

The Bilingual Mind and Brain Book Series 6

Ramesh Kumar Mishra

Bilingualism and Cognitive Control

 Springer

The Bilingual Mind and Brain Book Series

Volume 6

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Preface

It is well-recognised that any serious practice of a demanding skill over a period of time should change the brain: cognitive neuroplasticity could emerge because of long and persistent training. In this book I propose that the practice of bilingualism could lead to such noticeable advantageous neuroplasticity lifelong. Much research has shown that people who are bilingual enjoy a cognitive advantage in attention and executive control over those who are monolingual. This book, which is published in Springer's book series on bilingualism, summarises these results and contextualises them in light of current debates. Currently, no book-length discussions of bilingualism and cognitive control exist. The state-of-the-art coverage is aimed at students and researchers in multiple domains, including psycholinguistics, cognitive science, cognitive neuroscience and neurolinguistics among others. This book is divided into several chapters that stand alone, each of which has been designed to offer in-depth analysis of one issue within the context of bilingualism and cognition.

Considering the fact that the beneficial effects of bilingualism on cognition are currently under intense scrutiny and debate, I have attempted to show what we know for sure as of now. More controversial issues are also discussed so as to offer the reader the opportunity to create their own interpretations. This topic is of interest since we want to know whether speaking two languages makes us better than such things as taking pills or doing a difficult sport. Also, does this cognitive benefit also extend to domains where one does not need any language? Currently, scientists stand divided on the issue of bilingualism and its precise impact on our general cognition. Does bilingualism change the structural and functional patterns of the brain to such an extent that its functioning becomes much faster and smarter on a range of difficult tasks and other challenges of life? Additionally, there are differences of opinion on the exact psycholinguistic processes in bilinguals that allows recruitment of such control mechanisms. The chapters of this book cover dominant theories and modes, including empirical data, that exemplify the issues.

The book is written in the style of a monograph; therefore, chapters are not introductory. There are many excellent textbooks on bilingualism and related issues. However, at this point in time, there are many shortcomings in the field, some of

which are methodological. For example, we have only managed to study bilinguals in specific locations, mostly university students. The enormous influence of the sociolinguistic and cultural context on bilingual cognition is only now being appreciated. However, newer methods bring their own problems for analysis and interpretation, although they advance the field. Bilingual illiterates, who still inhabit many regions of the world, have not been studied. For example, India still has a sizable number of people who are formally illiterate but are bilinguals. In addition, individual differences and how they might explain the bilingualism cognition interface has not been looked at carefully. What I have written in this book should be interpreted keeping these points in mind.

I have researched cognitive control in Indian bilinguals and I discuss this research at many points throughout this book. Whether bilingualism has an effect on cognition or not, it is clear that this is a very heterogeneous problem. My own research has shown the difference between second-language speakers of high and low proficiency on different executive control tasks. In this monograph, I demonstrate this heterogeneity in research results with cross-linguistic comparisons. The last chapter of the book offers a detailed summary of the main points and also future directions for research in this area.

Hyderabad, India
3 March 2018

Ramesh Kumar Mishra

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Writing a book takes a great amount of time and energy. At the Centre for Neural and Cognitive Sciences, University of Hyderabad, India, I found a very conducive atmosphere. I have learnt much from the excellent PhD students who are working on bilingualism. Most particularly I thank Seema Prasad, my PhD student who has provided much help in manuscript preparation and editing. I thank my wife Bidisha and daughter Riya for all their support during the entire course of writing the book.

Hyderabad, India

Ramesh Kumar Mishra

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