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Discrepancy Models and the Discrepancy Between Policy and Evidence

The following articles are a synopsis of a double miniseminar sponsored by Division 1, At the ASHA Convention, December 9, 1995, in Orlando, FL.

Opening Remarks: Are We Asking the Wrong Questions?

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Discrepancy models of language impairment are active whenever “cognitive referencing” is used to diagnose impairment. The practice of cognitive referencing has widespread implications for professionals working with children, particularly in the schools, but also in other settings and sometimes with adults. Cognitive referencing means that scores on measures of language development are referenced to scores on measures of cognitive development for the purpose of determining who is eligible for language intervention services. In its most extreme form, individuals are only considered eligible for services when a significant discrepancy exists between cognitive ability and language ability (usually specified by some formula), and even more importantly, individuals often cannot be found eligible if such a discrepancy does not exist, no matter whether additional evidence might suggest that they need the service and could benefit from it. Current practices often lead clinicians to ask, “Who has language skills that are significantly lower than their nonverbal cognitive skills?” Perhaps instead, we should be asking, “Who has language and communication skills that are insufficient to support them in the important contexts of their lives?”

In the paper summaries that follow, Michael Casby explains how cognitive referencing relates to the unproved hypothesis that cognitive development is necessary for language development to occur. The natural outgrowth of this hypothesis is that a child who shows commensurate levels of cognitive and language development would be unlikely to benefit from such service. The reasoning goes that such an individual is simply a slow learner (i.e., if his or her IQ is in the 70 to 90 range) or mentally retarded (i.e., if his or her IQ is 69 or less), and the person’s language level, if commensurate, is presumed simply to be where it “ought to be,” given the person’s level of cognitive ability. As summarized by Kevin Cole, however, a developing body of research throws doubt on this assumption and several other assumptions that grow out of the cognitive hypothesis and directly affect clinical practice.

Despite the lack of evidence, discrepancy criteria have been codified in public policy in many places. In his 1992 article, Casby reported that policies in 31 of the 50 states included some form of cognitive referencing in their eligibility criteria for language intervention series. Although the practice was questioned by the ASHA Committee on Language and Learning Disorders in its 1989 paper on issues in determining eligibility for language intervention, many administrators and practitioners apparently consider it to serve a necessary gate-keeping function to prevent speech-language pathology and learning disability caseloads from swelling to unmanageable levels. Cognitive referencing is also recognized by research funding agencies as a standard subject-selection criterion for identifying children with specific language impairment to participate in research studies on language disorders.

Diagnostic criteria are clearly needed to establish recognized best practice and to identify research subject groups so we will know to whom results apply, but there is a gap between these widespread policies and the evidence. In his summary, Marc Fey argues that we would be wrong to eliminate cognitive-linguistic comparisons completely, especially for research purposes, but he, as well as other members of the panel, have questioned their clinical gate-keeping function on multiple grounds. Various panel members, including Margaret Lahey (whose paper was presented at the ASHA Convention by Jan Edwards of The Ohio State University), Kevin Cole, and Sandra

Terrell, raise questions about the practice of cognitive referencing. Their summaries touch on a number of the practical and theoretical problems it presents, including evidence that:

1. Cognitive and language tests may reflect the same things;
2. Some combinations of language tests and cognitive tests show a discrepancy when others may not—and at some times, but not others;
3. Formal testing often yields biased results for children from diverse cultural and linguistic communities;
4. Formal tests fail to assess contextually-based needs for language intervention;
5. Validity for determining the need for language intervention services is questionable; and,
6. Children can benefit from language intervention services whether or not they show discrepancies.

Frank Cirrin chaired the 1989 ASHA Committee that wrote the “Issues in Eligibility” paper. He deals with the question of “Who shall be called language disordered?” in his everyday practice in the Minneapolis Public Schools. Cirrin’s summary moves toward practical considerations of what can be done—both in working with individuals with varied language needs, and in changing policy. Along with Cirrin, my own comments at the conclusion suggest that we shift the current focus on addressing the question of who qualifies for services from an inside-out perspective to addressing the question of who needs language intervention services from an outside-in perspective. What if we asked the question from a different framework? What if, instead of, “Is there a discrepancy between cognition and language?,” we asked the question, “Is there a discrepancy between what the person can do with language and what the person needs to do with language in the important contexts of his or her life?” Such questions would be followed by two additional questions: (1) What could language intervention services do to narrow this gap? and (2) What kinds of services should they be? (Note: The National Joint Committee on Learning Disabilities is in the final stages of preparing a paper that offers a set of recommended procedures for operationalizing the definition of learning disabilities in this manner.)

Cognition and Language: Basis, Policy, Practice, and Recommendations

Michael W. Casby

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Contemporary interest in the relationship between cognition and language may be traced to the early writings of Richard Cromer. In his initial treatise on the relationship between cognition and language, Cromer (1974) suggested two versions of a cognitive hypothesis. His “strong hypothesis” was that “we are able to use the linguistic structures that we do largely because through our cognitive abilities we are enabled to do so” (p. 234). His alternative “weak hypothesis” was that “though language development depends on cognition, language has its own specific sources” (p. 246). In later publications, Cromer (1988) asserted that “more recent findings may challenge even this weaker view” (p. 225). Others have suggested an array of potential relationships between cognition and language (e.g., Bates, Benigni, Bretherton, Camaioni, & Volterra, 1977; Rice, 1983; Rice & Kemper, 1984). Recent research has proposed quite specific relationships between cognition and language (e.g., Gopnik & Meltzoff, 1992; Mervis & Bertrand, 1994), although it has not been demonstrated that these relationships are causal.

Research results in recent years have demonstrated that cognitive prerequisites are neither sufficient, nor even necessary for language to emerge. Rather, the data are largely correlational, suggesting interactive, rather than cause-effect relationships (e.g., Bates et al., 1977; Corrigan, 1978; Folger & Leonard, 1978; Ingram, 1978). Language may, in fact, outdistance cognition, particularly for individuals with mental retardation (Abbeduto, Furman, & Davies, 1989; Bellugi, Marks, Bihrlé, & Sabo, 1988; Curtiss, 1988; Fein, Waterhouse, Lucci, & Snyder, 1985; Greenwald & Leonard, 1979; Miller, Chapman, & Bedrosian, 1977). Some evidence also suggests that different populations of children display different developmental relationships between cognition and language at different points in time; thus, they may require flexible criteria vis-à-vis language intervention services.

Discrepancy-based regulations resulting from the cognitive hypothesis have been implemented in the majority of the United States (Casby, 1992), but, given the existence of expanding knowledge, such regulations should be viewed as too narrow, restrictive, and invalid. Regulations, definitions, and criteria based on a discrepancy model cause some students to be defined out of the loop of eligibility on an indefensible a priori rationale as opposed to a data-driven empirical basis. Given the demonstrated dissociation of cognition and language and the modularity of

language itself within the population of children with mental retardation, an approach based on functional-needs is recommended.

Who Shall Be Called Language Disordered?—An Update

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Children's language assessment is guided by varied objectives—some related to clinical issues and some related to research. When language researchers limit their subject populations to children with an IQ of 85 or above, they may do so for the purpose of eliminating potentially confounding factors, such as IQ. Exclusionary subject selection criteria do not necessarily mean that a researcher believes that children with "specific language impairment" differ in processing from children with lower IQ or with mild problems in hearing or motor development.

Assessments guided by clinical and educational objectives are aimed at different objectives, such as identifying how or what to teach a child, or at determining whether a child has accomplished the goals of intervention. A primary goal of initial assessment, however, is to identify children in need of services (Lahey, 1990). Identifying a child as having a problem assumes a specific frame of reference, such as expectations based on: (a) social acceptability, (b) age appropriateness, or (c) level of cognitive development—usually measured by an intelligence test.

Cognitive ability as a reference point is problematic for several reasons. One reason involves measurement concerns, including the concern that some scores do not take into account variability among children at a given age. Too often, comparisons of cognitive and linguistic skills use age equivalency scores (e.g., mental age vs. language age) which ignore variability in scores obtained by children of a particular age. Even when scores are used that do reflect variability among children (e.g., standard scores), problems arise in comparing scores from two measures because of the error in each test. One might conclude that a discrepancy between scores reflects differences in ability when actually it is related to such factors as the reliability of the measures. To interpret discrepancies, it is necessary to compute the standard error of measurement of the difference between scores (e.g., Lyman, 1971). A final measurement concern relates to the validity of linguistic and cognitive measures, particularly given the linguistic and cultural diversity among the children of this country (Lahey, 1992).

A second reason cognitive referencing is problematic involves theoretical concerns arising from the unsupported hypothesis that cognition sets the pace for, and a limit on, language development, such that language will not and cannot exceed the level of cognitive performance. Furthermore, IQ tests are not theoretically motivated relative to language development.

A third reason for concern is that empirical evidence is lacking to support a number of assumptions on which discrepancy formulae are based. These unsupported assumptions include: (a) children with and without cognitive-linguistic discrepancies have different reasons for poor language performance; (b) they learn language in a different developmental sequence; (c) they need different types of intervention; and, (d) they have different prognoses. Given the lack of empirical evidence supporting assumptions underlying the use of discrepancy formulae, alternatives are needed.

The broadest alternative is a theoretically neutral definition of language impairment referenced to chronological age. When "language disorder" is defined as performance below expectations for a child's chronological age (CA), the identification is descriptive and without etiologic implications. Some advantages of using CA as a referencing point are that: (a) it reduces measurement error (CA introduces little or none); (b) it is theoretically neutral as to a causative relationship between cognition and language; and, (c) it fits with a growing body of empirical data that children benefit from language intervention services whether or not they show a discrepancy between IQ and language quotient. Another advantage, at least from the standpoint of children and parents, is that it defines a larger group of children as eligible for services.

Some disadvantages of using CA as a reference point are that: (a) insufficient data are currently available to identify discrepancies for some areas of language and for children of different cultures; and, (b) CA referencing would eliminate from eligibility children whose language scores are average or above, but still discrepant from their higher performance IQ scores. Another disadvantage, at least from the standpoint of many administrators and clinicians, is that it defines a larger group of children as eligible for services.

Assessment alternatives for determining eligibility include use of informal observations instead of formal tests. Such observations would be particularly useful if research could identify criterion-referenced expectations for children in a particular age and cultural group (e.g., Stockman, in press). Another alternative is to use specific tasks that are theoretically related to language learning and are known to be particularly difficult for children with a language disorder, such as phonological processing tasks (e.g., Kamhi, Catts, Mauer, Apel, & Gentry, 1989), rapid automatized naming tasks (e.g., Denckla, 1974), or morpho-syntactic learning tasks using synthetic languages (Roseberry & Connell, 1991). A final alternative would be to reconceptualize the job of speech-language pathologists in school settings to serve primarily as consultants and to facilitate language learning opportunities for all students regardless of their current levels of performance. For this latter alternative, we would need evidence that children with and without language disorders would benefit from such services.

What Is the Evidence from Research with Young Children with Language Disorders

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Perhaps the key prediction of the cognitive referencing model is that children with relatively higher intelligence will benefit from language intervention services to a greater degree than children with lower intelligence. This prediction has two prongs, both of which can be examined on empirical grounds.

The first implication is that language intervention will be more effective for children with language deficits who have average nonverbal IQs than for children with below-average nonverbal IQs. Such a prediction was discounted by an intervention study by Fey, Long, and Cleave (1994), in which children in a borderline intelligence group demonstrated significant pre-post gains on experimental measures. These findings suggest that below-average intelligence does not preclude a child from making gains as a result of language intervention.

A second implication is that children with significant gaps between nonverbal intelligence and language can benefit more from intervention than children without such a gap. This prediction has been contradicted by three studies in which children without cognitive-language discrepancies benefited from intervention as much as children with such discrepancies (Cole, Dale, & Mills, 1990; Mercer, 1993; Notari, Cole, & Mills, 1992). In fact, Mercer's research indicated that children with lower cognitive performance actually demonstrated greater benefits from pragmatic intervention than their peers with normal cognition—just the opposite of what would be predicted by a cognitive referencing model.

Another line of research has investigated whether measurement error rather than a faulty theoretical model might account for the lack of support for cognitive hypothesis predictions. In one study, 70-90% of a group of young children (ages 3 to 7 years old) changed from eligible to noneligible during an 8-month period (1 school year); while another 13% changed from noneligible to eligible (Cole, Dale, & Mills, 1992), depending on tests used to make the comparisons. Children also changed categories between specific language impairment (SLI) and developmental lag language impaired (DLLI) in a related study (Cole, Schwartz, Notari, Dale, & Mills, 1995). Such research results suggest that the relationship between language quotient and IQ might change substantially between assessments for many children. Other research has shown that different combinations of tests might yield surprisingly different results about cognitive-language discrepancies (Cole, Mills, & Kelly, 1994). Formal test results also have been found to bear little relationship to the judgments of expert clinicians in developmental language disorders. Aram, Morris, and Hall (1992) found the diagnoses of no more than 40-60% of the children they studied who had been identified by experts as language disordered to be confirmed by discrepancy results from a standardized test battery.

The collective results of this research suggest that the choice of instruments for developing a cognition-language profile and the criteria for classification as language impaired have a tremendous effect on whether an IQ-language discrepancy is observed. On the basis of this evidence, the discrepancy model of cognitive referencing as currently applied appears insupportable as a means of identifying children with language impairments who need clinical services.

Cognitive Referencing in the Study of Children With Language Impairments

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University of Kansas Medical Center

First, I agree with the assertion of those who question the practice of cognitive referencing, that any version of cognitive referencing as a clinical method for determining eligibility for speech and language intervention is insupportable and inappropriate. Logical consequences of this assertion make sense. That is: (a) all children whose age-referenced delays in language create or enable a speech-language pathologist to predict complications in some areas of life functioning should be identified as having language impairments; and, (b) all such children should be considered as candidates for intervention.

Beyond this, however, a second assertion might be that intelligence, as measured by IQ tests, is irrelevant, and/or unimportant in the study of children with language impairments. I can neither support this assertion nor the possible assumptions underlying it that: (a) nonverbal IQ tests measure nothing; (b) nonverbal IQ tests measure nothing relevant to language functioning; (c) nonverbal IQ tests measure nothing relevant to treatment; and, (d) existing nonverbal IQ tests are the only possible measures for studying the relationships of nonverbal cognition and language impairment.

A third assertion, which I also cannot support, is that a gap between measures of language and measures of nonverbal cognition is not important in the study of children with language impairment. The assumption is that children who exhibit a gap between language abilities and abilities in other areas of cognition are linguistically, genetically, and/or neurologically different from children with language impairments who exhibit no such gap. Some reasons for studying this assumption are that: (a) children with such profiles actually exist (not all with normal intelligence); (b) they seem to be dramatically deficient in their development of grammatical morphology; and, (c) it is unclear whether such deficits are also characteristic of other children with language impairments who exhibit no language/IQ discrepancy.

Research on the validity of the specific language impairment (SLI) assumption might involve children with language impairments with and without language/IQ gaps, as well as younger children who are typically developing. It could also sample from a nonclinical population, but should involve steps to ensure that children classified as SLI do have a significant discrepancy between language and nonverbal IQ and that those not classified as SLI do not exhibit such a discrepancy. Unless the IQ/language differences are extreme, potential differences between the groups might be masked. A possible research design would involve three groups of children: (a) children classified as SLI with IQs of 100-115 and language scores of 70-85; (b) children classified as language impaired with IQs and language scores of 70-85; and (c) younger children who are developing normally with raw language scores equivalent to the other groups. The research would test the hypotheses that children with SLI would exhibit linguistic profiles that distinguish them from other groups, or that they would exhibit neurological, cognitive, and/or genetic profiles that distinguish them from other groups.

The Child Language Research Center, an NIDCD Center administered by principal investigator Bruce Tomblin at the University of Iowa, currently is dealing squarely with these issues. Two projects in particular, one by Tomblin and Mabel Rice, and another by Hugh Catts and myself, are investigating aspects of oral and written language profiles of early school-age children in essentially the manner outlined here. These and other projects of the Center should shed light on the clinical and theoretical significance of an observed gap between nonverbal intelligence test performance and language performance.

An appropriate conclusion of available research is that any version of cognitive referencing as a clinical method for determining who is eligible for speech and language intervention is insupportable. This does not, however, preclude the importance of additional research on the SLI hypothesis, starting with the assumption of the null hypothesis (i.e., that there are no differences between children with language impairments exhibiting a language/IQ gap and those exhibiting no such differences) and testing to discover whether it should be rejected. We have much to gain in the study of language impairment by pursuing the SLI hypothesis in experimental and observational investigations and much to lose by failing to pursue the same.

Discrepancy Model: Questions of Concern Regarding Use for Culturally Different Children

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Understanding the concerns about the implications of a discrepancy model for children who are culturally different requires an appreciation of the historical framework—as far back as slavery, when the slaves' manner of

language use became associated with the prevalent dominant class' attitude that slaves were ignorant, substandard, and subservient. The implication of the compensatory education activities of the 1950s and 1960s was also that African American children were cognitively impaired, not only because of their low performance on IQ tests, but also as evidenced by their use of "deficient" speech and language (Bereiter & Englemann, 1966; Deutsch, 1965; John, 1963; Osser, Wang, & Zaid, 1969). That is, any difficulties the children had in learning the "correct" language forms, to read, or to perform well on standardized tests of intelligence or achievement, were attributed to the children's supposedly limited cognitive abilities.

In contrast, linguists have since firmly established the legitimacy of dialectal differences rather than dialectal deficiencies (e.g., Baratz, 1969; Labov, 1966; Shuy, 1969) and have provided evidence of the systematic phonologic, morphologic, and discourse patterns among social varieties of American English (Houston, 1970; Kochman, 1971; Williams, 1981; Williams & Wolfram, 1977). Furthermore, studies have shown that when assessment procedures are adjusted to account for cultural factors, there are no significant differences between children who are African American and children who are White on various linguistic and cognitive measures (Terrell, 1975; Terrell, Terrell, & Golin, 1977).

The discrepancy model fails to take this history into account, however, and it also does not incorporate current evidence about testing children who are culturally different. Cognitive referencing for children with cultural differences can only be as valid as the standardized tests used to assess the language and cognitive levels of these children. A large body of evidence shows that linguistic bias, format bias, and content bias are prevalent in many formal tests (Taylor & Payne, 1983), not only for African American populations (Seymour, 1992; Seymour & Bland, 1991; Seymour, Champion & Jackson, 1995), but also for Asian populations (Cheng, 1993) and Hispanic populations (Kayser, 1993). Assessment bias can stem from psychological and sociocultural factors that influence test performance as well as from test item inappropriateness. Social factors include such issues as facility for code switching between a "school register" and "nonschool register" (Houston, 1970), or cultural mistrust issues that might account for a child adopting a "silent code" strategy rather than risk revealing information that might be misused. Research has shown that African American students with high mistrust of Whites score lower on intelligence tests (Terrell, Taylor, & Terrell, 1981) and have lower grades and poorer achievement motivation (Terrell, Watkins, & Miller, 1990) than those with lower mistrust of Whites. African American students also score higher on intelligence tests when tangible (M&Ms) or culturally relevant reinforcers (e.g., "good job blood," "right on brother") are used after correct responses than when typical social reinforcers (e.g., "good," "fine") are used (Terrell, Taylor, & Terrell, 1978). In fact, when three groups of 7- to 10-year-old African American children who had been diagnosed as borderline retarded were tested, the two groups who had tangible or culturally appropriate social reinforcers scored so much higher under those conditions that their mean IQ scores exceeded the mentally retarded range and fell into the low but average range instead (Terrell & Terrell, 1981). Informal assessment might also misidentify children with cultural differences who use an associational discourse style, identifying as deficient rather than different their tendencies to link statements to an immediately preceding comment rather than back to a central organizing topic, such as animals seen at the zoo. Failure to consider how adaptive skills may differ in different contexts is an additional concern.

To illustrate the importance of this last concern, consider the example of a 12-year-old African American girl, Willie Ruth, who had been diagnosed as "trainable mentally retarded" on the basis of intelligence test performance. Standardized linguistic measures, even when dialectal variations were accounted for, indicated language skills commensurate with her tested intellectual level. When I met Willie Ruth, she had been placed in a self-contained classroom for children with mental retardation where she received language arts instruction at a level determined by her diagnosed cognitive level and also received pullout language treatment. In Willie Ruth's case, the influence of cognitive referencing was to limit the level of classroom language stimulation she received. A visit to her home revealed extreme poverty conditions and parental illiteracy, but after a weekend with her, I saw her primarily as a child who was very polite and possessed what African Americans refer to as "mother wit." For example, while waiting in a long, slow-moving checkout line at a store, Willie Ruth moved back and forth looking for a shorter line, then correctly led me to one with the statement, "Miz Terrell, we can get out faster in that line down there." After we settled into my home, I asked, "What would you like to do now?" Willie Ruth responded, "It's your house, Miz Terrell." In other words, her social language and pragmatic skills, as well as her other adaptive behaviors, were appropriate, and on occasion, remarkable. The implications for Willie Ruth (and other children like her) are that problems of assessment bias can be compounded when cognitive referencing is used to guide intervention, so that the self-fulfilling prophecy becomes not only possible, but a highly probable outcome.

Thus, historical context and assessment bias both contraindicate the use of the discrepancy model for children who are culturally different. In addition, it may adversely influence intervention planning. Cognitive referencing can only be as valid as the assessment procedures that are used and the culturally-valid knowledge and skill of the clinician who uses them.

Discrepancy Models: Implications for Service Delivery in the Public Schools

Frank M. Cirrin

Minneapolis Public Schools

Given the evidence that the discrepancy model of cognitive referencing is *not* supported as a means of identifying children who need services for language/ communication, what impact do these findings have on the delivery of appropriate speech-language services in the schools? At least three levels of response should be considered.

First, professionals have both the responsibility and the ability to change state and/or district eligibility criteria when they are based on unsupported assumptions about who can benefit from language intervention. State speech-language-hearing associations are often in a position to lobby state legislatures and education departments. An example of more flexible procedures for defining a language disorder from Minnesota includes the requirement that: An analysis of a language sample or documented observation of communicative interaction indicates the pupil's language behavior falls below or is different from what would be expected given consideration to chronological age, developmental level, or cognitive level... (Minnesota Department of Education, 1993, p. 43)

It is also possible for Multidisciplinary Evaluation Teams to override existing eligibility criteria when individual situations warrant it. As an alternative, speech-language intervention targeting such needs as "classroom communication," can be provided as a "related service" to support individual education plan (IEP) goals and objectives that have been established in relation to other categories of eligibility.

A second response should be to serve students based on their unmet communication needs rather than on their test scores. Especially when evaluating the communication skills for children with mental retardation, neither MA nor CA is an appropriate reference point. Rather than basing eligibility for service on an unproved predictive model of who might benefit from services, decisions should be based on children's unmet communication needs (Casby, 1992). Numerous contextually-based communication needs, opportunities, behaviors, and environmental adaptations can serve as appropriate intervention targets for students with limited cognitive abilities. The shared philosophy of many advocacy groups and national associations (including ASHA) is that communication is "both a basic need and a basic right of all human beings" (National Joint Committee for Communicative Needs of Persons with Severe Disabilities, 1992, p.2). Service delivery concerns also extend to a responsibility for educating school staff, including administrators, principals, speech-language pathologists, general education teachers, and special education teachers, to the communicative needs of students with cognitive limitations.

A third level of response relates to the use of an "indirect" or consultative model of service delivery to provide appropriate services to all students with identified communication needs. The responsibility for meeting these needs should be shared among all school staff, with consultation from a communication specialist. Such a plan would allow a district to provide services cost-effectively and to deal with the logistics associated with more students being identified as eligible for services. Strategies for teams have been described in a number of sources (e.g., Bricker & Cripe, 1992; Calculator & Jorgensen, 1994; Cirrin & Penner, 1995; Giangreco, Cloninger, & Iverson, 1993; Rowland & Schweigert, 1993; St. Pierre, 1993). The list includes suggestions for the educational team to: (a) form consensus about how to best address a learner's identified communication needs; (b) analyze the learner's communication environment; (c) prioritize two or three functional communication outcomes; (d) write IEP goals that are discipline free; (e) ensure that communication goals and objectives are integrated throughout the student's day; and, (f) monitor progress regularly.

Discrepancy Model Alternatives: Closing Questions

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It is often easier to identify what is wrong than to offer viable alternatives. Suggested alternatives are embedded among the comments of many of the presenters in this synopsis. A plan for implementing services to students

without relying on current questions about discrepancies between language and cognition, would involve a new set of questions, strategies, and decisions. The question, "Does the individual have needs that are limited by inadequate language abilities?" could be answered with strategies for soliciting good referrals and basing decisions on interviews and participant observations. If the answer is "no," it may be concluded that the individual does not need additional special services at this time. If the answer is "yes," a second question, "Can language intervention help the person to acquire language knowledge, skills, and strategies to function more effectively?" could be answered with dynamic assessment activities monitoring for significant life changes (Olswang, & Bain, 1991). If none can be tied to language intervention, other accommodations might be considered, such as modifying the nature of intervention, the other contexts of the individual's life, or expectations of current ones. If change can be documented for an individual or group of individuals, the broader question becomes, "Does the amount of change justify the resources needed to achieve it?" That is a question that requires a national, state, or community consensus on values.

When the primary aim is to develop a unified general and special educational system that meets the needs of all students, old views are challenged. A truly needs-based assessment might show that finding students eligible for services so that they can be pulled out of their classrooms is not the best way to meet their needs. The specter of mushrooming caseloads might not loom as large when professionals get better at designing collaborative services that will assist students to participate in their classrooms at levels commensurate with their peers so that there is less need to pull them out of their classrooms.

Coda

At the conclusion of the double miniseminar, a few attendees (n = 12) returned a feedback form about their views on the issues discussed. Of these, 4 were employed in university settings, 5 in schools, 2 were graduate students, and 1 was in private practice. Ten indicated that Division 1 should urge and assist ASHA's Executive Board (EB) and Legislative Council (LC) to develop a policy that identifies as inappropriate the use of discrepancy formulae solely to perform a "gate-keeping" function in determining eligibility for language intervention services. Three (1 overlap) thought ASHA policy should establish procedures for determining eligibility that include discrepancy formulae as one appropriate component, with emphasis on the kinds of discrepancies to be considered important. When asked about research priorities, 11 gave feedback in support of Division 1 urging and assisting the EB and LC to encourage funding agencies, such as NIDCD, NICHD, and OSERS, to establish priorities to study issues regarding cognition and language. Nine (with considerable overlap) selected an option that would establish proposal review criteria affirming the need for clear definitions of study populations but not limiting language disability research to populations that meet discrepancy criteria for specific language impairment.

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