Cantonese-English Bilingual Preschool Children's Exposure to Emotion-Words: Results from a Questionnaire and a Story-telling Task

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INTRODUCTION

Emotion-language skills are important for developing academic readiness skills early in the preschool years[5,13]. Emotion-language skills include the understanding and use of emotion-words such as happy, sad, angry, etc.[3,16]. Knowledge of emotion-words emerge from our sociocultural-specific experiences[18] and so bilingual children growing up learning two languages may have emotion-language skills that vary across languages—skills that are different from monolinguals[15].

In clinic and in research, using parent questionnaires or surveys is a reliable and feasible way of estimating parents' language input and predicting bilingual children's language skills[4,8,11,14]. Questionnaires estimating emotion-language and language input in the home have not been studied in bilingual children. The Cantonese-speaking population is increasing rapidly in the U.S.[19], yet they continue to be an underserved minority population in healthcare, clinical, and educational settings[13]. Examining bilingual children's home language experiences with emotions will contribute to our greater understanding of how bilinguals learn and use emotion-words.

Purpose
- To examine how parents of Cantonese-English bilingual preschool children talk to their children about emotion-words.
- Two measures were used: a parent questionnaire and a parent-child story-telling task.

Research Questions
1. What is the relationship between Cantonese-English bilingual children's general vocabulary skills and their emotion word knowledge?
2. How frequently do parents talk about emotion-words with their children?
3. What is the relationship between the emotion-words parents reported using with their child on the questionnaire and the emotion-words parents used in the story-telling task?

METHODS

Participants
- 16 parents and their typically-developing Cantonese-English bilingual preschool children (mean age = 4;1 years; SD = 6.34; Age Range = 3;4 –5;0 years) participated.
- Children were sequential bilinguals who spoke Cantonese at home from birth (L1) and learned English as a second language (L2) in preschool.
- Participants were recruited through the bilingual Chinese–English Kai Ming Head Start centers in San Francisco.
- Cantonese and English vocabulary skills were measured using picture identification and picture naming tasks from the *Kai Ming* Vocabulary Test.

Two measures were used:
1) Parent Questionnaire
- The questionnaire was adapted from three previous questionnaires [4,7,12].
- Emotion-words were selected based on previously normed data [3,16].
- Culturally, linguistically, developmentally appropriate Chinese emotion-words were identified with a native Cantonese-speaker.

2) Parent-Child Story-telling Task: The purpose was to A) examine emotion-words that parents use with their child in a story, and B) compare parents' performance with parents' responses on the questionnaire.

METHODS

1) Parent Questionnaire

1) Language input in the home[4]

2) Parent-child emotion-related conversations[12]

3) Parent vocabulary checklist[7]

2) Parent-Child Story-telling Task

"Alexander and the…Very Bad Day"

"There's a Witch Under the Stairs"

"Llama, Llama Misses Mama"

RESULTS

Summary Tables

Table 1. Mean (SD) of children's performance on picture naming and picture identification tasks in L1 and L2.

	Cantonese	English
Picture Naming	45.94 (18.08)	43.56 (24.78)
Picture ID	66.94 (10.00)	58.06 (15.02)

Table 2. Mean (SD) of parents' language measures on the story-telling task for each book.

	Alexander	Witch	Llama	F	d
TNW-Emotion	8.56 (6.80)	8.13 (7.49)	11.31 (10.78)	1.03	2
NDW-Emotion	2.13 (1.09)	1.88 (1.41)	2.38 (1.63)	0.76	2
TTR-Emotion	0.33 (0.24)	0.26 (0.17)	0.30 (0.26)	0.44	2
MLU-Single	5.99 (0.72)	6.65 (1.34)	6.09 (0.94)	4.91*	2
MLU-Compound	5.07 (0.49)	5.69 (1.09)	5.09 (0.62)	7.33**	2

1. What is the relationship between Cantonese-English bilingual children's general vocabulary skills and their emotion-word knowledge?

Table 3. Relationships between receptive/expressive vocabulary measures in L1 and L2 and emotion-word knowledge in L1.

		Cantonese		English	
		Picture Naming	Picture ID	Picture Naming	Picture ID
Cantonese	Emotion Word Recognition	-0.06	-0.23	-0.03	-0.01
	Picture Naming	--	--	--	--
	Picture ID	0.63**	--	--	--
English	Picture Naming	-0.21	-0.09	--	--
	Picture ID	-0.13	0.01	0.88**	--

2. How frequently do parents talk about emotion-words with their children?

Table 4. Relationships among how frequently parents talk about emotions with their child.

	Sad	Happy	Angry	Scared/Worried	Surprised	Guilty/Ashamed
Sad	--	--	--	--	--	--
Happy	0.60*	--	--	--	--	--
Angry	0.76**	0.77**	--	--	--	--
Scared/Worried	0.65**	0.56*	0.72**	--	--	--
Surprised	0.28	0.47	0.47	0.50*	--	--
Guilty/Ashamed	0.15	-0.12	0.06	0.41	0.46	--

*p < 0.05, ** p < 0.01

RESULTS (CONT.)

3. What is the relationship between the emotion-words parents reported on the questionnaire and the emotion-words parents used in the story-telling task?

Table 5. Relationships among parents' responses on the questionnaire and their story language measures.

		Story-Telling Task								
		Alex			Witch			Llama		
		MLU-Single	MLU-Compound	TTR-Emotion	MLU-Single	MLU-Compound	TTR-Emotion	MLU-Single	MLU-Compound	TTR-Emotion
Questionnaire	Emotion Words Parents Use	0.09	0.11	-0.24	0.38	0.36	-0.06	0.09	0.08	0.34
	Emotion Word Recognition	0.22	0.23	-0.23	0.22	0.26	-0.26	-0.02	0.00	0.07
Alex	MLU-Single	--	--	--	--	--	--	--	--	--
	MLU-Compound	--	--	--	--	--	--	--	--	--
	TTR-Emotion	--	--	--	--	--	--	--	--	--
Witch	MLU-Single	0.64**	0.68**	-0.13	--	--	--	--	--	--
	MLU-Compound	0.58*	0.63**	-0.15	--	--	--	--	--	--
	TTR-Emotion	-0.02	0.003	-0.02	--	--	--	--	--	--
Llama	MLU-Single	0.70**	0.67**	-0.16	0.70**	0.63**	0.18	--	--	--
	MLU-Compound	0.70**	0.69**	-0.15	0.74**	0.67**	0.21	--	--	--
	TTR-Emotion	0.40	0.40	0.05	0.77**	0.66**	0.29	--	--	--

Table 6. Average percent of emotion-words across all participants.

		Responses on the Parent Questionnaire	
		Reported	Did not Report
		Accurate	Did not Report
Performance on the Story-telling Task	Used	Box A. Accurate 5.24%	Box D. Underestimation 3.90%
	Did Not Use	Box C. Overestimation 17.07%	Box B. Accurate 73.78%

DISCUSSION

- Results suggest that emotion-words may not be captured in general vocabulary measures. Additionally, emotion-words are considered a distinct class of words in the mental lexicon[15], and they may require different experiences and opportunities compared to general vocabulary skills.
- Guilt and shame are part of the self-conscious emotions family and are considered a distinct category of emotions[10]. Unique features of guilt and shame are not captured in models of basic emotions[6,17].
- Emotion-words have limited imageability and reduced context availability[1,2]. They may require specific contexts—contexts that may not be captured in a broad measure such as MLU.
- There are emotion-words that parents often over- and underestimate using.

Clinical Implications include creating specific opportunities to teach and use emotions-words and building self-awareness to support learning of self-conscious emotions.

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