

**HOW HONG KONG BILINGUAL
CHILDREN WITH CHINESE
DYSLEXIA PERCEIVE ACADEMIC
LEARNING? AN INTERVIEW WITH
METAPHOR ANALYSIS**

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INTRODUCTION

- While extensive research focused on the academic achievement of children with dyslexia, relatively fewer studies have paid attention to the affective aspects of these children
- However, this is important because attitude (the positive or negative inclinations toward a concept) may affect learning motivation (Ainley, 2006)
- Understanding children's attitudes and concerns is crucial to developing effective strategies that enhance their learning interests

METAPHOR ELICITATION TECHNIQUE

- Questionnaires may not be suitable for children with dyslexia due to their difficulties in reading and writing (Jin et al., 2013)
- Interview combined with metaphor elicitation may be a more effective method (Burden & Burdett, 2007; Jin et al., 2013)

METAPHOR ELICITATION TECHNIQUE

“Writing is climbing a mountain.”

Target

Source

Entailments: e.g., both require great effort, both are difficult, etc.

METAPHORICAL INTERVIEWS WITH DYSLEXICS

	Burden and Burdett (2007)	Jin et al. (2013)
Context	British	Singaporean
Metaphor	Dyslexia	Dyslexia, reading, writing, learning English, learning a second language, expressing thoughts, learning Mathematics and Science
Category	Surmountable vs. insurmountable	Positive, neutral or negative

→ Metaphor elicitation is an effective way to explore the thoughts and feelings of children with dyslexia

HONG KONG: A BILINGUAL CONTEXT

- Previous findings from studies focusing on English may not be generalizable to Hong Kong, a bilingual city
- The Chinese orthography and the literacy learning experience of Chinese children are different from their English counterparts (Li & Rao, 2005; McBride, 2016)
- Children with Chinese dyslexia may also face difficulties in learning English (Ho & Fong, 2005) and Mathematics (Malmer, 2000)

→ RQ1: What are the perceptions of dyslexia and learning (Chinese reading, Chinese writing, having Chinese lessons, English reading, Mathematics learning) in Hong Kong children with Chinese dyslexia?

VALIDITY MEASURES

- Previous studies using metaphorical interview in young children did not include any validity measures
- Testing the validity is important because self-report information may be exaggerated or understated (Nelson & Harwood, 2011)
- Reading fluency and parent-rated children learning interests were used as measures for criterion validity and concurrent validity respectively in the current study

→ RQ2: Is the metaphor elicitation interview a valid method in young children?

PARTICIPANTS

- 30 children with Chinese dyslexia (mean age: 10.8; age range: 8–13; 10 females)
- Grade three to six
- Native language: Cantonese
- Formally diagnosed with dyslexia by either educational or clinical psychologists

PROCEDURE

Training session

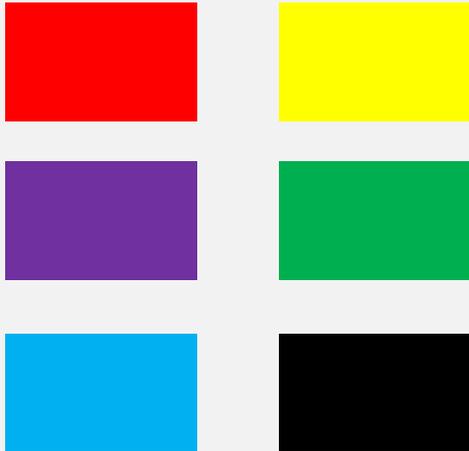


Interview session

If you could describe dyslexia (reading Chinese, reading English, writing Chinese, having Chinese lessons, learning maths) with a thing, what would it be?

PROMPTS

Color Prompt



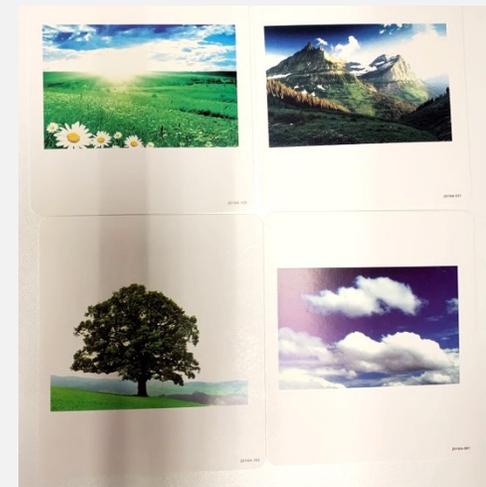
Animal Prompt



Fruit Prompt



Scenery Prompt



TASKS FOR VALIDITY MEASURES

Reading fluency (Siu et al., 2018)

- Each Chinese and English version has three parts, and each part contains 80 words
- Participants read aloud as many words as possible in one minute in each part

Parent-rated learning interest and confidence (1: strongly disagree; 5: strongly agree)

- “My child likes reading Chinese (English) books”
- “My child likes learning Chinese (English)”
- “My child thinks that learning Chinese (English) is easy”
- “My child has high confidence in learning Chinese (English)”

QUANTITATIVE ANALYSIS

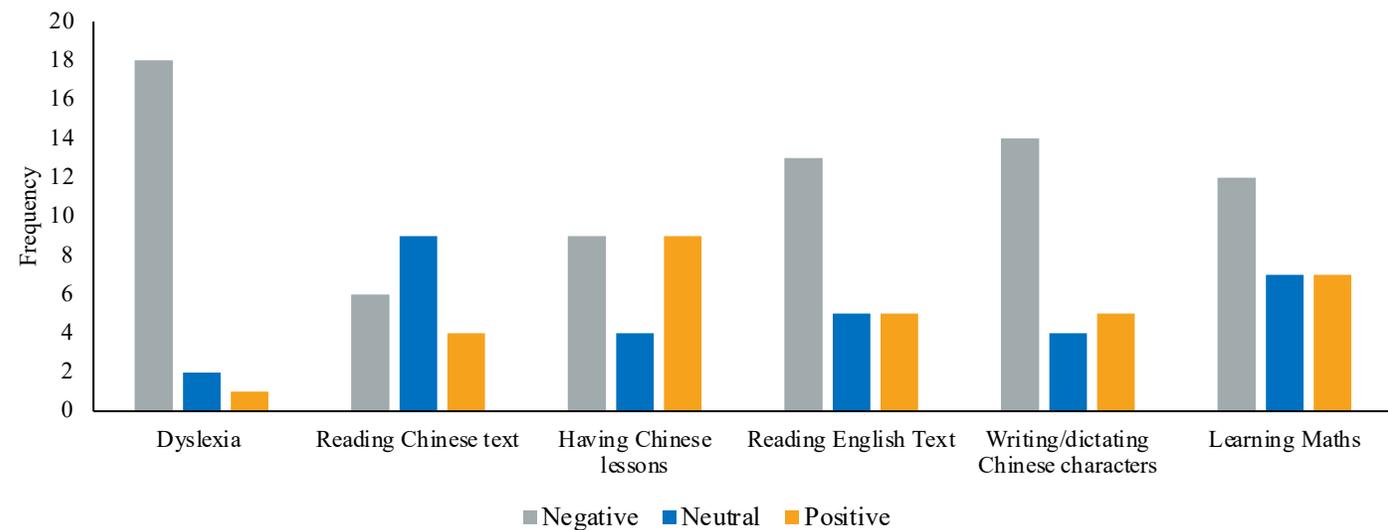
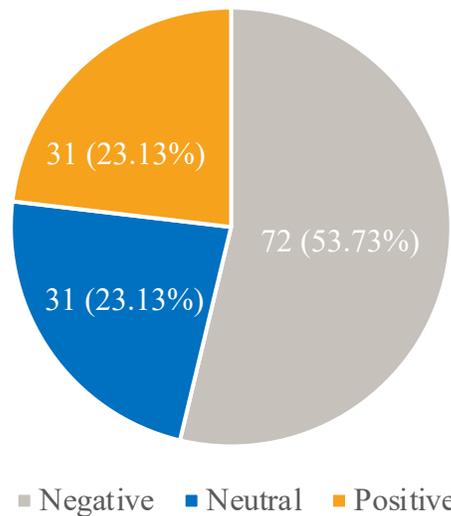
Two raters

- indicated the source and target domains with the entailments of each metaphor
- determined whether each metaphor was valid
- gave ratings on the attitude (0: negative; 1: neutral; 2: positive) of each metaphor

Discrepancies in ratings were reconciled by the third rater

QUANTITATIVE RESULTS: AN OVERVIEW

- 217 statements were generated, in which 134 (61.75%) of them are valid metaphors
- Rating of attitude: Strength of agreement between the first two raters (82.09%) and between the three raters (88.06%) are both good



QUANTITATIVE RESULTS: VALIDITY

	Attitude in reading Chinese text (0: negative; 1: neutral; 2: positive)	Attitude in reading English text (0: negative; 1: neutral; 2: positive)
Reading fluency in Chinese	$r(16) = +.459, p = .055$	
Reading fluency in English		$r(20) = +.667, p < .001$
Parent-rated Chinese learning interest and confidence (1: strongly disagree; 5: strongly agree)	$r(13) = +.25, p = .37$	
Parent-rated English learning interest and confidence (1: strongly disagree; 5: strongly agree)		$r(17) = +.758, p < .001$

DISCUSSION (QUANTITATIVE RESULTS)

Children's attitude to reading is associated with their reading performance in English, but not in Chinese

- Chinese reading performance is less varied than the English one

Children's attitude to reading is associated with the corresponding parent rating in English, but not in Chinese

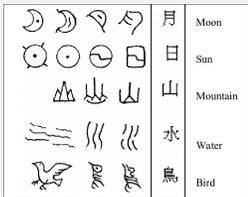
- Children may exhibit different attitudes in diverse contexts (Huo & Zhang, 2021)

QUALITATIVE ANALYSIS

Metaphor analysis (Cortazzi & Jin, 2020)

- All the targets, sources and entailments were listed
- Entailments with shared meanings were grouped
- Seven themes emerged: **Metalinguistic awareness, cognitive skills**, feelings about learning, Chinese lesson experiences, coping strategies for learning, **feelings about dyslexia** and social support

QUALITATIVE RESULTS: METALINGUISTIC AWARENESS



“Chinese words are like pictures drawn by people long time ago or pictographs because some Chinese characters originate from them. I feel familiar when I see those characters. Pictographs are rare and they do not appear often in the dictionary.”



“English words are like grains of worms and beans moving on books. The worms and beans are ugly, and they cannot be separated like Chinese. I don’t like them.”

“I like English dictation more because even though I don’t know the English words, I can still try to spell it. Chinese can only be learnt by reciting.”

→ Some Hong Kong children with dyslexia have a good metalinguistic awareness of Chinese and English, and this may influence their attitudes and learning methods

QUALITATIVE RESULTS: COGNITIVE SKILLS



“Chinese dictation is like looking for something in tons of rubbish but I cannot search it, just like I can’t remember many things, and I can’t look for the word.”



“Writing Chinese is like grapes, because we need to pay attention to each word to avoid making mistakes, just like we have to be careful when we tear the grapes out.”



“Solving maths questions is like a puzzle, since we need to understand and calculate with the correct method before getting the answer, particularly for word problems, which I think it is more difficult.”

→ Children with dyslexia understand the cognitive skills required in writing and Mathematics learning, and these skills are aligned with previous research findings

QUALITATIVE RESULTS: FEELINGS ABOUT DYSLEXIA



“Dyslexia is a bat devil, who seizes the writing ability of some people. It chooses some people as targets, but I don’t know the choosing criteria. People who are entwined by the devil will lose their writing ability forever. Nothing can help them, and they will die.”



“I know I have dyslexia and I understand that my reading and writing are worse than listening and speaking. I think dyslexia is surmountable by practicing more.”

→ Most children held a negative attitude to dyslexia, but most of them believed that dyslexia is surmountable

→ Parents and teachers should let children understand the definition of dyslexia early, and encourage positive attitudes, including high self-efficacy and internal locus of control, to face it

CONCLUSION

- Young children can generate creative and meaningful metaphors and link them to their learning experience and feelings
- Metaphor elicitation is a valid and effective method to facilitate the understanding of children's feelings on dyslexia and learning
- Children's descriptions provided great insight into their perceptions in learning and feelings to dyslexia and effective strategies in the Hong Kong context
- Teachers and parents should use the metaphor elicitation method to discuss abstract concepts, such as dyslexia, to understand children's views on it, with their needs for learning, so suitable assistance can be offered

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