

Multiple literacies: Linking the research on bilingualism and biliteracies to the practical

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ABSTRACT:

For the purposes of the first paper in this series, multiple literacies is limited for the most part to bilingualism and biliteracies. This paper addresses the fundamental developmental differences between monolingualism and bilingualism as outlined in the literature. In so doing, it takes into account research using qualitative and quantitative research methodologies thereby moving outside strict developmental models of bilingualism and biliteracies. Moreover, it reviews the advantages and possible disadvantages for bilingualism in preschool children. It then moves on to biliteracies in early childhood education. The questions addressed are: 1) Do bilingual children have an advantage over monolingual children? What can we say about the kinds of cognitive domains we can identify as being cognitively advantageous to bilingual children? 2) What are some challenges regarding the acquisition of biliteracies? 3) How can family literacies support bilingualism/biliteracies? The paper concludes with recommendations and implications about literacies for physicians who counsel bilingual families regarding early childhood literacy promotion and development.

KEY WORDS: bilingual advantage, bilingualism, biliteracies, family literacies, multiple literacies,

## **Introduction**

Studies conducted on the differences in the language abilities of bilingual children are numerous. For the purposes of this paper, the studies retained are those that consider language acquisition in two or more languages to be a continuous process in children. We examine these studies with the aim of developing an understanding of the processes involved in order to offer practical advice in reference to bilingualism and biliteracies.

We consider ourselves to be educational language researchers and teacher educators. We deal with bilingualism and biliteracies on a daily basis and, therefore, we need to look at both developmental and learning processes and the accompanying research (1, 2). In our roles, there is a need for us to incorporate this knowledge into the every day lives of bilingual children and the parents with whom we are in contact in our roles as educators and as researchers.

We are often faced with difficulties that arise in children for whom the bilingual experience has not been successful both in terms of language acquisition and biliteracy. We outline the pitfalls that need to be avoided in certain children if they are to be successful at language learning and in acquiring different and differing literacies if they are to come out of the experience with their self esteem and cultural values intact.

## **Recent Studies on Bilingualism and Biliteracies**

Research has shown that bilingual children lag behind their monolingual peers in acquiring language. It might even appear that bilingual children display language patterns similar to monolingual language impaired children. Research (3) that compared monolingual children with language impairment and typical second language learners demonstrated that they made similar kinds of errors in their expressive language and grammatical morphology. When comparing bilingual French-English children with language impairment and monolingual children with language impairment, there was no difference for aspects of grammatical morphology examined in both languages (4). These researchers concluded that language impairment may not be an impediment to learning two languages. In addition to the comparison between monolingual and bilingual children, there is the comparison between bilingual children with and without language impairment. Salameh, Håkansson & Nettlebladt (5) replicated a study they did one year earlier on Swedish-Arabic children with and without language impairment. They concluded that both groups of bilingual children developed grammatical structures in a similar way although the pace of development in bilingual children with language impairment was slower. Despite the similarities between typical bilingual children and language impaired children, it is important to differentiate them because of the implications for intervention. When a child is seen to be language or learning disabled, he will not be receiving appropriate intervention if the child is developing at a pace for second language learning. The converse is just as important. Children perceived to be developing at a pace for second language learning may be language or learning disabled. Recommendations for screening are provided in the last section of this paper.

With regard to typical bilingual learners, we focus on recent studies linking literacy to vocabulary, phonological awareness, oral language, syntax, and word order. As far as the acquisition of vocabulary and lexical items are concerned, there are many studies on first language (L1) acquisition with second language (L2) acquisition research lagging behind. A recent study by Uchikoshi (6) suggests that preschool experience can influence L2 vocabulary growth. Children who are enrolled in a preschool program tend to start Kindergarten with higher expressive vocabulary than children who stay at home. At the same time, results suggest that viewing educational television programs in the home has an impact on vocabulary growth. These programs focus on increasing children's vocabulary through repetition and reinforcement commonly found in parent-child book reading. This study piggy backs on L2 research by Tabor, Beals and Weizman (7) who address language speed and growth of literacy regarding the number of conversations and word variety that a child hears. The correlation between extra language exposure in the second language at the prekindergarten level strongly suggests that exposure to language is related to speed of language growth. An important point in the first study is that the results showed a gender difference. Boys are able to start and continue to maintain higher scores than girls in expressive and receptive vocabulary while previous studies with monolingual children show that girls have an advantage over boys. Snow, Burns and Griffin (8) and Tabors, Snow and Dickinson (9) reiterate that the combination of literacy-rich home environments and preschool experience can be beneficial to L2 children's lexical development. In short, a literacy-rich home environment that encourages literacy learning can only benefit a child who is acquiring an L2.

Like Lindsey, Manis and Bailey (10), we understand phonological awareness to be a set of linguistic and metalinguistic skills involving sensitivity to the sound structure of spoken words. Phonological awareness is not the only variable in ensuring that children are successful in literacy. Cross linguistic studies in L2 acquisition involving Chinese/English (11) as well as French/English (12) indicate that phonological awareness is a general and not a language specific contributor to reading acquisition. In other words, if children do well in phonological awareness in one language, they will also do well in the other language. According to the literature (13), there is a reciprocal relationship between phonological awareness and reading. In other words, reading in and of itself promotes phonological awareness and vice versa. The results of this study also indicate that phonological awareness may be a better reading predictor after a period of instruction has taken place. Hence, there is a place in all of this for the influence of a teacher in promoting phonological awareness activities in the classroom.

In addition, oral language seems to have a role in the development of reading. However, the research findings do not converge. There are some studies (14) which do not assign a particular role for oral language in reading. On the hand, there are other studies (15) that do. The differences in results across studies may be due to variations in sampling, developmental time frame, measurement, or statistical approach. For those studies that have found links between oral language and reading concur that oral language in terms of explication, narration and description must be added along with letter knowledge and print awareness (16).

Reyes and Hernández (17) address the question as to what factors exert the most influence on children's syntactic strategies. These researchers conducted studies with

Spanish/English speakers. L1 structures are developing at home where Spanish is used whereas English (L2) is the language used at school. The authors state that word order and subject verb agreement cues used by emergent bilingual Spanish children beginning to learn English fall *in between* the patterns demonstrated by monolingual speakers. When it came to the use of strategies regarding word order, these bilingual children made use of some local context cues just as often as some monolingual children but they did not rely on them as often as most of the monolingual children.

Similarly a decade earlier, a study (18) found that when making use of word-order strategies, bilingual Spanish-English children were also somewhere in between the monolingual groups. They used word order cues before using subject-verb agreement cues. In short, attending to subject-verb agreement cues comes at a later age than it does for the monolingual Spanish speaker but at an earlier age than it does for a monolingual English speaker.

When bilingual children use cues such as word order to process and produce both languages, they come to learn how cues work within and between two languages, thereby creating a system of cues that differ from monolinguals. In short, bilingual children follow a different developmental course of language development in comparison to monolingual children (19).

**Do bilingual children have an advantage over monolingual children? What can we say about the kinds of cognitive domains we can identify as being cognitively advantageous to bilingual children?**

Early and recent research on bilingualism target very few short comings when it comes to the bilingual experience. Early research such as the landmark study by Peel and Lambert (20) and replicated by Lambert and Tucker (21) point to cognitive advantages in bilingual children. Other research with bilingual children suggested that there might be a cognitive difference regarding development in either analysis of representation, control of attention or possibly both between children who became bilingual in early childhood when compared to monolinguals (22). Subsequent research has indicated that bilingual children have been identified as better than monolinguals at judging the grammaticality of sentences that contained distracting semantic anomalies (23). Bilingual children are also better than monolinguals at understanding that the meaning of the printed word does not change if it is moved to accompany a different picture (24). In other words, bilingual children were better able to suppress attention to a picture name.

However, there are developmental differences and these translate into cognitive differences between monolingual and bilingual children. One such study (25) targets the bilingual age delay involved in beginning to use a second-noun strategy for interpreting noun noun verb (NNV) and verb noun noun (VNN) sentences. This strategy requires reporting which of the two nouns in a sentence with a transitive verb is the actor. The choice appears to be language specific. Saliency in a language where word order might be more important than agreement determines which noun becomes the actor. According to the research (26), for English monolinguals, this pattern of choosing second noun agency occurs somewhere around age seven for VNN sentences and around age nine for NNV sentences. Spanish monolinguals begin to use a defined pattern of choosing second noun agency pattern by age eleven for both VNN and NVV sentences (27). The strategy

only develops in bilinguals around 14 to 16 years of age (28). Perception and attention to different cues in two different languages demonstrates a difference between monolinguals and bilinguals with bilinguals showing an in between pattern regarding perception and attention in each of their languages (29). Bilingual children rely on word order. Older bilinguals continue to rely on word order but they do not do so exclusively. These results and those presented in the previous section on word order cues point to differences in the performance of bilinguals when compared to monolinguals suggesting that bilinguals catch up with their monolingual peers in time.

### **What are some challenges regarding the acquisition of biliteracies?**

Ongoing research that we are presently conducting targets children for whom the French Immersion experience in school has been a disaster. Many of these children have been later identified as having a language processing problem, central auditory processing deficiency and/or poor short term auditory memories coupled with working memory problem (retrieval). The challenge here is not bilingualism (30). Bilingual children raised in two languages exhibiting these problems are extremely successful in their oral languages for the most part. Traditional literacy, defined as reading and writing, might prove to be the problem with these children. All children require support in reading and writing. Special needs children require additional support. Bilingual children require support in their L1 and their L2. Bilingual children with a language processing deficit and/or memory retrieval problems require additional support in both languages when it comes to biliteracy. Since learning to read often starts as children enter school around age 4 or 5, support at home and at school is important if children are to succeed. Storybook reading and asking questions to verify whether children comprehend, activities based on the alphabetic principle, concepts about print and phonological awareness are aspects of learning to read and write that can be supported at home. These activities are not intended as school-like activities but can be done through games and at play time. Parents of special needs children need to consult with the school board specialist who can suggest ways to support the child's learning at home.

Biliteracy, defined traditionally as reading and writing in two languages, could be disastrous for these children (31). Again, it is not the two languages that bring on the challenges; it is the memory and processing problems that interfere with learning to read and write language. Our inability to screen for these problems at a very early age does not help us regarding bilingual and immersion education. If such a problem were to be identified, our advice would be to exercise extreme caution regarding these children and early bilingual/immersion programs given the type of taxing that will be demanded of the auditory and working memory. Early indications in our research suggest that orally, these children will do well; we cannot expect them to do well in traditional literacy and this transfers across linguistic lines (L1 and L2). When there are processing and memory challenges involved with any child, the child starts to lose self-esteem and cultural capital through an inability to read and write.

### **How can family literacies support bilingualism/biliteracies?**

The family context at such a young age can be significant in supporting the child's literacies. Kenner (32) studied six year-old bilingual children at home learning to

read and write. She observed that the skills of different family members were complimentary in fostering the child's learning. She describes bilingual families as literacy eco-systems.

It is often recommended that one parent always speak the same language while the other parent the other language. When this is not possible it is recommended that in certain contexts, a parent speaks one language while in other contexts, the other parent speaks the other language. Immigrant parents should continue to speak to their children in their native language. It is the base for language conceptualization needed in acquiring a second language.

Moreover, one of the recommendations we need to put forward as educational researchers and educators involved in multiple literacies is for a parent/educator to be very wary of academic performance literacy tests and psychological tests that involve choice and use of the second noun agency pattern. Awareness of this pattern seems to be delayed in certain languages. Given this, L1 testing using this feature might not be to the benefit of a bilingual child. The same can be said of subject-verb agreement which is a popular item used in standardized tests in language and literacy. Given the current research, it is safe to say that in an L1 that exhibits a high degree of subject-verb agreement like Spanish and French for example, bilingual children in these languages will lag behind their monolingual counterparts. They would most probably not be as successful on these test items.

Since bilingual children often demonstrate below normal average vocabulary scores in each of their languages (33), standardized tests that put an emphasis on isolated lexical items or on lexical items in short sentences will prove to be difficult for these children and outcomes of such tests will show a deficit in these areas when it should not be considered a deficit. Bilingual children are acquiring vocabulary in two languages and there is a delay in vocabulary learning when compared to monolingual children.

According to Viberg (34), a recognized strength that bilingual children demonstrate is shown in book reading activities. These children have a tendency to give more detailed and concrete versions of the story in both languages than do monolinguals who tended to give more condensed versions. If a test requires short answers, this might not benefit the bilingual child. It would seem that semantic links are different in bilingual children and while this might prove to be a strength in the long run, depending on the task demanded of the bilingual child, it might not be recognized as such in a school or clinical setting.

### **Recommendations and implications about literacies for physicians who counsel bilingual families regarding early childhood literacy promotion and development**

To conclude, there are qualitative as well as quantitative differences in the performance of bilingual children when compared to monolingual children. Professionals need to recognize that bilingual children do not go through the exact same developmental stages at the same rate and order as monolinguals. To compound the problem, some of these stages are language specific while others cross linguistic barriers.

We would like to reiterate that there are cognitive advantages to being bilingual but that these advantages are not universal and that we are only now becoming able to identify the kinds of cognitive domains where bilingualism might prove to be advantageous. We ask parents, health care and educational professionals to exercise

caution in allowing bilingual children to sit for tests and evaluations that are made according to monolingual developmental patterns and that favor these. To know that these tests were designed for monolingual children is important when examining a child's performance and to know that only limited information can be obtained from such results.

To counter such forms of tests with bilingual children, Kester and Peña (35) warn that in testing in schools as well as clinically, domains must be sampled broadly to ensure that concepts and linguistic features are appropriately represented for each language. For example, grammar tests should explore a wide variety of structures in both languages. The authors also suggest exploring a wide variety of semantic concepts such as functions of objects, word associations, categorization, spatial relations, etc. In addition, using dynamic assessment, clinical interviewing and feedback during or as a follow-up to assessment of bilinguals may help better estimate language ability. They suggest that conceptual scoring systems need to be used to eliminate underestimation of ability. Conceptual scoring involves counting the concepts demonstrated in both languages and correcting for concepts shared in both languages. They reiterate that a selection of an appropriate mix of item-types needs to be included in testing/evaluation situations to gain the maximal amount of information about language ability in each language. For example, an English grammar test might have more items related to pronouns because they are more salient while a French grammar test might have more items related to gender and number agreement. Finally, when trying to balance concepts in different language versions of tests the frequency of occurrence of the words used needs to be considered.

Given this, we caution physicians who deal with bilingual children and language delays to be especially vigilant. Bilingual children in schools and in clinical settings have often been misdiagnosed with language delays or language impairments where, when bilingual developmental stages and cognitive development are foregrounded, these delays do not really exist. In this paper, we have attempted to further disseminate ongoing research regarding bilingual children to ensure that professionals in all walks of life begin to understand bilingual language acquisition in children, bilingual cognition, bilingual learning and biliteracies.

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