

## **Bi/multilingualism: Issues and Concerns<sup>12</sup>**

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The study of bi/multilingualism is an independent discipline in itself rather than just being a collaboration of information from different areas of research such as anthropology, linguistics, psychology and neuroscience etc. The existence of regional diversity in India gives rise to different languages and dialects and in the face of globalization, language diversity further increases. Sociolinguistic approach towards bi/multilingualism handle issues related to language maintenance, functional distribution of communication patterns, code mixing and code switching, whereas the fields of psycholinguistics and cognitive psychology are particularly keen on examining complexities related to language access and representation and overall involvement of cognitive mechanism in language organization in the brain.

The objective of the current paper is to highlight different research domain under which bi/multilingualism is studied in past. Further, we intend to highlight scope of research in the field of bi/multilingualism in Indian context.

Descriptions of bilingualism as a multifaceted phenomenon range from the liberal view where the bilingual is one who knows two languages, to the extremist view, where a person is called bilingual only if one knows both languages to native like competence. There is also little consensus on what the construct of bilingualism consists of - is it the age at which a language is acquired, or the nature of usage of the language(s), or the levels of proficiency in more than one language. An interesting question to answer would be how much knowledge of language is enough to be called as bi/multilingual? Only awareness of two or more languages may not be enough. In an attempt to address this issue, Cummins (1979) drew upon studies with multiple bilingual groups to suggest that if L1 has not reached a certain threshold of competence, then the child may become "semi-lingual", which reflects low levels of competence in both languages. This theory proposes that "negative cognitive and academic effects result from low levels of competence in both languages". Bilingualism has generally been considered to be of cognitive benefit (e.g. Costa, Hermander & Sabastia-Galle, 2008 based on

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<sup>1</sup> Technical words in italics have been explained in a glossary at the end of the paper.

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work with Catalan-Spanish biliguals; Bialystok 2007), but some past studies have also shown that it has negative effects on cognitive and academic progress (Saer, 1923;-Darcy, 1946, cited in Bialystok, 2001). The phenomenon of bilingualism, while widely prevalent, is so multifaceted that it is very difficult to define the phenomenon in a manner that can cover all aspects. Behavioural manifestation of negative effects of bilingualism is predominantly discussed with respect to language skills, especially in the domain of syntax and vocabulary development (Study on French-English bilinguals Coppetires, 1987). Similar deficiency in processing L2 in pronoun usage was reported by Cook (1990). Magiste, 1979 reported language processing deficiency (Reaction time was measured) in L1 also in German-Swedish bilinguals in a longitudinal study. These results are overshadowed by a large number of works projecting the positive effects of bilingualisms not just in linguistic skills (phonological and metalinguistic skills, grammar as well as arbitrariness in usage of signs) but also in cognitive skills (in the domain of attention, memory etc).

Defining bilingualism becomes further complicated when one starts to consider what knowing a language actually means. Bilingualism is often referred to in terms of categories and scales, such as ideal vs. partial and coordinate vs. compound; these are the constructs which are related to factors like proficiency (i.e. an ideal bilingual would be fully proficient in both languages, whereas a partial bilingual would have varying levels of proficiency) and context of language acquisition (i.e. coordinate bilinguals learn both languages in different contexts and compound bilinguals have the same context of learning) (Romaine, 1995, cited in Norlund, I, 2005). With growing research there is an inflation of new terminologies and extinction of the old. So, based on age of acquisition, we have early/late bilinguals and level of language proficiency gives us high/low proficient bilinguals and balanced/unbalanced bilinguals. These are the commonly used terminologies in current bi/multilingual research.

An interesting observation in the field of bi/multilingualism by Francois Grosjean (1998) is that the studies in the field of linguistics, psycholinguistics, language development and neurolinguistics have often produced conflicting results, and that these conflicts could be directly attributable to methodological and conceptual issues. *Language mode* (monolingual/bilingual mode), the choice of who the bilingual participants were, the stimuli, the specific tasks and the models of bilingual representation and processing being examined were the important issues surrounding the concept of bilingualism and could have been major sources of conflicting results. But, despite the conflicting results, findings from research in language diversity, bilingual language processing, acquisition and

learning are important to understand core issues in cognitive psychology such as the nature of attentional control in bilingualism (Colzato et al 2008), language representation in our mind (Chauncey, Holcomb and Grainger, 2009) and *lexical access* (Kroll and Stewart, 1994).

In the recent past, bilingualism has always been considered as a *categorical variable* based on the level of language proficiency, age of acquisition or language use. Most researchers have used methods like *confrontation naming* (i.e. in the form of Peabody Picture Vocabulary Test) or self reported questionnaires to depict the level of bilingualism (Carlson and Meltzoff, 2008; Yang and Lust 2004, Bialystok et al, 2004). Only recently are researchers acknowledging the use of *both* self reported measures of proficiency and some form of objective language test, to establish the level of bilingualism.

Early research suggested that learning two languages in childhood was detrimental to a child's cognitive development. This was due to the idea that the two languages were learnt independently and there was lack of cross language transfer. However, researchers like Bialystok and Hakuta (2004) suggest that the benefits from being bilingual go much further than simply knowing two languages. One of the benefits is the increase of *metalinguistic awareness*, along with *general purpose cognitive control* and literacy acquisition (Bialystok, 2001). Similar results in the Indian context for Hindi-English language group(s) was corroborated by Kar, Khare & Dash (2011). It is interesting that this advantage of bilingualism is also reported in the *clinical population* (Bialystok, Craik and Freedman, 2007; Chengappa 2009). One of the current line of research is looking at the factors influencing the bilingual advantage in cognitive tasks. Yang and Lust (2004), for example, give supporting evidence from Korean-English bilingual studies for language proficiency being an important measure of bi/multilingualism; and propose that it is the influence of this language proficiency that explains the bilingual advantage seen in *executive attention tasks*.

Within the Indian context there are empirical evidences supporting the influence of bi/multilingualism on cognitive and sociolinguistic aspects, but it is far from enough. Few of the studies from the sub-continent, continually emphasize that no single language could fulfill all the needs of a people in a multilingual society and that language choice is socio-linguistically depended not only on language proficiency but also on situational demands, as well as the interlocutor's language (Vasanta, Suvarna, Sireesha, & Bapi Raju, 2010 while commenting on the Telugu-Dakkhini-Hindi

language context). Many past researches on Kannada-Hindi-English speakers in Mysore and Hindi-Bengali/Tamil speakers living in New Delhi, for example, do emphasize the use of mother tongue and Hindi over English while listening to the interlocutor (Taylor, Mahadevan, & Koshal, 1978; Saghal, 1991).

On the other hand, clinical researches have pointed to the implication of bi/multilingualism on the assessment and management of various communication disorders. For example, a review by Chengappa (2009) highlighted that simultaneous exposure to different languages in regional contexts such as the Mysore, Karnataka, is emerging as a rule rather than an exception. It also supports the notion that bilingualism aids better cognitive-linguistic skills (studies with Malayalam-English bilingual groups, Sreedevi and Sathish, 2005) and proficiency in each language can be an influential factor in language recovery in language disorders such as Aphasia (Tamil-English groups, Sreedevi, 1999). One recent study on cognitive-linguistic abilities shows clear advantage for bilingual children and suggests that children with communication disorder can be taught two or more languages, provided they have the potential to learn the languages (Kannada-English language mix, Stephen, Sindhupriya, Mathur and Swapna, 2010). Dyslexia research in bilinguals holds interesting implication on the understanding of the brain and language processing. Karanth (1992) with the help of two case studies on developmental dyslexia, suggested differentially affected reading acquisition skills in their two languages – Kannada better preserved than English and Hindi/Kannada than English. In the area of intervention with Kannada-English bilingual children, *phonological intervention* tend to improve decoding and manipulation of phonological representation, thus improving literacy skills in non dominant language. The phonological intervention in the study did not explicitly focus on orthography-phonology linkage (Nag-Arulmani, Reddy and Buckley, 2003).

In conclusion, there are different aspects of bi/multilingualism which have to be addressed in greater detail for better understanding of bi/multilingual population and influence bi/multilingualism on cognitive processes and sociolinguistic aspects. There is a great need for research in India to conceptualize the theoretical and methodological concerns related to bi/multilingualism.

**Glossary:**

Executive attention: Executive function is an umbrella term for cognitive processes such as planning, working memory, attention, problem solving, verbal reasoning, inhibition, mental flexibility, multi-tasking, initiation and monitoring of actions

Cognitive control: Cognitive control involves filtering out of irrelevant information i.e. interference suppression, inhibiting an inappropriate response, maintaining goals of the task in hand even in conflicting conditions, switching conditions or switching between tasks and selecting among different responses. Cognitive control has been experimentally found to be associated with a wide range of processes and is not restricted to a particular cognitive domain. For instance, presence of impairments in cognitive control functions may be associated with specific deficits in attention, memory, language comprehension and emotional processing.

Metalinguistic awareness: This refers to the ability to objectify language as a process as well as a thing. The concept of Metalinguistic Awareness is helpful to explaining the execution and transfer of linguistic knowledge across languages (e.g. code switching as well as translation among bilinguals).

Confrontation naming: it is a complex process of naming a picture which involves several stages. In the perceptual stage picture is presented for correct identification of the stimulus. The second stage consists of semantic stage leading to semantic activation, followed by label retrieval in the third stage. Finally, there is the articulation of correct response.

Language mode: Language mode is the state of activation of the bilingual's languages and language processing mechanisms at a given point in time.

Lexical access: Lexical access is the process by which contact is made with the lexicon (mental dictionary) on the basis of an initial acoustic-phonetic or phonological representation of some portion of speech input. The result of lexical access is a potential word candidate which is compatible with this initial analysis.

Phonological intervention: Intervention program which considers phoneme as a basic unit of therapy with different communication disorder.

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