

## Department of Otorhinolaryngology, Head & Neck Surgery The Chinese University of Hong Kong

# The Cantonese Basic Speech Perception Test

The Cantonese Basic Speech Perception Test (CBSPT) is a validated and standardized assessment tool for measuring basic speech perception ability of the Cantonese-speaking population. The test is designed for children as young as three years old with various degrees of hearing loss. It could also be performed on children below three should they display an adequate level of attention and test compliance. Other than hearing-impaired children, the CBSPT is also applicable to adults who only have limited literacy and to the general population with problems in phonemic discrimination.

Taking years of detailed test design, data collection and stringent psychometric evaluations, the CBSPT is now ready for release for professional use. The test is designed to be used by speech therapists, audiologists, special educators and other professionals in investigating speech perception.

A brief introduction of CBSPT and the order form for the test are enclosed for your reference. Interested parties please complete the form and send it to <u>Division of Speech Therapy</u>, <u>Department of Otorhinolaryngology</u>, <u>Head and Neck Surgery</u>, <u>Room 303</u>, <u>Academic Building No.2</u>, <u>The Chinese University of Hong Kong</u>, <u>Shatin N.T.</u>, <u>Hong Kong</u> (<u>Attention: Ms Rina To</u>) by post. Enquires could be directed to Ms. Rina To on (852) 3943 9609 or <u>speechtherapy@ent.cuhk.edu.hk</u>.



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### Features of the CBSPT

- Each test kit contains a bilingual test manual (English and Chinese), two picture books, six CDs and five sets of scoring forms packed in a carton box.
- The test consists of three test domains and 15 test facets covering from sound detection to vowel and consonant perception.
- Test materials are compiled into booklets of pictures. All test words involved are familiar to young children as reported by teachers and parents in a survey.
- Two test forms are available the full form and the equivalent short forms. The full form provides indepth information on a child's speech perception performance. The short forms, which could be completed within 30 minutes, provide a quick screening result.
- Three randomization lists in each test form are provided.
- CDs are included for recorded mode presentation.
- The CBSPT was validated on 140 normal hearing and 83 hearing-impaired children. Percentile ranks, z-scores and standard scores are available.
- For individuals with hearing-impairment, reference scores in terms of means and the standard deviations under the aided and unaided conditions are provided.
- The CBSPT has undergone vigorous psychometric evaluations with satisfactory results. Reliability measures include the Cronbach's alphas and intra-class correlation (ICC).
- High content validity was evident by expert ratings of all items as 'good' to 'very good'. The establishment of construct-related validity is based on an integration of evidence from five approaches, namely (1) discriminant validity, (2) convergent/divergent validity, (3) correlation coefficients, (4) item response theory scaling (IRT) and (5) Confirmatory Factor Analysis (CFA).

### Clinical applications of the CBSPT

- 1. To identify children with hearing impairment:
  - Cut-off scores are provided to screen children with potential hearing problem. The sensitivity and specificity are above 90% and 86% respectively.
- 2. To assess the functional benefit of hearing devices:

  Comparing the aided and unaided scores indicates the extent of one's benefit from device use.
- 3. To assess candidacy for cochlear implantation:

  Cut-off scores are set in the CBSPT to indicate unsatisfactory aided performance of the hearing-impaired children. These children may be considered as potential candidates for cochlear implantation.
- 4.To set treatment objectives according to the functioning level of the clients.
- 5. To use CBSPT as an objective outcome indicator.



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### About the test

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#### About the author

To: Division of Speech Therapy.

Dr. Kathy Y. S. LEE is an Associate Professor in the Department of Otorhinolaryngology, Head and Neck Surgery at The Chinese University of Hong Kong. She is an experienced Speech-Language Pathologist who has been working extensively in designing the assessment and habilitation programs for cochlear implant children since 1995. Dr. Lee's research interests include child language development, Cantonese tone perception and production, test standardization and validation. Dr. Lee received her PhD in 2003. Her dissertation entitled 'The Construction and Validation of a Speech Perception Test for Cantonese-speaking Children' was granted the CUHK Young Scholars Dissertation Award.

From:

Department of Otorhinolaryngology, Head and Neck Surgery,	Address:		
Room 303, Academic Building No.2,			
The Chinese University of Hong Kong			
Shatin N.T., Hong Kong	Tel: Fax:		
Attn: Ms. Rina To	Email:		
Item CPCPT1:	List Price	Quantity	Sub-total
CBSPT kit	HK\$ 4,500 / US\$ 580 (each set)		
Additional scoring forms	HK\$ 300 / US\$ 38 (each set)		
(5 sets with 30 sheets each)	, , ,		
Postage	Each set of CBSPT kit		
By Local/Surface Mail			
a. Hong Kong	a. HK\$ 100		
b. Mainland China (Guangdong province)	b. US\$ 27		
c. Macau	c. HK\$ 174 / US\$ 22		
By Airmail			
a. Australia	a. US\$ 57		
b. Canada/USA	b. US\$ 68		
c. Japan / Mainland China (Other provinces)	c. US\$ 39		
d. Singapore/Malaysia/Taiwan	d. US\$ 31		
e. Switzerland	e. US\$ 60		
f. United Kingdom	f. US\$ 71		
TOTAL			
■ Please attach a bank draft in the amount of H	K\$/ US\$ paya	ble to	
'The Chinese University of Hong Kong'.			
(Personal cheques are acceptable for Hong Ko	ong residents only. Order is not	refundable.)	
■ Please debit this credit card:			
Type: #Visa / Master (#delete as appropriate)	Card Issuing Bank:		
Name:			
Card No.:			
Expiry Date:	Amount: HKD/USD		
Signature:	Date:		
■ For enquiries, please contact Ms. Rina To			

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