple gestures, signs, or symbols. Examples of relevant test adaptations for students who are deaf-blind include enlarging visual materials, giving the student extra time to respond, eliminating some test items, using brailled or tactile materials, allowing the student to respond in a different form (e.g., via communication device or by pointing), and having an interpreter deliver instructions.

Developmental. *Developmental* assessment focuses on the quality of a child's interactions with persons and objects. This approach is most appropriate for assessing infants, toddlers, and young children. Assessment procedures are usually not as formal as the psychometric approach, as the objective is to describe a child's approach to novel tasks, exploration and manipulation of objects, reactions to social stimuli, early communication behaviors, motor coordination, and quality of play. Results are usually expressed in terms of the child's stage of development, or the typical age range corresponding to the child's accomplishments. **The Bayley Scales of Infant Development** is probably the most popular developmental instrument. **The Callier-Azusa Scale**, another developmental tool, was specifically devised for use with children who are deaf-blind.

Functional. *The functional* (or ecological) approach emphasizes evaluation of basic life skills and community living, such as self-care routines, social interaction, work skills, self-determination, orientation and mobility, and leisure skills. In addition, this functional approach can be used in academic settings to develop strategies for classroom participation and socialization. Generally, rating scales and checklists are used to gather information obtained through interviews and observations of students in natural activities and settings. There are a number of functional assessment tools that have been developed for use with individuals who are deaf-blind with other disabilities. A student's performance might be given a rating or score (such as a percentile ranking), but the more important information is the qualitative description of the individual's competence or degree of participation in routines. Environmental factors, such as familiarity of setting, presence of peers, preferred activity, and physical space, are taken into account in evaluating skill areas.

Behavioral. The focus of *behavioral* assessment is to provide a proactive, positive behavioral support plan. Many children and adolescents who are deaf-blind and who may have additional severe disabilities need such support. Behaviors may be motivated by the need for sensory input, and represent forms of communication and interaction. In behavioral assessment, the frequency and intensity of behaviors are analyzed for the purpose of designing interventions and support.

Different approaches to evaluation are used for different reasons. For instance, for a school-aged child whose curriculum emphasizes academics (e.g., reading, mathematics, science), a psychometric approach might be used to describe the student's thinking and memory skills, ability to solve problems, verbal knowledge, and comprehension ability. In contrast, for an adolescent who has severe cognitive disability in addition to deaf-blindness, a functional approach might provide information about the student's social competence, basic self-care skills, vocational interests, and behaviors in the context of everyday life. Often, psychological evaluations of students who are deaf-blind involve the use of more than one approach because the educational and social concerns are so complex.

Who should conduct psychological evaluations of students who are deaf-blind?

While most psychologists are licensed or certified, there are no professional credentials that specifically qualify psychologists to work with students who are deaf-blind. In fact, few school, counseling, or clinical psychology programs offer experience in evaluating those who are deaf-blind. Most psychologists receive this kind of training on the job or in special workshops. Some have interests or skills in sign language, sensory impairments, behavioral support, early childhood development, special education,

and/or related topics. In the past, psychologists with these specialized interests were generally based in schools or agencies serving individuals with sensory impairments.

Increasingly, however, students who are deaf-blind are being educated in their own community schools where psychologists may not be as familiar with issues of deaf-blindness. Ethically, a psychologist who lacks the experience and support to provide professional services to students who are deaf-blind must refrain from doing so. Therefore, a parent should ask the psychologist about his or her background and experience working with students using communication forms other than speech. Parents should ask psychologists about their knowledge of the nature of deaf-blindness, general approach to evaluation, and ability to accommodate students who are deaf-blind. Parents might also inquire about the experience of other members of the educational team when multiple assessments (e.g., physical therapy, speech and language) are planned, as in triennial (three-year) school-based assessments. Many agencies (e.g., commissions for the blind and visually impaired, schools for the deaf, state deaf-blind or 307.11 projects, university-affiliated programs on developmental disabilities) can help parents identify experienced psychologists.

How should the psychologist prepare for an evaluation of someone who is deaf-blind?

Psychologists must be aware of many special concerns when evaluating a student who is deaf-blind. It may take extra time for the psychologist to get to know the student and for the student to feel comfortable with the psychologist, especially if the student is young or has other severe disabilities. Often, there are preferred ways to approach the student: a touch cue, name sign, tactual sign, auditory cue, or other signals when being introduced. The presence of a person familiar to the student may be required to help the psychologist establish initial rapport.

Usually, *communicating* with the student is the major concern. For students who use sign language, an interpreter is required for all evaluation activities. Misunderstanding is likely, even with a good interpreter, so caution should be taken to check for comprehension before moving on or making assumptions. Some students who are deaf-blind use augmentative communication devices, such as picture boards, communication booklets, or electronic systems. The device must be available during structured learning activities, and also during natural rou-

tines so that the psychologist may observe its functionality and its limitations. Braille users may require adapted assessment materials and perhaps special equipment (e.g., brailler, speech synthesizer) when performing psychoeducational tasks. Many students who are deaf-blind use very basic forms of communication, such as gestures, vocalizations, physical reactions, and direct behaviors. Rather than viewing these forms of communication as "barriers" to assessment, it is important for the evaluator to understand and describe them in terms of their functions and useful qualities.

Psychologists should understand that the use of *standard tests may not be appropriate* when evaluating a student who is deaf-blind. If the psychologist engages the student in testing, special considerations may be required. In structured learning tasks, for example, lighting conditions can affect a student's level of fatigue, motivation, or ability to perform. Some students work better in well-lit rooms whereas others work effectively in dimmer settings. Similarly, it is important to know about the student's field of vision, the optimal positioning for desk-top activities, preferences in contrast and background (e.g., white letters on black paper), desirable size of photos or letters, and the optimal distance for presenting test materials. All necessary assistive devices need to be available. If the student uses hearing aids, they should be turned on and properly adjusted. The psychologist should also be aware that background noises can be very distracting. Glasses or contact lenses should be worn, and a magnifier present if the student uses one in school. Even if recent hearing and eye reports are available, the psychologist should carefully observe how the student's sensory impairments actually affect attention, motivation, organization, and task performance in the context of learning and social activities. Because visual and auditory perception demand extraordinary attentional efforts of students who are deaf-blind, they are prone to fatigue. A work session may need to be divided into shorter segments.

Some students may exhibit *behaviors that interfere* with the performance of learning tasks or natural routines. These may include repetitive or excess behaviors, short attention span, self-injurious behavior, high activity level, disinterest in others, and aggressive behavior. Psychologists should consider what functions these behaviors might serve, especially for those whose communication forms and skills are basic.

What roles do parents play in the evaluation process?

Parents should have active roles in psychological evaluations. Parents can provide information and insights about their children that might not be observed within the limited time frame of an evaluation. Previous reports, samples of the child's work, videotapes, and other kinds of information are often helpful to the evaluator. Psychologists may need to consider, for example:

♦ Specific goals parents have for their children;

♦ Teaching strategies that parents find effective;

♦ Concerns at home or in the community;

♦ Competencies and areas of progress that might not be reflected by tests;

♦ Recent medical and health history;

♦ Behavioral problems or concerns over emotional functioning;

At the outset, parents and psychologists should discuss the relevant educational and social concerns for the student, as well as the specific objectives and purposes of the evaluation. If parents are unable to meet with the psychologist, a strong effort should be made to share information and concerns by telephone. In two-parent families, participation of both parents is important because of the different perspectives each may bring to bear on various issues.

Parents should meet with the psychologist following the evaluation. Parents need to have results presented to them in clear and meaningful ways. They should also ask questions about the implications of their child's performance. It is natural for parents and psychologists to have some differences in their observations, opinions, or interpretations about a student's skills or behaviors. When such differences occur, they need not be explained away as an inadequate evaluation by the psychologist, a "bad day" for the student, or the wishful thinking of parents. On the contrary, differences in how psychologists and parents observe or perceive a student's abilities or performance often point to more complex issues and lead to productive exchanges about how the child's behavior may vary across situations and environments. For this reason, it is essential that psychologists and parents attempt to communicate openly throughout the evaluation process.

Quality Indicators and Desired Outcomes

What determines the quality of a psychological evaluation?

No two psychological evaluations are the same. It is possible that different psychologists assessing the same student would use entirely different approaches and instruments, and present their results in different ways. However, a psychological evaluation should be held to certain standards of quality which help to determine how well it meets the needs of the student. Each evaluation should have "quality indicators" reflected both in the assessment design and in the psychological report, that summarize findings about the student's learning, communication, and social skills. Quality indicators include the following:

♦ Identification of specific educational and psychosocial concerns to be addressed

♦ Use of assessment tasks and activities that are meaningful to the student and relevant to his or her educational program and needs

♦ Use of multiple procedures and instruments to obtain information about the student (e.g., observations, one-to-one learning tasks, checklists, interviews)

♦ Multiple observations of student's communication behaviors and social interaction skills while he or she participates in natural activities and routines

♦ Description of the student's degree of participation in tasks and activities, as opposed to description of failures and inabilities

♦ Focus on the process of learning (e.g., how the student actively acquires new information), rather than on test scores

♦ Involvement of teachers, parents, and other related-service providers in review of relevant concerns and information gathering

♦ Assessment of pragmatic, functional home and community skills

What are the desired outcomes of a psychological evaluation?

It is crucial that psychological evaluations lead directly to positive outcomes for the student, his

or her parents, and the educational team. Observations and results must be translated into recommendations that suggest effective interventions, teaching strategies, and supports to enhance the student's learning, communication, and life skills. The translation of results is complex as there are many educational objectives and learning activities to develop. Desired outcomes include the following:

♦ Increased understanding of the student's range and forms of communication behaviors, and identification of the activities, communication partners, opportunities, and strategies that enhance communication.

♦ A written report that objectively describes the student's competencies and areas of difficulty, degree of progress across areas, circumstances or environmental factors that might have enhanced or interfered with performance during the assessment, emotional or behavioral concerns, and specific recommendations for supports and services that can be realistically implemented. Reports should avoid using jargon or technical language, making unnecessary references to scores or age levels, and comparing the student's performance to that of the "norm."

♦ A description of the student's social interaction skills, involvement with peers, and participation in school and community activities. Opportunities to develop social relationships are limited for many youngsters who are deaf-blind, and strategies to increase the student's participation in activities with peers and schoolmates are important but often overlooked.

♦ Consideration of what goals the student might be expected to achieve in academic, communication, social, and/or daily living skills given his or her current competencies and past progress. General approaches or strategies that may help the student achieve those goals should be discussed.

♦ Discussion of strategies to help parents and teachers deal with problem behaviors using positive supports such as reinforcers, preferred activities, redirection, and communication training. If necessary, a plan to monitor behavioral issues should be outlined.

♦ Suggestions about age-appropriate and meaningful materials and activities that can increase the student's social and academic participation, and enhance particular skills.

♦ Thoughtful consideration of needed supports and services for the student, including review of the important issues. The specific reasons for recommending, for example, counseling, assistive technology, or consultation from an itinerant vision teacher should be provided, with reference to findings of the evaluation.

A psychological evaluation should be viewed as a process that reviews a student's past achievements and addresses current concerns as well as the long-term plans and goals of the student and family. A successful evaluation suggests interventions and supports that can help the student achieve immediate goals. It also guides the educational team to make informed decisions that will affect the student's life.

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