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Differential Diagnosis of Selective Mutism in Bilingual Children

CLAUDIO O. TOPPELBERG, M.D., PATTON TABORS, Ed.D., ALISSA COGGINS, Psy.D., KIRK LUM, M.D.,
AND CLAUDIA BURGER, B.A.

Early diagnosis of selective mutism (SM) is an important concern. SM prevalence is higher than initially thought and at least three times higher in immigrant language minority children. Although the *DSM-IV* precludes diagnosing SM in immigrant children with limited language proficiency (as children acquiring a second language may normally undergo a “silent period”), specific diagnostic boundaries are not clear. The specific focus of this article is, therefore, the exact circumstances in which a language minority child should be diagnosed with SM.

SM SHOULD NOT BE CONFUSED WITH THE NONVERBAL PERIOD IN BILINGUAL CHILDREN

Population-based studies have demonstrated that SM is much more common than initially thought and not a rare disorder at all and that immigrant and language minority children are at a higher risk of SM than native-born populations. For instance, SM prevalence in the general child population was 7.1 per 1,000 in the United States (Bergman et al., 2002) and 7.6 per 1,000 in Israel

(Elizur and Perednik, 2003). In contrast, reported SM prevalence in children of immigrant backgrounds was three times higher in the Israeli study (22 per 1,000). In a large Canadian survey, SM prevalence, although relatively low, was 10 to 13 times higher in immigrant background than nonimmigrant children (5.5–7.8 versus 0.5–0.7 per 1,000, Bradley and Sloman, 1975). Similarly, immigrant background among children with SM is also quite common. In the largest SM case series published to date, 28 of 100 youngsters from Switzerland and Germany were immigrants (Steinhausen and Juzi, 1996). Consistent with the literature, the clinical experience of some of us working with immigrant language minority children suggests that SM is relatively common.

Despite the well-documented high risk, diagnosing SM in immigrant/language minority children is difficult. This may seem paradoxical, but it is consistent with a strict interpretation of *DSM-IV* criterion D (American Psychiatric Association, 1994), which excludes from the diagnosis children who are unfamiliar or uncomfortable with the language of their new country, as they “may refuse to speak to strangers in their new environment.” The *DSM-IV* concludes that “This behavior should not be diagnosed as SM.” This has led to the exclusion of language minority children from several studies of SM (Dummit et al., 1997). Because learning a second language takes the average immigrant child a long time, it is often unclear whether the child who otherwise meets other criteria for SM has achieved the right level of linguistic knowledge or familiarity to qualify for such diagnosis.

SM is characterized by the *DSM-IV* as failure of the child to speak in at least one setting while speaking normally in others (Criterion A), which causes significant interference with educational, occupational, or communicative functioning (Criterion B) and lasts for at least 1 month (Criterion C). Limited proficiency in the

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From the Judge Baker Children’s Center (Dr. Toppelberg and Ms. Burger); Children’s Hospital Boston and Harvard Medical School Department of Psychiatry (Drs. Toppelberg and Coggins); Child and Family Psychological Services (Dr. Lum); and the Human Development and Psychology Department, Harvard Graduate School of Education (Dr. Tabors).

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Correspondence to Dr. Toppelberg, Judge Baker Children’s Center, Harvard Medical School, 53 Parker Hill Avenue, Boston, MA 02120-3225; e-mail:topi@hms.harvard.edu.

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required language (Criterion D), is one of the exclusion criteria. The focus of this article is precisely *DSM-IV* Criterion D for SM, namely, “the failure to speak is not due to a lack of knowledge of, or comfort with, the spoken language required in the social situation,” and its relationship with the nonverbal period in second language acquisition as described by Tabors (1997): “A normal period in the acquisition of a second language in young children, characterized by lack of verbal communication.”

The nonverbal period is a frequent and normal stage of second language acquisition in young children. It typically starts when children realize that their home language is not understood at school and their second language skills are insufficient or absent. They then stop speaking completely in that setting. Observations suggest that the nonverbal period typically is (1) shorter than 6 months, (2) common in 3- to 8-year-olds, and (3) longer in the younger child (Tabors, 1997).

One of the most harmful and pervasive myths about second language acquisition in children is that they learn a second language easily, quickly, and automatically (Snow, 1997). On the contrary, second language acquisition is a complex process that involves intricate cognitive and social strategies (Wong Fillmore, 1979). Children must implement these strategies to move from the initial nonverbal period to one in which they can, indeed, communicate in their new language. The typical progression is one of (1) persistent silence, (2) repeating words, (3) beginning the process of practicing words and phrases in the second language quietly and noncommunicatively, and (4) “going public” with the new language. This characteristic progression has been reported again and again by researchers studying children learning a second language (Ervin-Tripp, 1974; Samway and Mckeon, 2002; Saville-Troike, 1988; Wong Fillmore, 1979). Based on this body of literature, the *DSM-IV* criterion in question is clinically relevant: it prevents the incorrect diagnosis of SM in normal immigrant children who are traversing the silent period.

This topic is timely given the accelerated growth of the bilingual fraction of the American child population, the debate on bilingual education, and the growing role of school psychiatrists (Hakuta, 1986; Sager, 1996; U.S. Bureau of the Census, 2000). The U.S. Census identifies 17.9% of the population as belonging to a language minority (i.e., individuals whose households speak a language other than English) and 4.7% living in “linguis-

tically isolated households,” in which no one older than age 13 speaks English fluently. According to a major study commissioned by the U.S. Department of Education (Zehler et al., 2003), English language learners constitute 8.4% of all children in grades K–12, representing a striking increase of 79% in a decade (1992–2002). It is estimated that 18.4% of all children belong to a language minority (U.S. Bureau of the Census, 2000), almost half of which are labeled as English-language learners. In conclusion, there is a large segment of the child population for which early detection of SM will depend on understanding what constitutes normal bilingual child development.

Is early SM diagnosis of consequence? It is for at least four reasons. First, because language minority children (e.g., immigrant and Latino children in the United States) are more likely to be underserved (Hernandez et al., 1998), which can lead to fewer opportunities to be diagnosed in their developmental trajectory. Second, because SM often severely hinders social functioning (through poor social communication), second language acquisition, and educational achievement (American Psychiatric Association, 1994; Manassis et al., 2003). Third, because SM presents additional instructional challenges that often require a diagnosis to be appropriately addressed. Fourth, because SM and/or its correlate, “behavioral inhibition to the unfamiliar,” predict concurrent and emergent anxiety disorders (Coiffman-Yohros, 2003; Kristensen, 2000; Rosenbaum et al., 1993).

Although *DSM-IV* criterion D correctly protects immigrant language minority children from an unwarranted SM diagnosis, there are circumstances in which SM should be suspected in a child learning a second language.

UNDERSTANDING BILINGUAL DEVELOPMENT IS NECESSARY TO CORRECTLY DIAGNOSE SM

Clinicians could erroneously diagnose SM in a child who remains silent for 1 month or longer if, unaware of the complexity of learning a second language, they expect a child to speak fluently in a few weeks.

Although children with the normal nonverbal period progress uneventfully through the phases described above, those with true SM display no progression. They get “stuck” in phases 1 through 3 (from persistent silence to uttering words and phrases quietly and noncommunicatively), never communicating openly in

situations that require “going public.” The mutism in SM (in contrast with normal mutism) is specific to relatively unfamiliar social situations, often affecting both languages if they are used in unfamiliar situations. The symptoms may be more evident and are almost always present in the second language, as this is commonly the language prevalent in schools and schools are the most common unfamiliar setting for these children.

Children’s learning a second language (and feeling confident enough to “go public” as in phase 4 of our progression) is dependent on individual difference factors such as personality (see Tabors, 1997). One such personality/temperament factor of great potential impact is “behavioral inhibition to the unfamiliar” (Kagan, 1997). Behavioral inhibition (a predictor of anxiety disorders [Biederman et al., 1993]) may characterize a number of SM features (Coiffman-Yohros, 2003) that link SM and social phobia (Dummit et al., 1997; Steinhausen and Juzi, 1996). Thus, shy, anxious, and/or inhibited children expected to function in a second, unfamiliar language may be more prone to reacting with mutism. When this mutism becomes severe and prolonged enough it warrants the diagnosis of SM. Bilingual children with true SM present with mutism in both languages, in several unfamiliar settings, and for significant periods of time. In contrast, the normal child in the nonverbal period typically presents with mutism in one language, in one or two settings, and for only few months. Most children learning a second language, despite substantial language exposure, will not feel fully comfortable in the second language in 6 or more months. However, this is unlikely to justify a failure to speak.

CLINICAL IMPLICATIONS OF SM DIAGNOSIS IN BILINGUAL CHILDREN

A diathesis-stress model has been proposed for SM, in which a social anxiety disposition, family immigration status, and developmental delay were successfully tested as putative vulnerabilities (Elizur and Perednik, 2003). Risk-averse behavior may affect normal second language acquisition in those children with a shy/inhibited temperamental disposition (Tabors, 1997). Oftentimes, other children will socially ostracize children learning a second language and, in particular, those who are shy. Language delays can certainly affect the learning of a second language and are common in children with SM. Clinicians should keep in mind that some of these

vulnerabilities (and their environmental triggers) should be addressed clinically. Specifically, potential language delays that predispose children to SM must be broadly assessed by a bilingual speech/language pathologist. Such broad assessment needs to involve multiple domains of language development (Toppelberg and Shapiro, 2000) in the two languages. New methods for the assessment of language function in children with SM have been developed (Manassis et al., 2003), with clear applicability to bilingual children. Clinicians also need to be aware of potential characteristics of the school environment that can trigger SM in a vulnerable child. Among them are a lack of class support for children learning a second language; negative, prejudiced, or even chauvinistic views of the child’s assets (such as his or her home language or cultural traditions); the high linguistic and cognitive demand resulting from sudden immersion in a second language; and feeble parent–school relationships. The school consultant should assist the system in identifying and targeting child vulnerabilities (temperamental, migratory, linguistic, developmental) and environmental stressors through interventions and the provision of special accommodations. Finally, although some observations cautiously suggest some justification for the clinical practice—with its associated risks—of targeting SM or its anxious/inhibited symptoms with selective serotonin reuptake inhibitors, this practice is clearly unjustified in a normal child learning a second language.

In brief, SM in children learning a second language can be suspected when mutism is prolonged, disproportionate to second language knowledge and exposure, present in both languages, and/or concurrent with shy/anxious or inhibited behavior. Admittedly, these elements need further research; our developmental approach is an initial attempt to provide them with face and content validity. We provisionally propose structuring the process of SM diagnosis in an immigrant bilingual child, a diagnosis that, if correct, is likely to benefit the child. In practically all disorders, the clinical implications of child bilingual language development are poorly understood both at the level of clinical presentation and mechanism. Although this area clearly requires empirical and conceptual study, existing developmental research helps us elucidate our current clinical dilemmas.

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