

South and Southeast Asian Psycholinguistics

A large body of knowledge has accumulated in recent years on the cognitive processes underlying language, much of which comes from studies of Indo-European languages, in particular English. This ground-breaking volume explores the languages of South and Southeast Asia, which differ significantly from Indo-European languages in their grammar, lexicon and spoken forms. South and Southeast Asian Psycholinguistics raises new questions in psycholinguistics and enables readers to re-evaluate previous models in light of new research. With 36 chapters divided into three parts — Language acquisition, Language processing and Language and brain — it examines contemporary topics alongside new findings in areas such as first and second language acquisition, the development of literacy, the diagnosis of language and reading disorders, and the relationships between language, brain, culture and cognition. It will be invaluable to all those interested in the languages of South and Southeast Asia, as well as to psychologists, linguists, educationalists, speech therapists and neuroscientists.

HEATHER WINSKEL is a Senior Lecturer in Psychology at Southern Cross University, Australia.

PRAKASH PADAKANNAYA is Professor of Psychology at the University of Mysore, India.





South and Southeast Asian Psycholinguistics

Edited by

Heather Winskel

and

Prakash Padakannaya





CAMBRIDGE UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Published in the United States of America by Cambridge University Press, New York

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107017764

© Cambridge University Press 2014

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2014

Printing in the United Kingdom by TJ International Ltd. Padstow Cornwall

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data

South and Southeast Asian psycholinguistics / Edited by Heather Winskel; Prakash Padakannaya.

pages cm

Includes bibliographical references and index.

ISBN 978-1-107-01776-4 (Hardback)

- 1. Psycholinguistics-South Asia. 2. Psycholinguistics-Southeastern Asia.
- South Asia–Languages–Psycholinguistics.
 Southeast Asia–Languages–Psycholinguistics.
 Winskel, Heather.
 Padakannaya, Prakash.
 P37.45.S68S68 2013

495.01′9–dc23 2013014906

ISBN 978-1-107-01776-4 Hardback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



Contents

List of figures

	List of tables List of contributors Introduction HEATHER WINSKEL	
Intro		
I	Language acquisition	
(i)	Spoken language	
1	Studying language acquisition cross-linguistically SABINE STOLL AND ELENA LIEVEN	19
2	Infant-directed speech: social and linguistic pathways in tonal and non-tonal languages CHRISTINE KITAMURA	36
3	Pragmatic development of Mandarin-speaking young children: focus on communicative acts between children and their mothers JING ZHOU	45
4	Referential forms in Thai children's narratives THEERAPORN RATITAMKUL	52
5	The acquisition of tense and aspect YASUHIRO SHIRAI	60
6	The acquisition of Malay numeral classifiers KHAZRIYATI SALEHUDDIN	71
7	The acquisition of Vietnamese numeral classifiers JENNIE TRAN	7 9

v

page ix



vi	Contents	
8	An overview of the acquisition of Malay wh-questions NORHAIDA AMAN	89
9	Marking plurals: the acquisition of nominal number inflection in Marathi SHALMALEE PITALE AND VAIJAYANTHI M. SARMA	99
10	Issues in the acquisition of Tamil verb morphology VAIJAYANTHI M. SARMA	110
11	Fast mapping of novel words in bi/multilinguals VISHNU K. K. NAIR, SUNIL KUMAR RAVI, SAPNA BHAT AND SHYAMALA K. CHENGAPPA	124
12	Studies on the acquisition of morphology and syntax among Malay children in Malaysia: issues, challenges and needs ROGAYAH A. RAZAK	133
13	Issues in developing grammatical assessment tools in Chinese and Malay for speech and language therapy LIXIAN JIN, ROGAYAH A. RAZAK, JANET WRIGHT AND JOHN SONG	145
(ii)	Written language	
14	Reading and reading acquisition in European languages BRIAN BYRNE, STEFAN SAMUELSSON AND RICHARD K. OLSON	159
15	Learning to read and write in Thai HEATHER WINSKEL	171
16	Learning to read and write in Malaysian/Indonesian: a transparent alphabetic orthography HEATHER WINSKEL AND LAY WAH LEE	179
17	Literacy in Kannada, an alphasyllabic orthography R. MALATESHA JOSHI	184
18	Reading in Tamil: a more alphabetic and less syllabic akshara-based orthography BHUVANESHWARI B. AND PRAKASH PADAKANNAYA	192
19	Akshara—syllable mappings in Bengali: a language-specific skill for reading SHRUTI SIRCAR AND SONALI NAG	202



	Contents	vii
20	Diversity in bilingual children's spelling skill development: the case of Singapore SUSAN RICKARD LIOW	212
II	Language processing	
21	Tones and voice registers ARTHUR S. ABRAMSON	223
22	How to compare tones NAN XU RATTANASONE, VIRGINIE ATTINA, BENJAWAN KASISOPA AND DENIS BURNHAM	233
23	Studying sentence generation during scene-viewing in Hindi with eye-tracking RAMESH MISHRA	247
24	Thai-specific and general reading processes in developing and skilled Thai readers JEESUN KIM AND CHRIS DAVIS	256
25	Eye movement guidance in reading unspaced text in Thai and Chinese JIE-LI TSAI	265
26	Southeast Asian writing systems: a challenge to current models of visual information processing in reading RONAN REILLY	272
27	Preferred Argument Structure and Thai varieties of English: evidence of cognitive processing limitations? THOM HUEBNER	285
28	Cross-language perception of word-final stops KIMIKO TSUKADA	297
29	Uncovering bilingual memory representations WINSTON D. GOH, LIDIA SUÁREZ AND KELLY YEO	305
30	Eye movements and reading in the alphasyllabic scripts of South and Southeast Asia HEATHER WINSKEL, PRAKASH PADAKANNAYA AND APARNA PANDEY	315



viii	Contents	
III	Language and brain	
31	Aphasia to imaging: the neurolinguistic endeavor as it reflects on South and Southeast Asian languages LORAINE K. OBLER AND AVANTHI NIRANJAN PAPLIKAR	329
32	Neural bases of lexical tones JACKSON T. GANDOUR AND ANANTHANARAYAN KRISHNAN	339
33	Hemispheric asymmetry in word recognition for a right-to-left script: the case of Urdu CHAITRA RAO, JYOTSNA VAID AND HSIN-CHIN CHEN	350
34	The Declarative Procedural model of language: a new framework for studying the non-inflecting languages of Southeast Asia? TOMASINA OH	362
35	Language-mixing in bilingual aphasia: an Indian perspective SAPNA BHAT AND SHYAMALA CHENGAPPA	372
36	The relationship between language and cognition HEATHER WINSKEL AND SUDAPORN LUKSANEEYANAWIN	381
		389 458



Figures

Figure 2.1	wiodel snowing now infant-directed speech is	
	modified according to the cultural background of the	
	mother, and developmental forces in the infant.	page 39
Figure 2.2	Mean F ₀ (top panel) and pitch range (bottom panel)	
	for English and Thai at birth, 3, 6, 9 and 12 months,	
	and in AD speech.	42
Figure 2.3	Mean F ₀ (top panel) and pitch range (bottom panel) in	
	speech to Thai and English boys and girls at birth,	
	3, 6, 9 and 12 months, and in AD speech.	43
Figure 3.1	A comparison of three core types of social interchange	
	in Chinese and American children.	47
Figure 6.1	Classification of Malay numeral classifiers (adapted	
	from Salehuddin & Winskel, 2008).	73
Figure 6.2	The different types of responses made by children in	
	the counting production task (Salehuddin &	
	Winskel, 2009, p. 304).	74
Figure 10.1	Production across different person/number/gender in	
	the corpus.	116
Figure 10.2	Default versus real agreement.	117
Figure 10.3	Overt NPs versus <i>pro</i> .	119
Figure 12.1	Verb phrase developmental patterns among young	
	Malay children.	142
Figure 12.2	Development of level of utterances according to stages	
	of LARSP.	143
Figure 13.1	The MCUS score sheet.	151
Figure 13.2	MCUS scores for 1 year 3 month to 1 year 5 months	
	old Mandarin-speaking children in the Free	
	Conversation task.	152
Figure 13.3	MCUS scores for 4 year 1 month to 4 year 11 months	
	old Mandarin-speaking children in the Free	
	Conversation task.	153

ix



List of figures

Sample of reading errors associated with akshara—	
syllable mismatch.	204
Children's success rate in syllable processing (Panel A)	
and phoneme processing (Panel B) on simple and	
complex syllables.	208
Phoneme deletion errors in CCVC non-words.	210
For the range from 50 to 500 Hz, the non-linear relation	
between Hertz and semitones. From Nolan (2003)	
with permission.	225
Electroglottography of a Mon speaker. Upper graph:	
Two glottal pulses from /klan/ "naughty" in Breathy	
voice. Lower graph: Two glottal pulses from / klan/	
"lick" in Clear (Modal) voice. From A.S. Abramson,	
G. Ramsay and L. Luangthongkum (unpublished data).	226
The five tones of Standard Thai for much of the	
twentieth century. Adapted from Abramson (1962).	229
Tone triangles plotted along F ₀ onset and offset	
dimensions in 3 months, 6 months and 9 months IDS	
and ADS for 3-6-9 cohort, and 6 months, 9 months	
and 12 months IDS and ADS for 6-9-12 cohort.	239
Tone trajectories over time of Thai children's tone	
	syllable mismatch. Children's success rate in syllable processing (Panel A) and phoneme processing (Panel B) on simple and complex syllables. Phoneme deletion errors in CCVC non-words. For the range from 50 to 500 Hz, the non-linear relation between Hertz and semitones. From Nolan (2003) with permission. Electroglottography of a Mon speaker. Upper graph: Two glottal pulses from /klan/ "naughty" in Breathy voice. Lower graph: Two glottal pulses from / klan/ "lick" in Clear (Modal) voice. From A.S. Abramson, G. Ramsay and L. Luangthongkum (unpublished data). The five tones of Standard Thai for much of the twentieth century. Adapted from Abramson (1962). Tone triangles plotted along F ₀ onset and offset dimensions in 3 months, 6 months and 9 months IDS and ADS for 3–6–9 cohort, and 6 months, 9 months and 12 months IDS and ADS for 6–9–12 cohort.



List of figures xi

44 consonant symbols, \mathfrak{q} and \mathfrak{n} are obsolete and have been replaced by \mathfrak{q} and \mathfrak{n} . The bottom panel shows 18 vowel symbols (for which 32 vowel forms can be constructed by combining the vowels with three consonants). Vowels and their components can be positioned before, after, below or above initial consonant(s) and these positions can also be combined. Note, here the consonant letter \mathfrak{q} is used as a place-holder to indicate the vowel position; the consonants used to compose vowels are \mathfrak{q} , \mathfrak{q} and \mathfrak{q} . The top right panel shows an example of how consonants and vowels can be written in various horizontal and vertical orthographic positions.

258

Figure 26.1 A schematic summary of the E-Z Reader model.

Starting at the bottom, the current fixation feeds information to the lexical processing and saccade programming module, which operate in parallel.

A saccade is initiated after a low-level assessment of a word's familiarity. This can be overridden if the shift in attention also results in a successful 'familiarity' check, thus accounting for the phenomenon of word skipping. Note, however, that saccades are triggered by lexical processing.

279

Figure 26.2 A schematic summary of the SWIFT model. In the SWIFT model lexical processing occurs within a four-word attentional gradient. Saccadic programmes are initiated autonomously, by a timing mechanism, so as to maintain a mean rate of eye movements. The inhibitory link allows word identification to extend the duration of the current fixation (via increasing the duration of the time interval between saccades) if the word being fixated is difficult to process.

281

Figure 26.3 The Glenmore model has a connectionist architecture and comprises three main components: (1) an interactive activation network that is responsible for identifying words; (2) a saliency map that selects saccade targets; and (3) the saccade generator. Activation of the input units is propagated forward to the letter and saliency units so as to identity and localize the individual letters in the 30-unit input array. Letter activation is then spread to the word units (which provide top–down modulation of the letter units), the saliency units and a fixate centre unit.



xii List	of figures	
	A saccade is initiated to the target location that corresponds to the most active saliency unit whenever the activation of the fixate centre unit reaches a certain threshold. The top panel gives an overview of the architecture, the bottom panel a sample configuration	
E' 20 1	for a specific fixation.	282
	Mean discrimination scores for Thai and English stimuli by six groups of listeners. The brackets enclose \pm 1 SE.	301
Figure 28.2	Mean discrimination scores for English stimuli by four groups of listeners. The brackets enclose \pm 1 SE.	302
Figure 28.3	Mean discrimination scores for Thai stimuli by four groups of listeners. The brackets enclose \pm 1 SE.	303
Figure 29.1	Proportion of foil intrusions across conditions in	310
Figure 29.2	Suárez and Goh (2007). Pattern of spread of activation in the cross-language	
Figure 29.3	conditions. Proportion of foil intrusions across conditions in	313
	Yeo (2007). Positron emission tomography (PET) images show	313
Figure 32.1	increased activity in the left anterior insular cortex when Chinese natives discriminate pitch patterns embedded in Mandarin words (top panel), but in the homologous area of the RH for those embedded in English words (bottom panel). In contrast, English speakers' activity is circumscribed to the RH regardless of lexical function. (Adapted from <i>Journal of Neuroscience</i> , <i>24</i> (41), 2004, 9157, with permission	
	from Society of Neuroscience.)	342
Figure 32.2	Activation in within-category deviant vs. across-category deviant contrasts elicited from a tonal continuum ranging from the Mandarin high rising to falling tone. Regions of activity are shown for within-category > across-category (panel A, STG; panel B, right STG) and across-category > within-category deviants (panel A, MTG; panel B, left MTG). STG, superior temporal gyrus; MTG, middle temporal gyrus. (Adapted from <i>PLoS One</i> , 6 (6), 2011.)	343
Figure 32.3	Peak amplitude and latency of MMN and P3a show that pitch contour and pitch height are important dimensions used in early processing of Cantonese tones. MMNs were larger in tonal pairs that differ greatly in initial pitch height (height–large, height–small).	



Lis	t of figures	xiii
	In contrast, pitch contour influenced the latency of P3a (contour–early, contour–late). FCZ, frontal–central electrode recording site. (Adapted from <i>Neuroscience Letters</i> , <i>487</i> (3), 2011, 270, with permission from	
	Elsevier Press.)	346
Figure 32.4	Discriminant analysis of pitch strength indicates that	
	moderate rising pitch is important for distinguishing	
	tone language from non-tone language speakers.	
	(Adapted from Journal of Neurolinguistics, 23(1), 2010,	
	89, with permission from Elsevier Press.)	347
Figure 32.5	Comparisons of spectral f_0 magnitudes reveal that pitch encoding is enhanced in musicians as compared to	
	Chinese or non-musicians in the rapidly changing portion	
	of Mandarin tone 2 (high rising) corresponding to the	
	note Bb of a discrete musical scale. (Adapted from	
	Journal of Cognitive Neuroscience, 23(2), 2011, 431,	
	with permission from MIT Press.)	348
Figure 33.1	An illustration of the same word written in Hindi	
•	(Devanagari) and Urdu (Nastalia) scripts	353



Tables

Table 2.1	Percentage correct of lexical tone in ID speech at		
	birth, 3, 6, 9, 12 months and in AD speech in the		
	utterance-initial and utterance-final position	page	37
Table 3.1	The development of communicative acts of Chinese		
	young children at the age of 14 to 32 months		46
Table 4.1	Referential forms and discourse contexts		57
Table 5.1	Preference of verb semantics in the use of -te i-(ru) by		
	children and caregivers		67
Table 5.2	Distribution of lexical aspect with -ko iss- by children		68
Table 5.3	Distribution of lexical aspect with -ko iss- by caregivers		68
Table 5.4	Use of <i>kamθlaŋθ</i> (progressive) and <i>lɛ:w3</i> (perfective)		
	markers by lexical aspect and age		69
Table 6.1	Malay shape-based numeral classifier acquisition		
	based on the mean number of correct production		
	responses across all children's age groups		
	(standard deviations are in parentheses)		
	(Salehuddin & Winskel, 2009a)		75
Table 6.2	Malay shape-based numeral classifier acquisition based		
	on the mean number of correct matching comprehension		
	responses across all age groups (Salehuddin &		
	Winskel, 2009b)		76
Table 7.1	The children in the longitudinal study		81
Table 7.2	The children in the cross-sectional study		82
Table 7.3	Proposed order of emergence of Vietnamese classifiers		84
Table 7.4	Errors		85
Table 8.1	Percent of correctly repeated responses		90
Table 8.2	Number of wh-questions in terms of wh-word and		
	question structure by two Singapore Malay children		
	and their mothers		91
Table 8.3	Proportion of in situ versus moved wh-questions across		
	wh-words		92

xiv



Lis	st of tables	XV
Table 8.4	Proportion of in situ versus moved wh-questions across	
	wh-words	94
Table 8.5	Means of embedded responses given by the children	97
Table 9.1	Noun classes in Marathi	101
Table 9.2	Results for testing the plural of real words	106
Table 9.3	Tokens for non-words	106
Table 9.4	Results for testing of plurals for non-words	108
	Match between predicate and subject case	117
	Imperative forms in Tamil	120
	Analysis of word errors in the L1 and L2	130
	Analysis of word errors in the L1, L2 and L3	130
	Pivot (P) and open class (O) structure in utterances	136
Table 12.2	Mean and standard deviation by age group for total	
	MPLAT raw scores	141
Table 13.1	Available local SLT assessment tools in Malay and	
	Mandarin Chinese	148
Table 15.1	Thai initial consonants (IPA symbols are in parentheses)	172
Table 15.2	Thai vowel expressions classified in terms of vowel	
	combination types	173
Table 18.1	A comparison of the characteristics of a traditional	
	alphabet and a syllabary	193
Table 19.1	Examples of children's responses on non-word reading,	
	syllable substitution and phoneme segmentation tasks	207
Table 21.1	List of Mon word pairs spoken four or five times each	
	by four male native speakers	232
Table 22.1	Chao tone letters assignment for Cantonese syllable	
	/fu/ (from Rose, 2000)	234
Table 22.2	Chao tone letters assignment for Thai syllable /kha/	234
	Chao tone letters assignment for Mandarin syllable	
	/ma/ (from Chao, 1948)	234
Table 27.1	Preferred Argument Structure constraints	286
	Non-proficient versus proficient speakers	290
	Number of transitive clauses with 0, 1, or 2 lexical	
	core arguments – low- and high-proficiency speakers	291
Table 27.4	Distribution of lexical core arguments across A, S,	
	and O roles for low- and high-proficiency informants	292
Table 27.5	Number and percentage of all arguments in A, S, and	
2710	O roles that are lexical	292
Table 27.6	Number of verbs with 0, 1, or 2 new arguments –	_,_
 710	low- and high-proficiency speakers	293
Table 27.7	Number of transitive verbs with two new arguments	293



xvi l	ist of tables	
Table 27.	8 Number and percentage of arguments in each role that	
	are new	294
Table 27.	9 Number and percentage of all new arguments that appear	
	in each grammatical role	294
Table 27.	10 Pronominal forms used by informants	295
Table 29.	1 Structure of the critical two-block trials in the short-term	
	cued-recall paradigm	306
Table 29.	2 Manipulations of past studies using the short-term	
	cued-recall paradigm	307
Table 29.	3 Manipulating phonological and visual similarity	
	across foils and target fillers	309
Table 29.	4 Manipulating cross-language phonological similarity	
	across targets and foils	312



Contributors

ARTHUR S. ABRAMSON, Haskins Laboratories and University of Connecticut

NORHAIDA AMAN, English Language and Literature Academic Group, National Institute of Education, Nanyang Technological University

VIRGINIE ATTINA, Marcs Institute, University of Western Sydney

SAPNA BHAT, Guest Faculty, University of Southern Denmark

BHUVANESHWARI B., Department of Studies in Psychology, University of Mysore

DENIS BURNHAM, Marcs Institute, University of Western Sydney

BRIAN BYRNE, School of Behavioural, Cognitive and Social Sciences, University of New England

HSIN-CHIN CHEN, Department of Psychology, National Chung Cheng University

SHYAMALA K. CHENGAPPA, Department of Speech Language Pathology, All India Institute of Speech and Hearing

CHRIS DAVIS, Marcs Institute, University of Western Sydney

JACKSON T. GANDOUR, Department of Speech Language Hearing Sciences, Purdue University

WINSTON D. GOH, Department of Psychology, National University of Singapore

THOM HUEBNER, Department of Linguistics and Language Development, San Jose State University

LIXIAN JIN, Division of Speech and Language Therapy, De Montfort University, Leicester

JING ZHOU, Faculty of Early Education, East China Normal University

R. MALATESHA JOSHI, College of Education and Human Development, Texas A&M University

xvii



xviii List of contributors

BENJAWAN KASISOPA, Marcs Institute, University of Western Sydney

JEESUN KIM, Marcs Institute, University of Western Sydney

CHRISTINE KITAMURA, School of Social Science and Psychology, University of Western Sydney

ANANTHANARAYAN KRISHNAN, Department of Speech Language Hearing Sciences, Purdue University

LAY WAH LEE, School of Educational Studies, Universiti Sains Malaysia

ELENA LIEVEN, Department of Developmental and Comparative Psychology, Max Planck Institute for Evolutionary Anthropology, and Max Planck Child Study Centre, School of Psychological Sciences, University of Manchester

SUDAPORN LUKSANEEYANAWIN, Center for Research in Speech and Language Processing and Department of Linguistics, Faculty of Arts, Chulalongkorn University

RAMESH MISHRA, Centre for Neural and Cognitive Sciences, University of Hyderabad

SONALI NAG, Centre for Reading and Language, Department of Psychology, University of York

VISHNU K. K. NAIR, ARC Centre of Excellence in Cognition and its Disorders, Department of Cognitive Science, Macquarie University

LORAINE K. OBLER, Speech-Language-Hearing Sciences, Graduate School and University Center, City University of New York

ТОМАSINA ОН, Department of English Language and Literature, National University of Singapore

RICHARD K. OLSON, Department of Psychology, University of Colorado

PRAKASH PADAKANNAYA, Department of Psychology, University of Mysore

APARNA PANDEY, Department of Psychology, University of Mysore

AVANTHI NIRANJAN PAPLIKAR, Speech-Language-Hearing Sciences, Graduate School and University Center, City University of New York

SHALMALEE PITALE, Department of Humanities and Social Sciences, Indian Institute of Technology (ITTI)

CHAITRA RAO, National Brain Research Center, Manasar, New Delhi

THEERAPORN RATITAMKUL, Department of Linguistics, Faculty of Arts, Chulalongkorn University



List of contributors xix

NAN XU RATTANASONE, Child Language Laboratory, Linguistics Department, Macquarie University

- SUNIL KUMAR RAVI, Department of Speech Language Pathology, All India Institute of Speech and Hearing
- ROGAYAH A. RAZAK, Speech Sciences Program, School of Rehabilitational Sciences, Faculty of Health Sciences, National University of Malaysia
- RONAN REILLY, Department of Computer Science, National University of Ireland
- SUSAN RICKARD LIOW, Division of Graduate Medical Studies, National University of Singapore
- KHAZRIYATI SALEHUDDIN, School of Language Studies and Linguistics, National University of Malaysia
- STEFAN SAMUELSSON, Department of Behavioral Science, Linköping University, Sweden
- VAIJAYANTHI M. SARMA, Department of Humanities and Social Sciences, Indian Institute of Technology (ITTI)
- YASUHIRO SHIRAI, Department of Linguistics, University of Pittsburgh
- SHRUTI SIRCAR, Department of Linguistics and Contemporary English, The English and Foreign Languages University, Hyderabad
- JOHN SONG, Division of Speech and Language Therapy, De Montfort University, Leicester
- SABINE STOLL, Psycholinguistics Research Unit, University of Zurich
- LIDIA SUÁREZ, Department of Psychology, James Cook University, Singapore
- JENNIE TRAN, Department of Linguistics, University of Hawaii
- JIE-LI TSAI, Department of Psychology, National Chengchi University
- KIMIKO TSUKADA, Department of International Studies, Macquarie University
- JYOTSNA VAID, Department of Psychology, Texas A&M University
- HEATHER WINSKEL, Department of Psychology, School of Health and Human Sciences, Southern Cross University
- JANET WRIGHT, Division of Speech and Language Therapy, De Montfort University, Leicester
- KELLY YEO, Department of Psychology, National University of Singapore