THE DEVELOPMENT OF NARRATIVE ABILITY IN ENGLISH-CHINESE BILINGUAL PRIMARY SCHOOL STUDENTS IN SINGAPORE

JING YAN*, CHEE KUEN CHIN* & SHEK KAM TSE**

** Singapore Centre for Chinese Language, Nanyang Technological University ** The University of Hong Kong*

Abstract

This study reports the comparative narrative ability of bilingual English- and Chinese-speaking primary school students in Singapore from a developmental perspective, an area attracting little research in the past. A total of 36 primary one, three and five students from mainstream schools narrated in Mandarin and in English whilst being shown accompanying pictures. The students' narrative ability was then measured in terms of their grasp of narrative structure, temporality and the evaluative expressions. Analyses showed that the students' English stories were more advanced than were their Chinese stories. Although similar developmental patterns were found in the children's English and Chinese, there were many more connectives and evaluative expressions in their English than in their Chinese stories. The evidence suggests that the English and Chinese competence of the bilingual learners in Singapore schools do not develop in close parallel. The implications for bilingual teaching in Singapore schools are discussed, especially the finding that the children's English ability was better than their Chinese language ability.

Keywords: comparative; bilingual competence; narrative ability; language development; primary students

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Corresponding author: Jing Yan, Lecturer, Singapore Centre for Chinese Language, Nanyang Technological University, 287 Ghim Moh Road, 279623, Singapore. email: jing.yan@sccl.sg

1. INTRODUCTION

In schools where primary school students are required to be bilingual, for instance in Singapore, the comparative linguistic proficiency of the children in the two languages rarely, if ever, develops at precisely the same rate. The linguistic competence of the learners is strongly influenced by the language spoken in the home; by the medium of instruction used in class; by the relative linguistic competence of the teachers; and by the quality of the syllabi covering and mapping development in the two languages. Before exploring how the above variables may influence bilingual competence, this study aims to describe bilingual competence of primary students in Singapore. This study examines students' narrative abilities in English and Chinese from a developmental perspective. Progress in the two languages is of concern for teachers and researchers because it provides feedback about whether bilingual education in the classroom is succeeding in achieving parity of performance in the two languages.

Researchers have provided different definitions of bilingualism. Bloomfield (1993) used language proficiency as the criteria for defining whether an individual is bilingual. He stated that a person whose proficiency in two languages equals a native speaker's level for both languages can be considered bilingual. Grosjean (2010) and Baker (2011) pointed out that being bilingual should be defined by the time of exposure to two languages and whether both languages are used in the context of daily life.

Studies have shown that achieving equivalent bilingual competence in two languages in any society is very unlikely for a number of reasons (Yip & Matthews, 2007). Schools are unable to engineer identical bilingual standards and identical usage of the two languages in the classroom, in society, and in the home. Singapore provides such an example, for the country has experienced a marked shift in social- and home-language usage since the country's independence. Before independence, many Chinese Singaporeans, who constituted 70% of the population, spoke southern Chinese language dialects, for instance Hokkian, Cantonese, and Teochow. Soon after independence, the Singapore government introduced a number of language policies. In the interest of fostering and promoting economic development on an international scale, the Singapore government promoted English competence in society in the 1980s by making English the medium of instruction in all lessons, except in the subjects of Chinese and civil education (Dixon, 2005). This act was known as the "English-knowing bilingual policy" (Leong, 2016; Wong, Chai, Chenand & Chin, 2013). At the same time, the Singapore government promoted Mandarin Chinese, which is obligatorily used in almost all Chinese communities in Mainland China. Aware of the complicated linguistic situation among social groups in parts of Singapore, the Singapore government streamlined matters by making Mandarin one of the official state languages and forbidding dialect-speaking TV and radio programs (Wu, 2010).

Due to the language policies, English and Mandarin Chinese are now the two languages most frequently used by Chinese Singaporeans, with increasing numbers of citizens choosing to use English as the language of communication (Department of Statistics, 2001; 2011). The numerous changes in social- and home-language usage have influenced the development of the two languages, so much so that the status of learners' bilingual competence is not always clear and consistent. The question of how to encourage the development of English and Mandarin competence among learners in schools is one that has attracted attention in educational circles.

The research reported in this paper compared the English and Chinese narrative abilities of Singaporean primary school students from a developmental perspective with the purpose of revealing a comprehensive picture of Singapore children's bilingual competence. There are several reasons for comparing narrative ability. First, it is a basic communication skill for exchanging and sharing personal experiences. Second, narrative ability reflects children's cognitive and language skills (Berman & Slobin, 1994; Eaton, Collis & Lewis, 1999; Hickmann & Hendriks, 1999; Labov & Waletzky, 1997). Third, the development of oral narrative ability has been shown to be closely related to literacy development (Dickinson, Golinkoff & Hirsh-Pasek, 2010; Speece, Roth, Cooper & De LaPaz, 1999; Storch & Whitehurst, 2002). Fourth, oral narrative ability is one of the learning objectives for both Chinese and English language education in Singapore (Curriculum Planning & Development Division, 2010; 2015).

L1 and L2 proficiency in Singapore

According to the interdependence hypothesis (Cummins, 1991), first language (L1) and second language (L2) proficiency should develop in parallel. The interdependence hypothesis states that the L1 and L2 proficiency are interdependent. The theoretical underpinning of this hypothesis is the common underlying proficiency (CUP) hypothesis (Cummins, 1980), which proposes two different components of language proficiency: basic interpersonal communication skills (BICS) and cognitive/academic language proficiency (CALP). The chief distinction here is that the CALP is closely related to cognitive ability, while BICS is acquired naturally regardless of IQ or academic achievement. CALP plays an important role in the development of reading and writing abilities. It is the shared CALP that accounts for reading and writing development in both L1 and L2. According to the CUP hypothesis, reading and writing abilities in two languages are to some extent interdependent. Thus, the CUP hypothesis predicts a relationship between L1 and L2 reading and writing abilities. Many empirical studies have operationalized language proficiency into concrete components and have charted the relationship between L1 and L2 development, providing some evidence for the interdependence hypothesis (Abu-Rabia, 2001; Geva & Ryan, 1993; Park, 2013; Verhoeven, 1994).

In addition, Cummins (1991) reported that a cross-lingual relationship was also observed between L1 and L2 BICS. Based on this, Genesee et al. (2006) further differentiated cognitive-demanding communication and cognitively-undemanding communication. The first type refers to speaking activities that require little cognitive loading, such as talking about a favourite movie. The latter type refers to speaking activities which require heavy cognitive loading, such as explaining a scientific experiment. The latter type-communication that requires heavy cognitive loading-is also called a literacy-related language skill (Genesee, Geva, Dressler & Kamil, 2006). Genesee et al. proposed that the interdependence hypothesis was also applicable to development of cognitively demanding communications between L1 and L2. Evidence was found of relationships between L1 and L2 oral development. Francis (1999) found the participants' oral narrative ability of Spanish and Na´huatl significantly correlated with each other. The narrative ability was coded for the following: discourse connectors that indicated relationships between events; inferences beyond the descriptive level that included causal relationships and characters' thoughts; and length of a story, which was measured by number of sentences. Similar findings were reported in Rodina's (2016) study that examined Norwegian-Russian children's narrative abilities. She found the participants' narrative abilities in Norwegian and Russian developed in parallel. Lasagabaster (2001) measured 252 participants' intelligence, metalinguistic awareness, linguistic creativity and English proficiency (reading, writing, listening, and speaking). The speaking task was narration based on a series of pictures, and proficiency was measured in a holistic approach that considered pronunciation, vocabulary, grammar, fluency, and content. The results revealed that metalinguistic awareness correlated with speaking. This provided some evidence that intelligence has an influencing role on the oral narrative skill. Based on the previous research, the interdependence hypothesis should be applied in predicting relationships between L1 and L2 oral narrative abilities as well.

However, the two systems do not always develop in parallel, though theoretically, aspects of L1 and L2 proficiency are often interdependent. Researchers who have investigated L2 proficiency claim that L2 proficiency is also influenced by the quantity of L2 input, especially for oral development (Cummins, 1991; Gardner, Masgoret & Tremblay, 1999).

In Singapore, the quantity of Chinese and English input is imbalanced. Based on national census data, among Singaporean citizens aged above 5 years (Department of Statistics, 2001; 2011), the number of people who prefer to use English for daily communication at home is increasing. The percentage of people who use English at home increased from 19.3% in 1990 to 32.6% in 2010. Less people are using dialects for communication. The percentage of people using Chinese dialects decreased from 50.3% in 1990 to 19.2% in 2010. The percentage of people who use Mandarin Chinese at home increased from 30.1% in 1990 to 47.7% in 2010. In addition, a survey on home language of primary one students revealed that till 2004, 50% of parents had chosen to use English at home (Ministry of Education, 2004).

Besides, English is the medium of instruction for most subjects at schools. According to the 2015 Primary Chinese Language Syllabus (Curriculum Planning & Development Division, 2015), the teaching time for Chinese and civil education (taught in Chinese) ranges from 4 to 7 hours per week, throughout the 6 years of primary education. This teaching time occupies only 15% to 27% of the total teaching hours, while the rest of the subjects are taught in English. Therefore, the amount of English input is greater than the amount of Chinese input for primary students. Due to the imbalance in the input of the two languages in primary education, it is expected that school children's Chinese proficiency and English proficiency are not likely to develop in close parallel.

Previous research into English-Mandarin bilingual competence in Singapore has revealed that learners possessed higher reading and writing proficiency in English than they did in Mandarin. Cheng (1992) compared secondary students' Chinese and English writing ability. The results showed that English writing proficiency was higher than Chinese writing proficiency, both in the expository essays and the narrative essays. Wong compared 43 secondary learners' Chinese and English writing strategies (Wong, 1993). Her results showed that the strategies used in the dominant language could more easily be transferred to the non-dominant language than the other way around. In her study, strategies for English writing were more easily transferred to Chinese writing, which indicated that English was the dominant language. Hsui (1996) conducted a survey of the reading habits of English, Chinese, Tamil, and Malaysian student teachers at the National Insitute of Education, Singapore, and found that participants tended to read in English more than in other languages. Some of the participants indicated that English was for reading and writing, whereas their mother tongue was for everyday oral communication. All of the above studies reported that the English proficiency levels were higher than the levels of Chinese proficiency in reading and writing.

Based on previous research, it can be hypothesized that Singaporeans' English reading and writing abilities are stronger than those in Chinese, but Chinese speaking proficiency may be higher than English speaking proficiency. However, this hypothesis calls for empirical testing, because the use of the two languages inside and outside the home has been changing. Besides, the research on bilingual competence of Singapore's primary students has been scant for the last decade, which has made it difficult to discern bilingual competence for teachers and other educators.

Development of narrative ability

Narrative ability is a basic communication skill. Successfully narrating a story requires complex language and cognitive skills to construct experience, organize information, and express it in extended discourse. Researchers have made progress in discovering common features that characterize the development of narration skills in children in various L1s—including English and Mandarin Chinese (Berman &

Slobin, 1994; Hickmann & Hendriks, 1999)—and have shown that children's narrative ability develops in terms of narrative structure, temporality, and evaluative expressions (Berman & Slobin, 1994; Chen & Yan, 2010, 2011; Eaton, Collis & Lewis, 1999; Hickmann & Hendriks, 1999; Labov and Waletzky, 1997).

Whereas narrative structures center on basic story components, some researchers have distinguished between global structure and local structure (Berman & Slobin, 1994). Global structure refers to the basic episodes of a story such as background, conflict, resolution, and conclusion. Local structure refers to events that constitute episodes (Berman & Slobin, 1994). The researchers examined the story structure skills of 5-year-old and 3-year-old children and found that 5-year-olds were able to narrate a story in terms of features linking basic episodes, while 3-year-olds could usually describe pictures separately without any reference to relationships between features and events in the pictures.

Temporality refers to relationships between events in a story, and reflects how learners conceptualize and organize information. There are three basic types of relations: temporal, adversative, and causal. A temporal relation is the basic relation indicating time sequence among events; an adversative relation indicates a contradictory relation between events; and a causal relation reflects a cause-effect relation among events. Among the three types, causal relations are better able to reveal the theme of a story (Berman & Slobin, 1994). The range of linguistic devices to express these relations includes conjunctions, adverbs, and tense. Chang and McCabe (2013) looked at the connectives used by different age groups of Taiwanese children learning English as a foreign language and found that older children expressed more causal relations in their stories than did younger children.

Evaluative expressions refer to non-event descriptions, including descriptions of language, mood, and mental activities of story characters. Whereas a description of events usually plots vertically, evaluative expressions seem to move plots horizontally (Bamberg & Damrad-Frye, 1991). Evaluative expression requires children to think and make inferences from other people's perspectives according to the story context. Bamberg and Damrad-Frye (1991) identified five categories of evaluative expressions: mood, language, inference, negation, and causal relations. They found 9-year-old children and adults produced more descriptions of mood than did 5-year-old children. Similar results were found by other researchers (Berman & Slobin, 1994; Chen & Yan, 2011). Among the five categories, description of mood was found to be more difficult than other types, because children needed to think from the perspective of characters in the story, inferring what the character was thinking and feeling, which calls for higher cognitive processing.

In sum, previous research has suggested that as age increases, children are increasingly able to tell a story with complete story structure, and information is thematically organized by deploying causal connectives. Older children were able to express evaluative expressions at appropriate times to show their understanding of stories. Story structure, temporality, and evaluative expressions are three indicators that usually reflect the development of narrative ability.

The interdependence hypothesis predicts parallel development of oral narrative abilities between two languages. Research has (Francis, 1999) examined narrative abilities in two languages considering discourse connectors, inferences, and length of stories, and found a correlation. These measures also reflect children's narrative ability development. Based on the interdependence hypothesis, English and Chinese narrative abilities should develop in parallel in Singapore. However, due to imbalanced language input, we hypothesize that Chinese and English narrative abilities do not develop in parallel in the Singapore context. Previous research has suggested that English reading and writing abilities were higher than those of Chinese, while Chinese oral proficiency was higher than English oral proficiency. Empirical testing is called for, because the home and social language environments have been changing over the last 20 years. To examine this issue, the current study sets out to answer the following research questions:

1) What is the developmental pattern in Singapore primary school students' Chinese narrative ability?
2) What is the developmental pattern in Singapore primary school students' English narrative ability?
3) What, if any, are the similarities and differences between Chinese and English developmental patterns?

2. METHOD

Because very few studies during the last decade have explored bilingual development, and little is known about Singapore children's bilingual competence, this study is exploratory in nature. With the purpose of generalizing certain patterns of Chinese language development and English language development, the current study employed a multiple-case study approach.

Participants

For this multiple-case study, we employed a purposive-sampling method. To be more specific, typical sampling was chosen to recruit participants that can reflect average students (Merriam & Tisdell, 2009). At the school level, we chose mainstream schools. Mainstream schools are usually located in the heartland of public housing, constituting the majority of the primary schools in Singapore (Silver, Goh & Alsagoff, 2011). Students from mainstream schools are more likely to come from a bilingual language background where English and Mandarin are used to varying degrees. At the class level, we chose classes studying the normal Chinese curriculum. There are two types of primary Chinese curriculum: normal Chinese and higher Chinese. The majority of classes take the normal Chinese curriculum. Within each participating school, the current study considered students from various classes of the normal Chinese curriculum.

At the student level, gender, language proficiency, and language background were taken into consideration. A total of 36 participants from Primary One (P1,7 years old), Primary Three (P3, 9 years old) and Primary Five (P5, 11 years old) of four mainstream primary schools participated in this study. These participants are students with Chinese ethnic backgrounds. There were 12 participants from each grade. Within each grade, participants were from various classes and had mixed levels of Chinese and English proficiency. There were 17 male participants and 19 female participants. The participants were from families with various language backgrounds, according to their school records: English-dominant language background, Chinese-dominant language background, and bilingual family background. The above criteria guaranteed that the participants in our sample reflected average students.

Test instruments

A questionnaire designed by the Singapore Centre for Chinese Language was administered to parents of the participants to explore the language backgrounds of the participants. This questionnaire has been validated in previous studies (Goh, 2012; Li & Tan, 2016).

The questionnaire assessed two dimensions of language background: language use and language contact. The first dimension, language use, is concerned with language for communication with family members. The second dimension, language contact, is concerned with language that involves reading materials, media, and language-related activities. Each dimension was assessed using 10 items. Participants were asked to rate each item on a 5-point Likert scale. A lower rating means more frequent use of English over Chinese, while a higher rating indicates more frequent use of Chinese over English. Participants' ratings to each of these items were subsequently converted to scores by the researcher by applying the following rules: a +1 score was given to an item that was rated as 1; a 0.5 score was given to an item rated as 2; a 0 score was given to an item rated as 3; a -0.5 score was given to an item rated as 4; and a -1 score was given to an item that was rated as 5. A higher score means English is more frequently used than Chinese. A lower score means Chinese is more frequently used than English. An average score of all the items within one dimension was calculated. The average score of the two dimensions was generated as the home language background index (HLB index), ranging from -1 to 1. The -1 index indicates a pure Chinese background while 1 indicates a pure English background. (Some example questions are shown in the Appendix).

A series of six wordless pictures was used to elicit children's narrative responses. The content of the first picture in the series showed two boys fighting. Then a woman came along and stopped them. After that, the boys became friends once again. The content of the pictures, based on a storybook (Olten, 2008), was very close to the students' everyday school life.

Research procedure

All the participants performed the task both in Chinese and in English. Using the same task for both English and Chinese can make oral performance of two languages comparable. However, there may be practice effects. To solve this problem, a counterbalanced design was utilized. At the beginning, the interviewer asked several social questions to put the children at ease. Another purpose of these questions was to warm up the participants for the oral performance task. Therefore, if the interview was conducted in English first, then English was used for the social questions and vice versa. The interviewer then explained the task and what was expected of the student. The students were given two minutes to prepare themselves for the task, after which they were asked to tell the story. The whole process was audio-recorded and transcribed for later analysis.

Transcription

The transcription followed the rules of the Child Language Data Exchange System (MacWhinney, 2000). The audio-recorded data were then transcribed by the researchers and a Singaporean research assistant.

Data analysis

Participants' stories were analyzed in terms of their narrative structure, temporality, and incidence of evaluative expressions. These measures reflect not only the relationship between L1 and L2, but also the development of narrative ability.

Narrative structure. The basic components of the story portrayed included background, conflict, resolution and ending, as well as descriptions of minor characters. Background elements referred to time and place of the story. Conflict elements referred to two boys quarrelling and fighting. Resolution elements referred to the woman stopping the two boys quarrelling. The ending elements referred to what happened after the boys stopped fighting. As the story used in this study also included a few inconsequential characters, descriptions of these were treated as part of the structure. The boys who were fighting and the woman who stopped the fight were the main characters, while other characters were classified as minor characters.

Table 1. Coding scheme for narrative structure

Narrative Structure	Excerpts
Background	On a sunny morning, the teacher took (2.25)* the students to do sports no the playground [translated from Chinese]
Conflict	One day Xiao Ming and Xiaowen (2.7) they both liked playing football, but they wanted to know who was better (1.7), Xiaowen from the beginning said that I played better than you, you (4.3) don't know how to play football. [translated from Chinese]
Resolution	She quickly put [//] (1.3) separate them and (2.6) ask them to (1) explain every [/] <everything to her> [/] explain everything to her.
End	They became good friends.
Minor Characters	One girl very scared.

Note. *Pausing time.

Temporality. Temporality was measured in terms of the use of connectives which indicated interrelationships between events. Besides connectives, there were other linguistic elements used to indicate event relations. Some linguistic devices are not common to English and Chinese, therefore the researchers used their judgment to analyze connectives when investigating temporality. There were three basic relations: temporal, adversative, and causal. Temporal connectives indicate time relations among events, such as *when*, *then*, *after that*, and *at first* in English, *ranhou* 'then', *houlai*' after that', and *gangkaishi* 'at the beginning' in Chinese. Adversative connectives indicate adversative relations between events, and that what happens later is in conflict with what happened previously. The adversative connectives included *but*, *although*, and *though* in English, *suiran* 'but', *danshi* 'although', and *keshi* 'but' in Chinese. Causal connectives indicate causal relations among events, such as *because*, *so*, *if* in English, *yinwei* 'because' and *suoyi* 'so' in Chinese.

Table 2. Coding scheme for connectives

Connectives	Excerpts
Temporal	When I saw them I was (1.1)* extremely afraid.
Adversative	The teacher scold them but they still want to fight.
Causal	I [/] I laughed at them, because they er (1.8) didn't chose to fight at a good time, chose to fight at er [/] school. [translated from Chinese]

Note. *Pausing time.

Evaluative Expression. This study developed a framework for analysing evaluative expressions based on Bamberg and Damrad-Frye's study (1991). The categories of evaluative expressions included motivation, language, mental activities, and mood. The motivation category refers to description of the story characters' intentions. The linguistic features included "I try to, I want to." Both phrases indicate expressions of intentions. The language category referred to descriptions of direct and indirect characters'speech. Mental activities referred to descriptions of what the characters thought or understood. Linguistic features included "I realize that" and "I know that." The mood category referred to descriptions of the mood of the characters in the story, such as "angry" and "happy."

Table 3. Coding scheme for evaluative expressions

Types	Excerpts
Motivation	Nobody want to make friends.
Language	He say (2.1)* good (2) carry on fighting.
Mental Activities	I thought it looks very interesting.
Mood	They seemed very angry. [translated from Chinese]

Note. *Pausing time.

Reliability of the coding

In order to check for reliability of the coding, we randomly selected 20% of the narrative transcripts and arranged for a second coder to conduct an independent analysis. We then used Nvivo software to calculate the Cohen's Kappa index, ranging from 0-1, with 1 meaning 100% agreement. The Cohen's Kappa index of the two coders' coding output was 0.9, indicating a 90% agreement.

3. FINDINGS

Results of language background information

The results of the background questionnaire are shown in Table 4. The range of the HLB index is from -0.63 to 0.57 (M = -0.04). This means that all the participants are exposed to two languages at home, though to different degrees. An index of -1 indicates a pure Chinese background while 1 indicates a pure English background. A participant whose HLB index is negative is labelled as Chinese background and vice versa. Though participants whose mean value is close to 0 can be treated as bilinguals, we simply categorized all the participants into either Chinese language background or English language background. We did this because the purpose of describing home language background is to show that the participants are from both

Chinese language backgrounds and English language backgrounds, which provides the foundations for making generalizations within each age group; the purpose was not to compare among different language backgrounds.

Table 5 shows that there are equal numbers of participants from English backgrounds and Chinese backgrounds at each grade.

Table 4. Results of language background questionnaire

	N	Min	Max	Mean (SD)
CDI	36	-0.63	0.57	-.04 (0.33)

Table 5.Number of participants in English and Chinese backgrounds in three grades

	English	Chinese
P1	6	6
P3	6	6
P5	6	6

The learners' performance on narrative structure, temporality, and evaluative expressions categories were first compared across the two languages. Then the results were compared across different age groups within each language, after which the developmental patterns of the various age groups were compared across the English and Mandarin output.

Narrative structure

All of the participants were able to narrate the most important components (conflict and resolution) of a story in English. Three P1 participants and one P5 participant were unable to narrate a story in Chinese, missing the conflict and resolution. These participants either told the interviewer that they did not know how to tell the story in Chinese, or they code-switched to English. An example of the above behavior is shown in Excerpt 2. Almost one third of the story was in English (code-switching of English was highlighted in italics), with important information expressed in English, for example "angry", "fighting" and "friend to each other." From Table 6, one can see that more participants narrated main elements in English than in Chinese.

Table 6. Number of participants who described the narrative structure in Mandarin and in English

	Mandarin (N=36)	English (N=36)
Background	8	11
Conflict	32	36
Resolution	31	35
Ending	31	35
Minor Characters	28	33

Excerpt 1

(0.9) they were *angry*, *then* they (1.9) were *fighting*, *then* (1.1) that teacher (0.6) scolded them. (1.3) *then* they still [/] (1.2) they still (1.0) fighting. (1.0) *then* nobody wants to (0.8) *friend* them. (1.2) *then* they *friend each other* lo [translated from Chinese]

The comparative performance of the different age groups is shown in Table 7. In Chinese, P3 and P5 produced more complete stories with more descriptions of minor characters than P1 participants. There was little difference between P3 and P5 participants. Improvements were obvious from P1 to P3, and moved into a flat phase from P3 to P5. In English, in contrast, there was little difference in terms of narrative structure across the different age groups. Nearly all the participants at each grade were able to narrate the main components and to refer to the minor characters.

Table 7. Number of participants who described the narrative structure in Mandarin and in English

	Mandarin			English		
Narrative Structure	P1	P3	P5	P1	P3	P5
Background	2	4	2	1	6	4
Conflict	9	12	11	11	12	12
Resolution	8	12	11	12	12	11
Ending	8	12	11	12	12	11
Minor characters	6	12	10	10	11	12

Comparing the Chinese and English performance, the participants' stories became complete from P3 in Chinese. In English, there was little difference among the three grades because even the P1 participants produced fairly complete stories.

Temporality

A comparison of temporality in the case of Chinese and English is shown in Table 8. Participants produced more connectives in English than in Chinese for every type. Thus, the English stories could be interpreted as being more thematic than the Chinese stories. Examples of one participant's English and Chinese stories are shown below.

Table 8. Connectives in Mandarin and in English

	Mandarin (N=36)		English (N=36)	
Connectives	Frequency	Participants	Frequency	Participants
Temporal	106	26	185	36
Adversative	34	18	37	15
Causal	31	10	57	21
Total	171	30	269	36

Excerpt 2

Chinese story: One day, there were two (3.1) boys are arguing (3.5) , there was a boy (2.1) <saw> [/](13.3) saw them (12.7) fighting (23.4), *na* one boy went to tell the teacher saying (2.5) they were arguing (10.4) <that that> [//] (3.3) that teacher (1.6) go to (2.8) punish them (1.5) *na* that little boy was smiling (9.8) that they did not want to (4.5) quarrel (32.1) that [/] (6) *na* they already (2.1) cried {raising tone} (9.3) *na* they want to be friends [translated from Chinese]

English story: <one :> [/] (2.1) one day <there's one> [//] there's two little boy (1.4) fighting (2.0), and (2.5) one boy saw them fighting so[/] (1.7) *so* one boy went to tell the teacher that both of them are fighting (2.7), *so* teacher ask them (1.2) to calm down (1.1) and (1.3) teacher scold them (1.4) and *then* the (1.4) Lee [//] and teacher separate Lee nicely (2.2), *after that* (1.6) no one (1.2) wants to play with them and (1.2) they want to be friends again.

In the above examples, the participant was unable to use proper Chinese connectives to indicate temporal relations. Instead, she used "na" functioning as the connective. No other types of connective were used. In the same participant's English story, she was able to use proper English connectives, such as "then," and "after that." In addition, she utilized a causal connective "so," although the clauses connected by "so" may not have had a very strong causal relationship.

Comparing the results of Chinese across different grades, the P5 participants produced more temporal and causal connectives than did the P3 participants, while the P3 participants produced more temporal and adversative connectives than did the P1 participants. The frequency of temporal and causal connectives increased as the age of the participants increased. The P3 participants produced the most adversative connectives among the three grades. The results indicate that the P3 and P5 participants were able to tell stories in a more thematic manner than were the P1 participants, and that the P3 and P5 participants organized the information in different ways.

Table 9. A comparison of three grades in Mandarin and English connectives

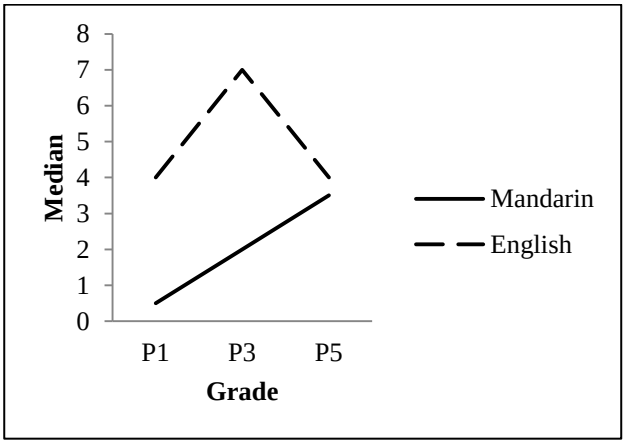
		P1			P3			P5		
		T	A	C	T	A	C	T	A	C
Mandarin (N=36)	M	0.5	0	0	2	1	0	3.5	0.5	0.5
	N	6	2	2	9	10	2	11	6	6
English (N=36)	M	4	0	0	7	1	1.5	4	0	1
	N	12	3	5	12	7	8	12	5	8

Note. M = median; N = number of participants; T = temporal connectives; A = adversative connectives; C = causal connectives.

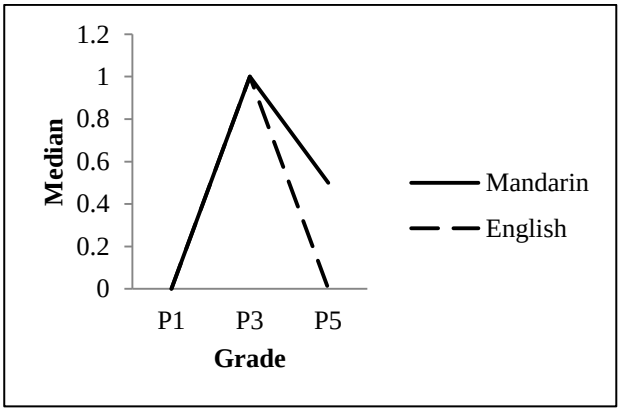
When using English, the P3 participants produced more temporal, causal, and adversative connectives than did the P5 participants. The P1 students produced the least of each type of connective. The results indicate that the P3 children were more able than children in the other two grades to tell a story in a thematic manner. The reason could be that the P3 participants produced longer stories than the P5 participants did, therefore this increased their use of connectives.

Comparing performance in the two languages, the older participants were able to tell a story in a more thematic manner than were the younger participants in Chinese. In English, the P3 participants produced more thematic stories than did the other two grades. This is consistent with other studies investigating children's L1 development (e.g. Chang, 2004). The frequency of connectives increased at first, then declined. However, participants at each grade produced more temporal connectives in English than in Chinese, providing evidence that the students' English was more advanced than that of Chinese in terms of temporality. A similarity was that the P3 participants produced the most adversative connectives in both Chinese and English. Turning to the specific information expressed, the P3 participants usually described the boys' behavior after the teacher stopped them as "they were still arguing with each" or "they were fighting non-stop." This behavior was described as being adversative to the teacher's behavior. P5 participants either missed this information or did not interpret the relation as adversative.

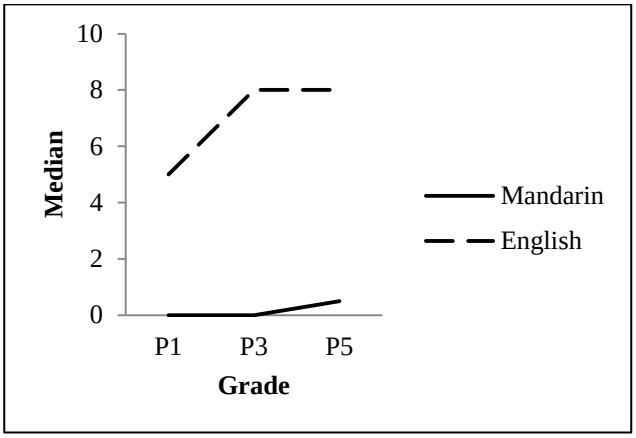
Figure 1. Connectives in Mandarin and in English across three grades



Temporal



Adversative



Causal

Evaluative expressions

A comparison of the evaluative expressions in Chinese and English is shown in Table 10. In general, the largest category of evaluative expressions produced by participants in both languages was language. The second largest category was mood, while the smallest was motivation. Participants produced more evaluative expressions in English than in Chinese in each category.

Table 10.Evaluative expressions in Mandarin and in English

	Mandarin (N=36)			English (N=36)		
Type	Freq	%	Participants	Freq	%	Participants
Motivation	16	6.7	12	33	11	18
Language	96	40.17	32	114	38	31
Mental Activities	55	23.01	23	64	21.33	24
Mood	69	28.87	25	89	29.67	29
Total	239	100	35	300	100	36

As for development in Chinese, the largest category produced by the P1 participants was language, while the second largest category was mood. For the P3 participants, again language was the largest category, but the second largest category

was mental activities. For the P5 participants, the largest category was mood, while the second largest category was mental activities. The percentage of mental activities and motivation categories increased as the age of participants increased, while this was the other way around for the language category. Only the P3 and P5 participants expressed motivation. The percentage of the mood category decreased at first, then increased.

Table 11. A comparison of three grades in Mandarin evaluative expressions

	P1			P3			P5		
Type	Freq	%	Participants	Freq	%	Participants	Freq	%	Participants
Motivation	0	0	0	8	7.69	6	8	8.17	6
Language	16	47.06	10	52	50	10	28	28.57	12
Mental Activities	4	11.76	2	25	24.04	11	28	28.57	11
Mood	14	41.17	5	19	18.27	9	34	34.69	10
Total	34	100	11	104	100	12	98	100	12

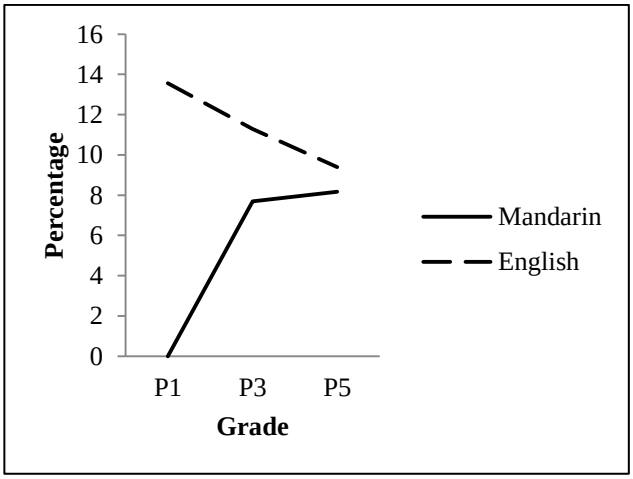
As for developments in English, the largest category produced by the P1 group was mood, while the second largest category was language. The largest category produced by the P3 sample was language, while the second largest category was mood. The P5 participants produced language as the largest category, and mental activities as the second largest category. In general, the percentage of mental activities increased as the age increased. The percentage of motivation decreased as the age increased. All three grades of children were able to describe motivation.

Table 12. A comparison of three grades in English evaluative expressions

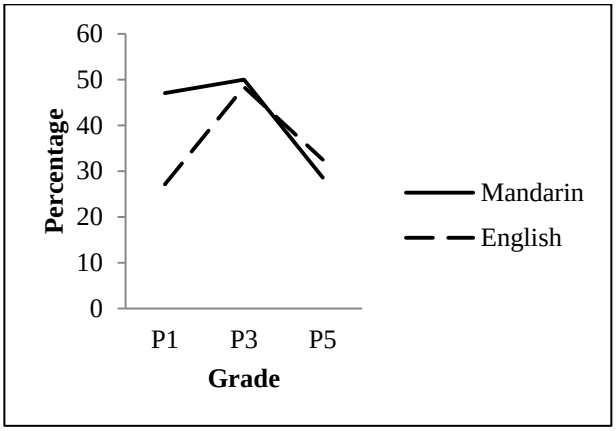
	P1			P3			P5		
Type	Freq	%	Participants	Freq	%	Participants	Freq	%	Participants
Motivation	8	13.56	6	14	11.29	6	11	9.4	6
Language	16	27.12	9	60	48.39	11	38	32.48	11
Mental Activities	8	13.56	6	19	15.32	8	37	31.62	10
Mood	27	45.76	7	31	25	10	31	26.50	12
Total	59	100	12	124	100	12	117	100	12

Comparing the two languages, the percentage of mental activities expressed increased as the age increased. A noticeable difference was that the developmental pattern was reversed in the case of motivation.

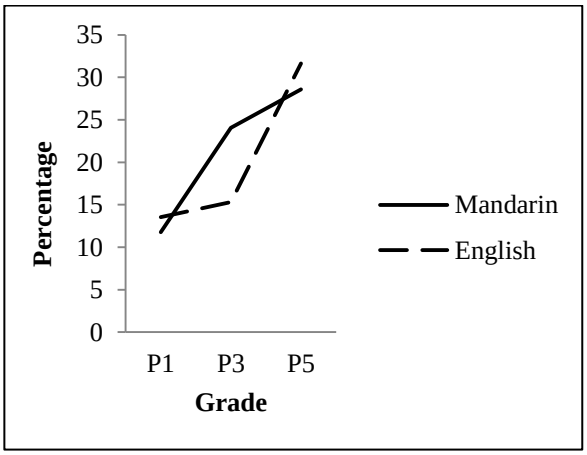
Figure 2. Expressions in Mandarin and in English across three grades



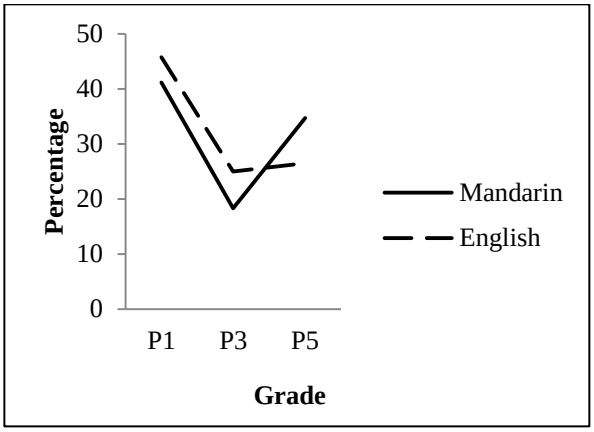
Motivation



Language



Mental activities



Mood

In summary, in terms of narrative structure, the results showed that some participants were unable to narrate the story in Chinese while all of the participants were able to narrate the story in English. In Chinese, the participants' stories became complete from P3. In English, there was little difference among the three grades. In terms of temporality, the participants produced more connectives in English than in Chinese for every type. As for the development in Chinese, the older participants were better at telling the story in a thematic manner than were the younger participants. In the case of English development, the P3 students were able to produce more thematic stories than the P5 participants. In terms of evaluative expressions, the participants produced more evaluative expressions in English than in Chinese in each category. In Chinese, the percentage of participants describing motivation increased as the age of the participants increased, while the percentage in the language category decreased. In English, the percentage of participants describing motivation decreased as the age of the participants increased. In both languages, the description of mental activities increased as the age of the participants increased.

4. DISCUSSION

By comparing the Chinese and English narrative abilities of the students from an age-development perspective, this study provides interesting information about the children's relative bilingual competence. Due to an imbalance in the language input and the English-knowing bilingual policy, the results indicate that the children's English narrative ability was more advanced than was their Chinese development in terms of narrative structure, temporality, and use of evaluative expressions. The results are consistent with other studies (Cheng, 1992; Wong, 1993) regarding the bilingual competence of school-age students in Singapore. However, the finding is not consistent with Hsui's (1996) study in that the mother tongue was

used for daily communication. This study found that the participants' English was also advantaged in oral proficiency. This may reveal the influences of imbalanced input in two languages on oral proficiency development in Singapore.

As predicted by the interdependence hypothesis, similar patterns of development were found in terms of Chinese and English development. As age increased, the participants' narrative ability seemed to develop in terms of temporality and description of mental activities in both languages. The older participants were better able to narrate a story with information more thematically organized than were the younger participants. The older children were able to switch the perspectives of narrating the story, describing the mental activities. To express evaluative expressions requires the cognitive ability to understand other people's feelings. Younger children tend to be more self-centered (Bereiter & Scardamalia, 1987) and, as they grow older, they begin to understand how other people think. This cognitive ability promotes the development of describing evaluative expressions in both languages among bilinguals.

However, the two languages have differing developmental patterns such as in narrative structure and description of mood. An obvious explanation for the difference is that the participants' English proficiency is more advanced than is their Chinese. The P1 participants were able to narrate a complete story and describe the mood of the characters, thus there was no clear developmental pattern in English. In Chinese, however, because the P1 participants were unable to perform well, we have evidence of a clear developmental trend. From their English stories, it is possible to infer that the participants possessed the cognitive ability to narrate a complete story with all the necessary information, but that they were unable to perform equally well in Chinese. This would seem to indicate that the children had insufficient Chinese language knowledge to transfer their L1 knowledge to their L2.
With regard to development of narrative ability, some of the findings are consistent with those in the academic literature that narrative ability develops in terms of narrative structure, temporality, and evaluative expressions (Berman & Slobin, 1994; Chen & Yan 2010, 2011; Eaton, Colli & Lewis, 1999; Hickmann & Hendriks, 1999; Labov & Waletzky, 1997). The older participants in the current study were able to narrate complete stories with increasing use of adversative and causal connectives, and increasing use of evaluative expressions. Previous research has explained that as children grow older, they become able to understand causal relationships and think from the perspectives of other people, which makes their stories complete and thematic (Berman & Slobin, 1994).

In addition, the present study found an increase in descriptions of mental activities as age increases, while previous studies have only found the increase in descriptions of mood (Bamberg & Damrad-Frye, 1991; Chen & Yan, 2010). Descriptions in this category, including what the characters were thinking, were usually started with phrases such as "I think" or "I understand". The reason that the previous studies did not report any clear increase in this category may be due to the use of different elicited materials. A widely used material in the literature is *Frog,*

where are you? (Mayer, 1969), which described a little boy with his dog looking for a missing frog. The plot is more likely to elicit descriptions of actions rather than mental activities. In the present study, the plot was about how two boys who were fighting became friends. The change of mental activities is critical to plot development, and therefore triggers more descriptions of mental activities than is the case with the frog story.

5. CONCLUSION

This study compared Singaporean primary students' narrative abilities in Chinese and English, allowing the researchers to gain insights into the children's bilingual competence. The results indicate that the English narrative ability of the children was more advanced than their Chinese narrative ability. The unambiguous gap between Chinese and English narrative ability has been discussed above, providing interesting reference information for Chinese teachers charged with developing students' Chinese language ability. The present study provides evidence to suggest that English may be the dominant language for oral communication in schools in Singapore nowadays.

The bilingual policy has been the cornerstone of the Singapore education system. Educationists need to reflect on the finding that the bilingual policy applied in Singapore's schools seems to favor English usage and learning. If the findings are valid, then Singaporeans may be becoming more and more proficient in English than in Chinese. This poses a serious challenge for Chinese-language teachers, as well as for children's mastery of the Chinese language. The evidence provides reference information for policy-makers and for those facing the task of promoting balance in the bilingual competence of Singapore citizens.

This study has several limitations. First, its scale is small, and the results are based on descriptive data. Second, some factors that may influence students' oral proficiency were not taken into consideration, such as socio-economic status. This area calls for attention. Further empirical studies are encouraged to validate the findings of this study so as to provide a comprehensive picture of learners' bilingual competence in the context of dynamic social- and home-language backgrounds in Singapore.

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APPENDIX

Example questions of home language questionnaire

How does your child speak English and/or Mandarin with the following persons? How often does your child use it/them?

Use of English & Chinese (Mandarin)	English only	more English, less Chinese	equal amounts of English & Chinese	more Chinese, less English	Chinese only
a) With yourself					
b) With your spouse					
c) With child's siblings (Pls specify no. of siblings: _____)					
d) With child's peers (e.g. cousins, neighbours, classmates and other friends)					