Meeting the Needs of Signers in the Field of Speech and Language Pathology: Some Considerations for Action

Jody H. Cripps, PhD¹, Sheryl B. Cooper, PhD¹, Samuel J. Supalla, PhD², and Paul M. Evitts, PhD, CCC-SLP¹

Abstract
Deaf individuals who use American Sign Language (ASL) are rarely the focus of professionals in speech-language pathology. Although society is widely thought of in terms of those who speak, this norm is not all-inclusive. Many signing individuals exhibit disorders in signed language and need treatment much like their speaking peers. Although there is validation of the existence of disorders in signed language, provisions for signed language therapies are rare. Spoken language bias is explored with a focus on the concerning history of therapies provided for spoken language only. This article explores attitudes regarding ASL along with how signed language reading can help identify and treat language learning disabilities among deaf children. Addressing the topic of signed language disorders aims at meeting the needs of individuals who are deaf, which could lead to professional training and treatment options in signed language pathology (e.g., aphasia, stuttering).

Keywords
signed language, speech-language pathologists (SLPs), treatment for, disorders, communication, deaf/hard of hearing, exceptionalities, learning disabilities, language learning disorders, delays/disorders, language/linguistics, reading

Introduction
American Sign Language (ASL) is a language indigenous to the United States and parts of Canada, typically used among individuals who are deaf and hearing people who interact in the deaf community. It is a language with vocabulary and grammatical features different from English, which can be as effective as the spoken language used by individuals who hear (Klima & Bellugi, 1979; Sandler & Lillo-Martin, 2006; Valli, Lucas, Mulrooney, & Villanueva, 2011). Deaf people face the same medical possibilities as hearing people, including medical conditions such as a stroke. If communication, in the form of ASL production, is affected by cerebral impairment caused by a stroke, diagnosis and treatment would be required to restore full and effective functioning. Paralleling the field of speech-language pathology, this might be called “signed language pathology.” Scholars familiar with ASL and the deaf community have proposed this concept (Nover, Christensen, & Cheng, 1998; Wix, 1993), but it has not been adequately explored. The notion of therapy for signed language-based disorders to this point has been seen as a novelty.

Currently, a typical speech-language pathologist (SLP) would know and speak English, and most likely lack adequate signing skill and knowledge of the linguistic principles of ASL needed to diagnose and treat disorders in ASL production and comprehension. To work with a signing deaf client, a typical SLP might select one of two choices: communicating directly with the patient via limited signed language or utilizing an ASL-English interpreter (e.g., Ferguson & Armstrong, 2004). Professionals communicating directly with clients may know or learn some ASL to enable signed conversations (e.g., Vold, Kinsella-Meier, & Hughes Hilley, 1990); however, a basic level of signing skill does not provide the depth of knowledge needed for the SLP to make diagnoses regarding an individual’s ASL skills.

Professionals who choose to use an interpreter because they are unfamiliar with ASL cannot diagnose and treat ASL issues without personal knowledge of how the language is produced correctly. Williams and Abeles (2004) identified several limitations that might arise from conducting therapy through an interpreter. First, interpreters are not experts in all fields, nor are they secondary experts on

¹Towson University, Towson, MD, USA
²University of Arizona, Tucson, USA

Corresponding Author:
Jody H. Cripps, Department of Audiology, Speech-Language Pathology and Deaf Studies, Towson University, 8000 York Rd., Towson, MD 21252, USA.
Email: jcripps@towson.edu
information about the client. Second, introducing a third person into the therapeutic relationship does not instantly solve communication problems; language difficulties may still occur and many relationship factors are changed with the addition of a third person.

Although there are American Speech–Language–Hearing Association (ASHA) policies outlining specific requirements for using interpreters (ASHA Multicultural Issues Board, 2004), mismatches often occur between interpreters and the needs of the assignment, and interpreters can be assigned to situations for which they are unprepared or unqualified (Marschark, Sapare, Convertino, Seewagen, & Maltzen, 2004). Interpreters should not be expected to provide diagnostic information to the clinician, and the SLP cannot afford to entrust the diagnosis of a signed language disorder to an interpreter whose level of skill and knowledge is unknown, and whose expertise is not in the area of language pathology. SLPs desiring to treat disorders in ASL must become skilled in all aspects of ASL to diagnose and treat these disorders directly.

The ASHA purports that professional services are supposed to be helpful for all members of society. ASHA professional accreditation programs do not require graduate students to complete any ASL classes, although some of them do include ASL classes in their curricula. An attempt to identify requirements for ASL classes in ASHA-approved graduate programs indicated that ASHA does not maintain a list of courses offered at academic programs (personal communication with Silvia Quevedo, August 25, 2014).

It appears that the current practice in the field of SLP is focused on providing services to those who use a spoken mode of communication and does not include service for those who use only a signed modality. There appears to be a bias against those who use a signed language as their primary form of communication (see Cripps & Supalla, 2012, for a review of spoken language bias in the education of deaf children and with society in general). There is a need for a discussion of signed language aphasia and other disorders, and a comprehensive picture of how deaf signers experience language impairments. Disparities between research and application exist, and suggestions to develop the area of signed language pathology are needed. Finally, the attitudes of SLPs toward minority languages and dialects that will question the existence of spoken language biases will be addressed.

The complexities of society’s attitudes and perceptions of ASL can be explained by starting with the issue of literacy and language delays. The scope of practice of the SLP includes diagnosis and intervention in reading, which is based on making the connections between sound and print. Understanding how deaf children process written language through the use of ASL can guide SLPs to become more skilled and bias-free in the area of language modalities. Support of this framework can lead ASHA to become a leader in overseeing quality services to individuals who use ASL.

Language Learning Disabilities and Language Delays With Children Who Are Deaf

The field of Learning Disabilities is very broad, and information on language-based learning disabilities (LLD) among deaf children is compromised by the lack of a literacy program geared to the specific issues confronting this specific population. Using spoken language to teach and support reading is too frequently emphasized as “the way” for children to become literate, including those who are deaf. Conventional reading instruction practices are based on the assumption that children hear English and rely on spoken language knowledge for reading development purposes, which raises the issue of accessibility for deaf children. More troubling is that deaf children frequently sign in the classroom (in a school for the deaf or a regular public school with the provision of an ASL interpreter) while the curriculum is spoken-language-based. Curricula are presented in written English (books, media) or spoken English (instruction by the teacher), but information received by the student is in ASL through an interpreter or signing teacher. Thus, deaf children confront print materials as foreign and restrictive, and biases toward spoken language become apparent.

In an ideal situation, deaf children learn to read based on what they know in ASL and transition to written English as their second language through a special set of tools and procedures. “ASL gloss” allows deaf children to learn to read in English without needing to hear it (see Supalla & Cripps, 2011, for the detailed description of the cross-linguistic reading instruction setup). Of special relevance for the SLP is how deaf children can be encouraged to read individual signs in print with the use of the “ASL-phabet.” This literacy tool helps deaf children understand the meaning of English words through reading their sign equivalents. Most important, a reader’s prior knowledge can be used to connect to printed words on a page, permitting deaf readers to see graphemes representing signs written in their own language. Graphemes, written symbols representing the phonological parameters of handshape, location, and movement, are critical to the representation of signed words (see Brentari, 2002, for a review of ASL phonology). Graphemes combined to form a written symbol for an ASL word can be compared with how spoken words are written letter by letter (see Supalla, McKee, & Cripps, 2014, for a review on the ASL-phabet and how it functions equivalent to a spoken language alphabet).

Theoretically, a type of learning disability called dyslexia could be identified among deaf children who experience difficulty reading words through written ASL. In general, dyslexia is characterized by difficulties in acquiring reading and
writing/spelling skills, and can be associated with more generalized language deficits. A notable deficit involves phonetic processing with a strong genetic basis (e.g., Cope et al., 2005; Francks et al., 2004). Like hearing children with LLD who have problems with reading in print form due to phonemic processing (with spoken language), deaf children with learning disabilities may demonstrate difficulties in reading and processing written signs. Thus, signed language reading can provide a missing link in helping to diagnose authentic LLD among deaf children and is a tool that could be used by SLPs providing therapy.

Unfortunately, the basic concept of signed language reading is currently underused by educators. In fact, spoken language bias in teaching reading is quite common in the field of deaf/special education (Cripps & Supalla, 2012). With this narrow view on reading, the prevalence of reading difficulties based on lack of auditory input for deaf children is well-known and a source of problems plaguing educators for years (e.g., Padden & Ramsev, 1998; Paul, 2003). It is easy to understand why it is difficult to diagnose dyslexia among deaf children. Reading difficulties for these children are often so profound that they confound dyslexia (Edwards, 2010). Although dyslexia is expected to occur among deaf children as much as it does children who can hear, the prevalence of LLD among deaf children is obscured by the emphasis on spoken language for reading and decoding in educational systems.

The present system’s protocol has left many SLPs in this field ill-equipped to diagnose and treat deaf children’s learning disabilities. Although other professionals are often involved on an assessment team, language intervention responsibility typically rests with the SLP. Other damaging effects of spoken-language-based instruction in the educational system include a lack of signed language-based resources (Commission on the Education of the Deaf Report, 1988; Johnson, Liddell, & Erting, 1989). In order to effectively diagnose LLD among deaf children, valid evaluation instruments are needed to operationalize cognitive functions. Research using signed language reading, with clearly defined criteria for learning disabilities among deaf children, is needed. To date, no research has been done to develop diagnostic tools to separate learning disabilities from English problems among deaf learners, and there are no educational tools to mitigate the problem. Consequences of spoken language biases in the educational system include misdiagnoses and a multitude of related complications reported for deaf children (A. Morgan & Vernon, 1994; Samar, Parasnis, & Berent, 1998).

Likewise, issues associated with language delays among deaf children indicate that improvement needs to be made in the educational system. Some educators view ASL and English as two equal languages for consideration, but for deaf children, ASL is more accessible than other options. Lederberg, Schick, and Spencer (2013) explained that the linguistic and literacy needs of deaf children are complex, and mention ASL as one of several communication options, but overlook the fact that ASL provides a superior opportunity to achieve native or full language competence (see Supalla & Cripps, 2008, for further discussion on the conceptualization of linguistic accessibility with the emphasis on the learnability of ASL as compared with English).

Delayed development of ASL skills can have serious implications. This is especially true when signed language reading is tied to deaf children’s proficiency in ASL. Research has shown that many deaf children are at risk for language delay (e.g., Schick, De Villiers, De Villiers, & Hoffmeister, 2007). Most deaf children are born to hearing parents who do not know any signed language at least initially (Mitchell & Karchmer, 2004). Although more hearing parents have learned some form of signed language in recent years, it is unknown whether hearing parents learn and use the language well and succeed in creating a rich signing environment at home for deaf children (e.g., Marschark, 2001). Basic research on deaf children who acquired ASL after the critical period of language learning demonstrates a negative impact on linguistic competence (involving phonology, morphology, syntax, semantics, and pragmatics) well into adulthood (e.g., Mayberry, 1994; Newport, 1990).

Lederberg et al. (2013) treated the lack of opportunity for deaf children to achieve proficiency in ASL as something to accept. Poor and highly varied signed language proficiency among deaf children is described as unfortunate reality. The notion of signed language intervention, or any treatment for improvement, is not addressed at all in their article, reinforcing the evidence of spoken language bias. As the field of SLP is well-known for pursuing spoken language intervention, it makes sense to consider the same for signed language.

As a direct result of the spoken language bias, signed language delays are significantly affected by the limited availability of appropriate diagnostic tools and treatment options for deaf children with communication disorders (e.g., Haug, 2008; Singleton & Supalla, 2011). SLPs do not possess a cadre of signed language-based tools and treatment options to improve their ability to work with signing children. To contend with the impact of language delays among deaf children, Snoddon (2008) argued that a high priority must be placed on ASL and that designated professionals such as SLPs assume responsibility for intervention when signed language delays are identified.

Research and Applications Related to Aphasia, Stuttering, and Specific Language Impairment (SLI) in ASL

Spoken language biases are also a problem in aphasia, stuttering, and SLI. Although basic research on these language-based disorders among deaf individuals who sign is
The Prevalence of Signed Language Aphasia

Aphasia is functionally defined as “the loss or deterioration of verbal communication due to acquired lesion of the nervous system involving one or more aspects of the processes of comprehending and producing verbal messages” (Basso & Cubelli, 1999, p. 181). This definition can extend to the signed language modality as well. Signed language aphasia is found to include characteristics such as halting and effortful sign production, single-sign utterances, absence of syntactical and morphological markings, and disordered grammatical markings such as errors in spatialized markings (Hickok & Bellugi, 2001). Production errors among aphasic signers involve phonology; sublexical, lexical, and sentence-level processes; and poor comprehension perceiving signed lexicons and sentences (Bellugi, Klima, & Hickok, 2010; Hickok & Bellugi, 2010).

Research studies including hearing signers born to deaf parents and raised bilingually, using ASL and English, suggest that individuals who demonstrated aphasia in spoken language also demonstrated the same problems in signed language (e.g., Corina, 1998; Poizner, Klima, & Bellugi, 1987). In the United Kingdom, Marshall, Atkinson, Smulovitch, Thacker, and Woll (2004) assessed a deaf individual using British Sign Language (BSL) and identified the presence of aphasia in BSL. These studies, which involved two different signed languages and deaf and hearing signers, provide a foundation of evidence for the existence of aphasia in the signed language modality.

Poizner et al. (1987) reported six deaf patients with either left- or right-hemisphere damage (LHD, RHD). An adapted version of the Boston Diagnostic Aphasia Examination was administered using ASL (see Salk Institute’s Sign Aphasia Test Battery, http://signaphasia.stest.salk.edu) along with tests that included production and comprehension using different aspects of ASL grammatical structure. Results indicated that deaf signers with LHD performed poorly in language production (Broca’s) and/or comprehension (Wernicke’s), whereas this did not occur among deaf signers with RHD (Bellugi et al., 2010; Hickok & Bellugi, 2010; Quinto-Pozos, 2014).

Overall findings from the signed language aphasia studies indicate that the left hemisphere is responsible for language production and comprehension among signers, comparable with the process of spoken language. There are abundant and available, there appear to be no applications of the knowledge accumulated. The data suggest that the scientific curiosity about whether aphasia, stuttering, and SLI take place in the signed language modality is legitimate and worthy of pursuing, but helping deaf individuals ameliorate the same disorders is less critical. The existence of signed language disorders has been noted, but the only therapies available appear to be for spoken language.

The Prevalence of Signed Stuttering

Equally disturbing is the lack of follow-up on the long history of studies on signed language stuttering, beginning in the 1930s. Stuttering in general is frequently defined as “a speech disorder characterized by disrupted rhythm or dysfluency” (Hulit, 1996, p. 28). Since Voelker and Voelker’s study in 1937, stuttering-like behaviors have been noted among deaf individuals who use signed language (as cited in Snyder, 2009). Cosyns, Van Herreweghe, Christiaens and Van Borsel (2009) defined the characteristics of signed stuttering as manual repetitions, prolongations, blocks, choppy manipulations, jerky and hesitant signs, involuntary interruptions, and extra movements. With this information, Snyder (2009) proposed that signed stuttering exists, not solely as a speech disorder but as a disorder indicative of cognitive processing and production errors.

At Gallaudet University, a university serving deaf students in Washington, D.C., Whitebread (2004) interviewed 10 faculty members active in the deaf community. All of these faculty members reported that they had experience interacting with individuals who demonstrated stuttering in ASL. The purpose of the interviews was to elicit the potential characteristics of stuttering in the signed language. The faculty members described in detail what signed stuttering looks like. As a result of this study, the researcher outlined nine characteristics of signed stuttering: (a) inconsistent interruptions in sign and finger spelling, (b) stuttered symptoms most often occur at the initiation of a gesture, (c) hesitation of sign movement, (d) repetition of sign movement while keeping the original handspace, (e) exaggerated signs or prolonged signs, (f) unusual body movements completely unrelated to linguistic communication, (g) poor fluidity of the sign, (h) inappropriate muscular tension (in the arms and hands) associated with signing, and (i) adding a schwa (gestures included prior to a sign that serve no storytelling meaning).

In Flemish Sign Language (FSL), stuttering has been documented among deaf individuals. Cosyns et al. (2009)
administered a questionnaire to FSL interpreters and employees who worked with deaf students in the mainstreamed school environment to determine whether they noticed any stuttering in signed language. More than 13% of the respondents indicated that they had seen stuttering-like behaviors in FSL. (See Whitebread, 2014, for a detailed review of the cases of signed stuttering.)

The European and American studies indicate that signed stuttering is a real phenomenon. Yet, no standardized assessment or therapy was identified in the literature for individuals who exhibit signed stuttering. There is no research on treatment for signed stuttering. In addition, no data could be found regarding the percentage of ASL users in the United States and Canada who stutter. With a subgroup of deaf people demonstrating this disorder, it is clear that treatment for signed stuttering has not been a priority.

The Prevalence of Specific Signed Language Impairment (SSLI)

Although recent findings in the study of SLI have identified disorders of language in the signed language modality or SSLI, the direction for treatment remains unclear. Generally, SLI is considered an isolated linguistic problem found in children with atypical language development with no other obvious impairments. Symptoms of SLI include problems with phonology, morphology, syntax, semantics, pragmatics, and listening and expressing language (Leonard, 1998). Researchers in the United Kingdom used existing theories of SLI and applied them to BSL in an initial study, targeting a hearing child with deaf parents who was exposed to both spoken English and BSL from birth. They identified atypical language development in both languages (G. Morgan, 2005). While notable, this study of one subject is not generalizable, and more research is needed to affirm the findings.

In 2007, G. Morgan, Herman, and Woll provided evidence that a 5-year-old deaf child, despite exposure to a rich BSL environment from birth, had substantial receptive and expressive language problems that could not be explained by any other obvious impairment. Research by Mason et al. (2010) also looked at deaf children whose problems in BSL could not be explained by delayed exposure to language.

In the United States, Quinto-Pozos and colleagues conducted similar studies with ASL, interviewing professionals working with children in schools for the deaf (Quinto-Pozos, Forber-Pratt, & Singleton, 2011). These professionals provided personal accounts of children suspected of having isolated signed language problems that resembled SLI. The researchers discussed the service providers’ frustrations over the lack of resources such as assessment instruments and intervention treatment strategies for use with deaf children, and some mentioned that they developed informal signed language therapy strategies on their own. The researchers followed up with a 2013 study examining a native signing deaf girl. Both linguistic and nonlinguistic (cognitive-motor skills, visual-spatial, and memory) instruments were used to determine whether the child had atypical signed language development in ASL. In this study, the researchers identified the child having difficulties producing spatial aspects of ASL (i.e., classifiers and referential shifting).

Evidence regarding SSLI in deaf children who use BSL and ASL is preliminary. Limited research emphasizes an interview-based survey of professionals (e.g., teachers, SLPs, ASL specialists, etc.) who worked with deaf children in an educational setting (Quinto-Pozos et al., 2011). More efforts to standardize tests diagnosing language impairment in children who use ASL are needed to correlate with existing ASL assessments for syntax (see Quinto-Pozos et al., 2013, for an example). Discussion in Singleton and Supalla (2011) and Haug (2008) focused on diagnosis rather than suggesting therapeutic methods. Singleton and Supalla identified some limitations with (a) existing tests including length and time involved (note children who have short attention spans), (b) implications due to a focus on research rather than application, (c) questionable validity of using subtest results to generalize overall proficiency, and so forth.

Attitudes About ASL, Signing, and Signed Language Disorders

To help understand why signed language pathology has not been fully realized, it is time to address society’s preoccupation with what is considered “normal.” Whereas many deaf people sign, signing is not something that society at large considers in all contexts. Speaking and spoken language are so powerful that what society perceives as a norm is not representative of the whole population, and the plethora of publications on spoken-language-based tools and treatment options constitutes a limited view of language intervention. Professionals maintain a focus on validating what is normal, rather than acknowledging differences and developing new interventions and training.

Negative attitudes toward deaf individuals who use ASL have been documented through research (e.g., Bauman, 2004; Eckert & Rowley, 2013; Humphries, 1977). The social stigma for signing and signed language was most overt in the education of deaf children up to the time of civil rights movement in the 1970s (e.g., signing not allowed in the classroom; deaf students must learn to speak regardless of the difficulties; Baynton, 1993; 1996). As a result of the civil rights movement, any action against ASL is viewed as inappropriate and politically incorrect but negative attitudes continue to exist.

Serving as one example, the study by Ralston, Zazove, and Gorenflo (1996) demonstrated that physicians who
provide services to deaf individuals frequently hold negative attitudes about this population and their communication modes. To help explain what deaf people have endured over the years, Humphries (1977) coined the term *audism*, defined as “the notion that one is superior based on one’s ability to hear or to behave in the manner of one who hears” (p. 12), which also includes the perception of signed language as inferior to spoken language. Audism is prevalent throughout society, demonstrated by comments, behaviors, attitudes, and beliefs that occur on a daily basis and infer the superiority of spoken language and hearing abilities.

Deaf people are not the only group affected by negative attitudes about how they communicate. There is research indicating that SLPs and other professionals possess negative attitudes toward clients who can hear and are part of a minority group. An extensive literature review (Bebout & Arthur, 1992) revealed that professionals (e.g., clinicians and teachers of individuals who have disorders) were likely to have negative views of their clients with diverse ethnic and linguistic backgrounds. Bebout and Arthur administered a questionnaire to university students, which included questions that elicited students’ perceptions of different types of spoken language disorders. Similar to the professionals, the university students demonstrated negative views toward minority members with spoken language disorders. They found that some groups were likely to expect that individuals with certain disorders could do better “if they tried harder.” This led the researchers to the conclusion that cultural differences could have a significant impact on speech and language therapy.

Attitudes toward ASL can be compared with attitudes toward an English dialect known as African American English (AAE). Although AAE is a dialect of English, not a complete language like ASL, both are currently used by linguistic minorities in the United States, both are often mistaken for incorrect English grammar, and both have a tendency to elicit prejudice or negative attitudes toward users (e.g., Baugh, 2000; Charrow & Wilbur, 1989; Rickford, 1999). Robinson and Stockman (2009) examined SLPs’ perceptions of a minority group using AAE dialect. They found that SLPs in the study did not have experience with AAE, were unfamiliar with the grammatical rules of the AAE dialect, and concluded that the SLP raters’ lack of knowledge of AAE resulted in rating the AAE speakers as less intelligible. Another study, regarding teachers’ attitudes toward AAE, in New York City public schools (Blake & Cutler, 2003) found that majority of these teachers had positive attitudes toward AAE. The responses from these urban teachers indicated sensitivity to the population of students who use AAE as their primary language.

A preliminary study by Cripps et al. (in press) examined SLP graduate students’ perceptions of ASL in a department where ASL is a popular credit-bearing undergraduate class. Many undergraduate students enrolled in the ASL classes to meet general education requirements, including undergraduate SLP students. The graduate students were exposed to the “ASL-friendly” environment in the department. They had the opportunity to interact with other students who knew ASL and with deaf faculty. An “opinionnaire” about perceptions of signed language was disseminated to SLP graduate students. The objectives of this study were to identify the following information from graduate SLP students: (a) attitudes toward the use of signed language, (b) awareness of disorders in signed language, (c) perceptions of opportunities for therapy in signed language, and (d) perspective on the need for training in diagnosis and treatment of signed language disorders during graduate education.

Few respondents were extensively familiar with ASL; however, almost all agreed with the statement “ASL should be treated equally as one of the human languages.” However, only a few respondents indicated awareness of signed language aphasia or signed stuttering, and most had not heard of any of the signed language disorders. Almost all respondents felt lacking in expertise to assess and treat people who are deaf with ASL disorders. When presented with the idea of providing deaf individuals with signed language disorders therapy conducted through the use of ASL, almost all agreed that deaf participants with signed language disorders could benefit from therapy in signed language.

When asked for additional comments, some participants provided comments indicating that they would like to learn more about ASL and signed language disorders. Some felt that more education was needed in this area at the undergraduate level, and some respondents suggested that the topic of ASL disorders should be included in graduate curriculum in SLP programs. One student regretted that her undergraduate program did not provide adequate training in ASL. One student was eager to continue signing and apply this knowledge to her future SLP practice. Several students indicated interest in learning, or continuing to learn, more about ASL.

**Closing Remarks on the Future of Signed Language Pathology**

Support for signed language pathology is tied to how ASL is socially perceived as a language. The field of SLP can be seen as representative of the larger society. The opportunity to develop positive attitudes among SLPs toward ASL is more likely when they experience education through signed language classes. However, SLP students and professionals who demonstrate positive attitudes about ASL continue to be undermined by the shortcomings in their own training and how ill-prepared they are to work with deaf children and adults. The gap between ASL and the field of SLP is wide and deep. It is true that ASL is increasingly available for students to study in an academic setting for the similar experience associated with learning Spanish or any other foreign
language (e.g., Cooper, 1997; Wilcox & Wilcox, 1997), but the support for the signed language is superficial.

Some scholars have begun exploring the concept of Universal Design (UD) where ASL is promoted society-wide rather than being confined to deaf children and adults or for hearing people who happen to have the desire to study signed language. Following the principles of UD, ASL is a skill that all individuals are encouraged to learn and master. In time, hearing members of society would have the capacity for signing in addition to speech (Supalla, Small, & Cripps, 2013; see Cripps & Supalla, 2012, for the related discussion on the push for signed language proliferation in New Zealand). The “ASL for All” scenario includes boosting society’s awareness of the linguistic alternatives that should lead to the long overdue attention for deaf individuals who experience signed language disorders.

At present, ethical and social justice principles are breached when appropriate diagnoses and treatments for signing individuals are neglected in face of the scientific validation of ASL disorders (see Humphries et al., 2012, for a similar argument on behalf of ethics with deaf children and ASL). The differential treatment during the provision of therapy between ASL and spoken language cannot continue. Scientific curiosity propelled research into signed language disorders but stopped short of developing and providing treatment. Imagine how the public would react had spoken language disorders been identified but no treatment made available.

The mission of the ASHA includes empowering and supporting SLPs, audiologists, and speech, language, and hearing scientists by (a) advocating on behalf of persons with communication and related disorders, (b) advancing communication science, and (c) promoting effective communication (www.asha.org). As an advocate for language pathology, ASHA is well-positioned to take a stand to combat audism, moving forward to advocate for signed language pathology research and a related curriculum added into educational curricula and practitioners’ scope of practice.

As society begins to accept ASL and its value in the lives of deaf children and adults as evidenced by the increase in ASL classes and changes in SLPs’ attitudes, a global change in direction is imperative. ASHA can shift its position to be truly inclusive. Then ASHA will need to recognize the significance of spoken versus signed language modalities for the benefit of all in society. This includes pursuing ASL resources for educating deaf children in the area of reading and ASL acquisition and for deaf individuals who experience one form of signed language disorder or another. College students who are the next generation of SLPs will undergo the necessary preparation to work with deaf individuals who sign. These students will be empowered as promised by ASHA.

Clear and widespread operationalized definitions of signed language aphasia, signed stuttering, and other disorders will need to be part of the reform. Information on the topic of ASL disorders will be provided in both undergraduate and graduate SLP programs, as well as during in-service training and continuing education. The results could be far-reaching, justifying the need for development of new diagnostic tools and new therapeutic treatment techniques to ameliorate a variety of signed language impairments, affecting a range of signers from novice level to native signers. The review of the literature suggests that the field of communication disorders may be positioned to broaden its perspectives to include diagnosis and treatment of signed language disorders. Changes in attitudes and perceptions will likely open new doors for research and practice in signed language pathology.

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