Evaluation in Mandarin Chinese children's personal narratives

Chien-ju Chang and Allyssa McCabe

Evaluation is a critical component of personal narrative, the component that conveys to listeners how narrators feel about experiences that happened to them. Evaluation conveys the impact of what actually did happen in the context of what narrators expected would happen but did not or what they wished had happened instead. This chapter presents a study of how Taiwanese children develop the ability to evaluate their narratives and a comparison of Taiwanese to English-speaking children in their use of evaluative devices. Prior research (Minami, 1994; Minami & McCabe, 1995) suggests that English-speaking mothers provide more evaluation comments in telling past experiences with their children compared to Japanese-speaking mothers. Differences in use of evaluative devices were hypothesized to be evident across Chinese- and English-speaking children in their personally experienced stories.

Mandarin Chinese-speaking children from Taiwan (N = 171) and 96 English-speaking children from the United States participated in this study. Chinese-speaking children were aged 3 to 9 years and comprised seven groups (at each of those ages). English-speaking, American children were aged 4 to 9 years and comprised six groups. Following Peterson and McCabe's conversational map (1983), the experimenter elicited a number of personal narratives from each child. Specific prompted topics such as visit to a doctor were given in conversation. The purpose of this task was to assess children's narrative skill without adult's support; neutral follow-up responses such as "uh-huh," "tell me more" were used. Evaluation was coded in Chinese using an adaptation of the system Peterson & McCabe (1983) developed to code evaluation in English-speaking American children aged four through nine years. The percentage of each type of evaluative device per narrative comment was determined and Taiwanese children were compared in this way to American children from the Peterson & McCabe corpus. Results show that Taiwanese children included many fewer evaluation comments (13–25% of the children's clauses were partially or fully evaluative) in telling their personally experienced stories compared to American children (50% at each age). Results are interpreted as reflecting deep and pervasive cultural differences: Chinese children are

socialized to have an interdependent self (with less emphasis on what an individual felt in the past), while American children are socialized to have an independent self (with early and frequent emphasis on what an individual felt in the past).

Keywords: narrative, Chinese, American, evaluation, children

Introduction

Evaluation in personal narratives

Development of extended discourse is the most notable aspect of language acquisition during the preschool and early school years (Karmiloff-Smith, 1986). Among forms of extended discourse, a very common and also universal one is the narrative (Bruner, 1986; Karmiloff-Smith, 1986). Children's narrative competence represents not only an aspect of language skill, but also reflects how children make sense of the world and is closely related to literacy achievement (Bruner, 1990; Nelson, 1986; Snow & Dickinson, 1991; Snow, Porche, Tabors, & Ross-Harris, 2007).

To tell good, interesting stories, children need the ability to provide the listeners not only information about who and what is involved in the experience and where and when the event occurs but also the significance of the narrated event to them. These are the two important functions of narratives pointed out by Labov, i.e., reference and evaluation (Labov, 1972). Reference conveys information about events and their setting; through use of evaluation strategies, children reveal their attitude and feelings towards the reported events. Various types of evaluation devices were documented in prior research, ranging from linguistic devices such as intensifiers or delimiters (e.g., very or a little), compulsion words (e.g., have to), similes or metaphors (e.g., he ran away so fast as wind), etc., to paralinguistic or performative devices such as elongation (e.g., looong time ago), phonological stresses, prosodic features, and gestures, etc. (Peterson & McCabe, 1983; Reilly, 1992; Sah, 2011; Wolf, Moreton, & Camp, 1994). Preece pointed out that personal narrative is the genre that occurs most frequently in preschoolers' conversation (1987). Other researchers (Labov, 1972; Miller & Sperry, 1988; Peterson & McCabe, 1983) also indicated that evaluation skill is best reflected in personal narratives. The focus of this chapter is on the development of evaluation devices in children's personal narratives in Mandarin Chinese-speaking children.

Development of evaluation strategies

Providing evaluative comments in conversation is an early emerging ability. According to prior research, English-speaking children as young as two and half have the ability to convey the meaning of the reported experience (Miller & Sperry, 1988). To develop good control of evaluation devices, however, takes time.

Peterson and McCabe (1983) collected personal narratives of children aged 4 to 9 years in the United States. They found that half of the clauses in children's personal narratives were fully or partially evaluative and identified twenty-three types of evaluation devices from their data. Among the twenty-three types of evaluative devices they isolated, gratuitous terms, stressors, negative comments, compulsion words and causal explanations were the ones frequently used by their children. Facts per se, exaggeration and fantasy, words per se, similes and metaphors, objective judgments and tangential information, on the other hand, seldom occurred in their children's narratives.

No significant age effect in the proportion of evaluative comments was observed in Peterson and McCabe's study, but they did find significant age differences in the variety of evaluation. On average, the youngest group and the older ones used about ten and fifteen different types of evaluations, respectively, in their stories. Moreover, an age effect was observed in several types of evaluation devices. In general, compared to the older groups, younger children used significantly more repetitions and stressors but significantly fewer words per se, facts per se, results of high point actions, and tangential information in their narration. An age effect in use of evaluation devices was also observed in studies by, for example, Bamberg and Damrad-Frye (1991), Berman and Slobin (1994), Reilly (1992), Shiro (2003), and Uccelli (2008).

Studies of development of evaluation in Mandarin Chinese speaking-children's narratives are sparse. Applying short-term longitidinal research design, both Chang (2004) and Sah (2007) observed that the amount and variety of evaluation devices in children grew from 3;6 to 4;3 (Chang's study) and from 5;5 to 5; 11 (Sah's study). Similar findings were gained from cross-sectional studies of Chang (2001) and Huang (2002); both found growth of use of evaluation strategies in older children's narratives.

Sah (2011) focused on age differences in the use of emotion expressions or frames of mind and knowledge of story structure in five-, nine-year-olds and adults in telling the wordless picture book, *Frog, where are you*. She found an age effect in density of emotion expression. Adults used emotion expressions significantly more than five- and nine-year-olds. A significant age difference was also observed between the five- and nine-year-old children. In Chang's study of

evaluation development in children aged four to seven years (2001), frames of mind was the only strategy that increased with age.

The above-mentioned research on narratives of Mandarin Chinese-speaking children is limited either in the age range of subjects recorded or the period of time for observation. The picture of development of evaluation strategies in Mandarin Chinese-speaking children is still not clear and complete. The study conducted by Huang (2002) was the only one that examined narrative development of children across a larger age range, i.e., ages 3 to 12 years. The number of children in her study in each age group (age 3–4, age 5–6, age 7–8, and age 9–12), however, was only 10, and her study focused on use of evaluation in narration of a series of wordless picture cards, not in personally experienced stories. Prior research has documented differences in use of evaluation strategies across narrative genre (Chang, 2001; Chang, 2008; Sah, 2007). For example, Chang (2008) found that proportions of evaluation were significantly higher in fantasy narratives than those in personal narratives or scripts. Also, as noted, children's ability to use evaluation devices can better be reflected in their personal narratives (Labov, 1981; Peterson & McCabe, 1983; Miller & Sperry, 1988). It is hence important to explore how children develop evaluation strategies in telling their stories of personal experience.

Research on the development of evaluation devices in English-speaking children's personal narratives is fruitful. To date, however, there has been no study focusing on the evaluative devices in Mandarin-speaking children's personal narratives. Since the cultural and linguistic background of Mandarin Chinese-speaking children is different from that of English-speaking children, it is important to explore what kinds of evaluative information Mandarin Chinese-speaking children include in their personally experienced stories and how these evaluative strategies may differ from those used by English-speaking children.

Research questions

Two research questions were posed in this study:

1. What evaluation devices do Mandarin Chinese-speaking children aged from three to nine use in narrating their personal experience stories? Are there age differences in the use of evaluation devices?
2. To what extent do Mandarin Chinese-speaking children in Taiwan differ from English-speaking children in the US in the use of evaluation devices in narrating their personal experience stories?

In order to understand similarities and differences in use of evaluation in Mandarin Chinese-speaking children's personal narratives across American children, we applied the method used by Peterson and McCabe (1983) to elicit personal narratives and to analyze the data.

Method

Participants

One hundred and seventy-one Mandarin Chinese-speaking children from Taiwan and ninety-six English-speaking children from the United States participated in this study. The mean ages of the Chinese-speaking children were 3;9 (N = 41), 4;4 (N = 21), 5;4 (N = 21), 6;8 (N = 20), 7;5 (N = 23), 8;5 (N = 22) and 9;4 (N = 23). Parents or primary caregivers of the Chinese-speaking children were high school or college graduates. They were recruited from three preschools (group of age 3), one primary school (groups of children aged 6–9), and the affiliated kindergarten of the primary school (groups of children aged 4–5) in New Taipei City, Taiwan.

In order to understand how evaluation devices used by Mandarin Chinese-speaking children differ from English-speaking children, six groups of children's personal narratives collected by Peterson and McCabe (1983) were selected for comparison. There were 16 children in each age group in their study, and the children's mean ages were 4;1, 5;1, 6;0, 7;0, 8;0, and 9;0 respectively. They were predominantly working class children chosen from a nursery school and an elementary school in Ohio, America. Table 1 summarizes the subjects' characteristics in terms of age and gender.

Table 1. Mean age and gender of subjects: Taiwan & US

Country	Taiwan				US			
Age/Grade	Mean age	N	Male	Female	Mean age	N	Male	Female
3	3;9	41	17	24	NA	NA	NA	NA
4	4;4	21	12	9	4;1	16	8	8
5	5;4	21	12	9	5;1	16	8	8
6/Grade 1	6;8	20	10	10	6;0	16	8	8
7/Grade 2	7;5	23	10	13	7;0	16	8	8
8/Grade 3	8;5	22	9	13	8;0	16	8	8
9/Grade 4	9;4	23	14	9	9;0	16	8	8

Procedures and Data Collection

Following Peterson and McCabe's conversational map (1983), the experimenter interviewed and elicited a number of personal narratives from each child. The interview was audio- and video-recorded. Specific prompted topics such as a visit to a doctor, spilling, injury, fights, travel, and a frightening experience were embedded in conversation with each child. The purpose of this task was to assess children's narrative skill without an adult's asking specific questions or otherwise directly scaffolding the children; neutral responses such as "uh-huh," and "tell me more" were hence given to the child during conversation. An example of a narrative prompt follows:

"Do you know what this is (show child a toy syringe)? Auntie had a stomachache yesterday and I went to see a doctor. The doctor gave me a shot. Have you ever been to a doctor's office?" If the child said "yes," the experimenter kept asking, "I want to know if you remember what happened when you visited a doctor's office. Please tell me what happened when you saw a doctor." If the child said "no," the experimenter asked if such an experience happened to his mother, father, siblings, friends, etc.

Transcription

The collected narratives were transcribed by one assistant verbatim using the codes for the Human Analysis of Transcripts (CHAT) of the Child Language Data Exchange System (CHILDES) (MacWhinney, 2000; MacWhinney & Snow, 1985). All of the transcription was verified by another assistant who was familiar with CHAT format and passed the CHECK program of the CHILDES.

Coding system

Using an adaptation of the coding system developed by Peterson & McCabe (1983), the present study categorized occurrences of evaluation devices in the three longest narratives produced by Mandarin Chinese-speaking children. Twenty-two types of evaluation devices were coded at the clause level. A single clause may contain numerous types of evaluations.

Among the twenty-two types of evaluation devices, three of them[1],i.e., elongators (such as 'we had to stay a looooong time'), attention-getters (such as 'you know what?'), and facts per se (such as 'I caught the biggest fish') were not found

1. Examples of the three codes were taken from Peterson & McCabe's corpus (1983, p.222–224).

in narratives produced by Mandarin Chinese-speaking children. The other nineteen types of evaluative devices were described as one of the following (note that evaluation was coded in clauses that were fully devoted to that function, as well as in clauses that were only partially so):

1. Onomatopoeia: i.e., *wang5wang5* ('bark bark'), *miao1miao1* ('meow meow')
2. Stressors: a marked emphasis in voice, i.e., *shi4 zhen1 de5* ('It is true!')
3. Exclamations: i.e., *ta1 xia4 dao4 le5!* ('He was frightened!')
4. Repetitions: repetitions for effect, i.e., *ran2hou4 wo3 jiu4 yi1zhi2 ku1 yi1zhi2 ku1* ('Then I kept crying kept crying.')
5. Compulsion words: i.e., *wo3 zhi3hao3 hui2 jia1*. ('I had to go home.')
6. Similes and metaphors, i.e., *wo3 chi1 de5 man3 lian3 dou1 shi4 ge4 da4 hua-1mao1*. ('I ate and all of my face was a mess, as a big Siamese cat).
7. Gratuitous terms: i.e., *ran2hou4 ta1 hen3 da4 sheng1 jiao4*. ('Then he cried very loudly.")
8. Words per se: including adjectives, adverbs, verbs, nouns, exclamations that are evaluative themselves, i.e., *wo3 ji2mang2 pao3 hui2 jia1*. ('I ran back home in a hurry.')
9. Exaggeration and fantasy: i.e., *wo3 bei4 xia4 si3 le5*. ('I was frightened to death.')
10. Negatives: explicit negations or defeated expectations, i.e., *wo3 mei2you3 ku1 ei5*. ('I did not cry.')
11. Intentions or desires: i.e., *di4di4 xiang3 kan4*. ('Brother wanted to watch.')
12. Hypotheses or inferences: i.e., *yao4bu4ran2 wo3 ba4 de5 tui3 da4gai4 shi4 zou3 bu4 liao3 de5*. ('otherwise my father's legs probably won't work.')
13. Results of the high point: e.g., *yin3liao4 jiu4 gun3 gun3 bao4 kai1, na4 dong1xi1 dou1 pao3 chu1lai2, ran2hou4 wo3 jiu4 na2 mo3pu4 yi1zhi2 ca1 yi1zhi2 ca1*. ('The drink rolled and rolled and then burst. Something came out. Then I kept wiping and wiping using a wiper.')
14. Causal explanations: i.e., *ran2hou4 wo3 jiu4 jiao4 tong4 yin1wei4 yi1fu2 tang4 dao4 wo3*. ('Then I cried hurt because the clothes burned me.')
15. Judgments (objective and subjective judgments): i.e., *ta1 jiu4 hen3 tan1xin1 jiu4 ba3 xiang4pi2 shou1 qi3lai2 le5*. ('Then he was greedy and he took the eraser.')
16. Descriptions of internal emotional states: i.e., *wo3 hen3 gao1xing4*. ('I was happy.')
17. Tangential information: information relevant to the narrative ('She gave me ten dollars for going in there. Ten dollars is a lot of money when you're little[2].')

2. Example of this code was taken from Peterson & McCabe's corpus (1983, p.222–224).

18. Physical condition: i.e., *wo3 du4zi5 tong4*. ('I got stomach.')
19. Idioms: Chinese idioms, proverbs, slangs, i.e., *jie3jie3 dou1 shou4shang1 le5 ni3 hai2zai4 xing4zai1le4huo4*. ('Sister got hurt but you still gloated over this.')

Two types of evaluation strategies, i.e., physical conditions and idioms, were newly developed codes only for Chinese-speaking children.

Reliability of coding

In order to test reliability of evaluation coding, twenty percent of the narrative transcripts were randomly selected and coded by another research assistant majoring in child language and education to compute Cohen's Kappa statistic. The inter-rater corrected-for-chance agreement was 94%.

Data analysis

Transcripts of the children's narratives were coded and then analyzed using the CLAN programs of the Child Language Data Exchange System (MacWhinney, 2000; MacWhinney & Snow, 1985). In order to answer the research questions posed in this study, descriptive, ANOVA and principal component analyses were used to capture the developmental features in use of evaluation devices in personal narratives produced by Mandarin Chinese-speaking children across different ages. Descriptive data in percentage of each type of evaluation per narrative comment produced by Mandarin Chinese-speaking children and English-speaking children were also compared to see the differences in use of evaluation devices across languages.

Results

Basic length measures

As noted, the three narratives with the greatest number of narrative clauses were selected for coding and analyses. FREQ and MLU programs were used to compute number of words, number of different words, number of utterances, mean length of utterance, and number of clauses in the three longest narratives across the seven age groups (see Table 2).

Table 2. Means of number of words, number of different words, number of utterances, mean length of utterance, and number of clauses in Taiwanese children's personal narratives

Age/Grade	Number of words	Number of different words	Number of utterances	Mean length of utterance	Number of clauses
3	168.56	69.24	39.95	3.98	49.44
4	184.71	83.38	35.14	4.95	47.62
5	177.81	75.90	34.62	5.00	45.58
6/Grade 1	207.85	90.15	35.20	5.63	48.75
7/Grade 2	277.09	112.70	42.30	6.49	58.48
8/Grade 3	315.27	121.68	47.68	6.46	66.14
9/Grade 4	285.91	114.91	43.39	6.52	59.17

As is shown in Table 2, overall, developmental differences were observed in the basic length measures in children's personal narratives. Children younger than 6 produced fewer words, fewer different words, fewer utterances, and fewer clauses than the school-aged children. The younger the children were, the shorter the mean length of utterance was in their narratives. Signficant differences were found in number of words, $F (6, 164) = 4.81$, $p < .001$, number of different words, $F (6, 164) = 3.77$, $p < .01$, and mean length of utterance, $F (6, 164) = 9.59$, $p < .001$.

Development of evaluation devices in Taiwanese and American children

Descriptive & ANOVA analyses. In order to understand the density of each type of evaluation device in the narratives, the percentage of each type of evaluation per narrative comment was examined. The total number of narrative clauses of the three stories, on average, was over thirty. Unexpectedly, no significant age effect was found in the total number of narrative clauses (see Table 3). Table 3 lists the mean percent of each type of evaluation device produced by the Taiwanese children in their three longest personal narratives:

As is shown in Table 3, nineteen types of evaluation devices were found in Mandarin Chinese-speaking children's personal narratives. Children as young as three already possessed the ability to use fourteen types of evaluation strategies to narrate their personal eperience narratives. Results indicated that the density and quantity of evaluation comments developed with age. Nearly 13 percent of the narrative comments were partially or completely evaluative in the youngest group of children and on average they produced 3.51 evaluative clauses in total.

Table 3. Percent of each type of evaluation per narrative comment: Taiwan & US

Age group	3	4		5		6		7		8		9		F-value
Country	Taiwan	Taiwan	US	Taiwan	US	Taiwan	US	Taiwan	US	Taiwan	US	Taiwan	US	Taiwan
Onomatopoeia	0.1	0.2	1.2	0.1	0.6	0.3	2.0	0.1	1.2	0.6	1.5	0.1	2.1	.47
Stressors	0.1	0.1	8.6	0.0	6.6	0.2	17.3	0.0	13.3	0.2	8.6	0.05	6.1	.53
Elongators	0.0	0.0	0.8	0.0	0.6	0.0	1.7	0.0	2.3	0.0	0.5	0.0	0.2	NA
Exclamations	0.0	0.3	2.0	0.0	3.2	0.0	2.0	0.5	2.7	0.4	2.7	0.2	2.2	1.30
Repetitions	0.9	1.4	2.6	0.5	2.6	1.4	3.2	1.4	1.7	1.5	1.7	1.8	1.5	.50
Compulsion Words	0.9	1.3	6.3	0.7	5.0	0.9	5.5	1.1	5.1	1.8	3.8	1.3	4.8	.67
Similes and Metaphors	0.0	0.2	0.1	0.0	0.6	0.3	0.1	0.1	0.3	0.1	0.3	0.0	0.4	1.01
Gratuitous Terms	0.7	2.4	11.0	1.6	14.7	3.4	11.9	2.3	12.4	2.8	11.5	3.4	14.1	3.75*
Attention-Getters	0.0	0.0	2.7	0.0	2.6	0.0	2.4	0.0	1.6	0.0	1.4	0.0	1.2	NA
Words per se	3.0	6.9	1.7	5.9	1.7	7.5	3.5	10.7	3.7	8.6	3.8	11.7	3.4	6.67*
Exaggeration	0.0	0.03	0.6	0.0	0.9	0.1	0.4	0.0	0.7	0.1	0.1	0.2	0.1	1.29
Negatives	2.3	1.0	8.4	1.5	8.7	1.5	8.1	2.0	5.3	2.6	7.8	2.7	8.0	.95
Intentions or Desires	0.3	1.3	0.4	0.4	0.8	1.8	1.6	0.9	0.7	2.0	1.1	1.8	0.7	2.34*
Hypotheses or Inferences	0.4	0.06	1.6	0.3	1.6	0.8	2.8	0.5	2.3	0.6	2.8	1.2	2.9	3.72**
Results of High Point action	0.8	1.6	0.3	0.9	1.5	2.8	1.6	3.5	1.2	3.0	2.5	2.9	1.8	5.25***
Causal Explanations	0.3	0.4	4.0	1.4	4.8	1.0	4.7	1.6	4.1	2.3	3.8	2.4	4.5	3.80**
Judgments	0.2	0.7	NA	0.3	NA	0.4	NA	1.2	NA	0.9	NA	0.9	NA	2.20*
Objective Judgments	NA	NA	0.1	NA	0.0	NA	0.0	NA	0.7	NA	0.1	NA	0.4	NA

Age group	3	4		5		6		7		8		9		F-value
Country	Taiwan	Taiwan	US	Taiwan	US	Taiwan	US	Taiwan	US	Taiwan	US	Taiwan	US	Taiwan
Subjective Judgments	NA	NA	1.3	NA	1.2	NA	1.2	NA	1.0	NA	1.0	NA	1.2	NA
Descriptions of Internal														
Emotional States	3.5	3.5	0.7	4.5	1.3	5.4	1.6	4.1	0.6	3.7	1.2	4.3	1.4	.53
Facts per se	0.0	0.0	0.3	0.0	0.2	0.0	0.2	0.0	0.6	0.0	0.5	0.0	0.4	NA
Tangential Information	0.0	0.0	0.2	0.0	0.1	0.0	0.1	0.1	0.2	0.0	0.2	0.0	0.5	1.08
Physical Condition[1]	0.9	1.9	NA	1.7	NA	1.6	NA	1.0	NA	1.6	NA	0.7	NA	1.03
Idiom[2]	0.0	0.0	NA	0.0	NA	0.0	NA	0.2	NA	0.1	NA	0.1	NA	.78
Total different type of evaluation devices	14	17	21	13	20	16	20	17	21	18	21	17	21	
Number of evaluative clauses	3.51	6.52		5.71		7.2		10.44		12.09		12.13		7.09***
Percent of evaluative clauses	12.7	17.1	46.1	16.0	47.8	21.0	54.5	21.6	46.3	23.8	48.0	24.9	45.5	4.02***
Number of narrative clauses	30.17	34.90		35.24		35.85		41.09		43.91		46.77		1.50

[1, 2] Newly developed codes for Mandarin Chinese data.

*p < .05 **p < .01 ***p < .001

In contrast, about 25 percent of the oldest children's narrative comments were evaluative and the total number of evaluative clauses they produced was 12.13. Generally speaking, both the percentage of evaluation per narrative comment, $F(6, 164) = 4.02$, $p < .001$, and the average number of evaluation clauses, $F(6, 64.09) = 7.09$, $p < .001$, increased with age; that is, significant age effects were observed. Results of post hoc analyses showed that seven-, eight- and nine-year-old children produced significantly higher proportions of evaluative clauses in their personal narratives than did the three-year-old children.

Among the nineteen evaluation devices produced by Taiwanese children, words per se was the device that was most heavily used, and about one third to half of the evaluation comments were conveyed by words per se. Gratuitous terms and descriptions of internal emotional states also occurred frequently in each age group. Contrary to our expectations (based on what was found for English-speaking children of the same age), the proportions of phonological devices such as onomatopoeia, stressors, elongators, and exclamations in narrating their personal experience stories were relatively low. Separate one-way ANOVAs were carried out for the evaluation devices to investigate if there were significant differences in each type of evaluation device across age. Significant age differences were found in six types of evaluation devices, i.e., gratuitous terms, $F(6, 63.52) = 3.75$, $p < .05$, words per se, $F(6, 64.01) = 6.67$, $p < .01$, intentions or desires, $F(6, 64.53) = 2.34$, $p < .05$, hypotheses or inferences, $F(6, 65.47) = 3.72$, $p < .01$, results of high point, $F(6, 67.21) = 5.25$, $p < .001$, causal explanations, $F(6, 64.41) = 3.80$, $p < .01$, and judgments, $F(6, 63.95) = 2.20$, $p < .05$.

Comparison of the percentage of each type of evaluation device per narrative comment across Taiwanese children and American children interviewed by Peterson and McCabe (1983) is exhibited in Table 3. A striking difference was found in the percentage of evaluative clauses in children's personal narratives. As noted, about fifty percent of narrative comments produced by American children were evaluative. In contrast, only thirteen to twenty-five percent of narrative comments in Taiwanese children's stories were evaluative. Compared the American children from the Peterson & McCabe corpus, Taiwanese children included many fewer evaluation comments in telling their personal experience stories.

It is also interesting to find that words per se was the evaluation strategy used most frequently by Taiwanese children. American children, in contrast, used stressors and gratuitous terms heavily in their stories. Although the average percentage of evaluation comments in Taiwanese children was lower than that of American children, percentage of words per se, results of high point, intentions

or desires, and descriptions of internal emotional states produced by Taiwanese children, overall, were higher than those in stories narrated by American children. As noted, strategies such as elongators, attention-getters, and facts per se never occurred in Taiwanese children's stories; occurrences of these strategies in American children's narrative were also low. Idioms was a code newly developed for Taiwanese children but it only occurred in Taiwanese children older than seven.

Correlation and principal component analyses. In order to understand the interrelationship across the nineteen types of evaluative devices identified in Taiwanese children's narratives, correlation and principal component analyses were conducted (see Table 4). In Peterson and McCabe's study (1983), only the correlation between stressors and elongators was significant ($r = .39$, $p < .01$). Inconsistent with what Peterson and McCabe found, however, most of the evaluation types identified in Taiwanese children were significantly correlated. Words per se was the one that had the highest number of significant correlations with other evaluation types, including stressors ($r = .21$, $p < .01$), repetitions ($r = .23$, $p < .01$), similes and metaphors ($r = .15$, $p < .05$), gratuitous terms ($r = .51$, $p < .01$), exaggeration ($r = .21$, $p < .01$), intentions or desires ($r = .26$, $p < .01$), results of high point action ($r = .38$, $p < .01$), causal explanations ($r = .37$, $p < .01$), judgments ($r = .38$, $p < .01$), and descriptions of internal emotional states ($r = .27$, $p < .01$). Only three types of evaluation devices, i.e., hypotheses or inferences, idioms, and negatives, were not significantly correlated with any other evaluation variables.

Eight major factors were extracted from principal components analysis followed by a varimax rotation and these factors explained 60.43% of the variance (see Table 4).

As was found in correlation analyses, hypotheses/inferences and negatives were quite independent of other evaluation devices. Other types of evaluation devices, however, were grouped into different factors, such as (1) words per se, gratuitous terms, judgments, causal explanations, and exaggeration (factor 1), (2) intentions/desires and compulsion words (factor 2), (3) description of internal emotional states and results of high point action (factor 3) (see Table 4). These results differ from what Peterson and McCabe (1983) observed in their corpus. They identified twenty-one types of evaluation but they all seemed relatively independent. Results of principal component analysis of their study found seventeen different factors accounting for 90% of the variance and no major factors were found.

Table 4. Results of principal component analysis of personal narratives in Taiwanese children

Factor extracted	Eigenvalue	Distinctive evaluation codes utilized	Percentage of variance explained	Total percentage of variances explained
1	2.98	Judgments, Causal explanations, Exaggeration, Words per se, Gratuitous terms	11.54	11.54
2	1.45	Intentions or desires, Compulsion words	7.74	19.28
3	1.39	Descriptions of internal emotional states, Results of high point action	7.71	26.99
4	1.28	Similes and metaphors, Physical condition	7.42	34.41
5	1.17	Exclamations, Tangential information	6.93	41.34
6	1.12	Stressors, Onomatopoeia	6.90	48.24
7	1.07	Hypotheses or inferences	6.21	54.45
8	1.03	Negatives	5.99	60.43

Discussion

Similar to English-speaking children (Bretherton, Fritz, Zahn-Waxler, & Ridgeway, 1986; Dunn, Bretherton, & Munn, 1987; Miller & Sperry, 1988; Peterson & McCabe, 1983), Taiwanese children include evaluation comments in their personally experienced stories; even at the young age of three years, we found fourteen evaluation strategies in their stories. These results suggest that to convey feelings, thoughts and perspectives in telling personal narratives is a common human behavior no matter whether the children are reared in Western or Asian cultures. The specific devices to express what the narrators think and feel about what happened to them, however, vary across different languages and cultures.

In this study, words per se were heavily used by Mandarin Chinese-speaking children in Taiwan, whereas they were seldom used by English-speaking children. On the other hand, English-speaking children in the US used stressors (second only to gratuitous terms) in their personally experienced stories, while Mandarin Chinese-speaking children never did. A distinguishing difference between Mandarin-Chinese and English is that Mandarin is a tone language whereas

English is an intonation language (Gussenhoven, 2004). In tone languages such as Mandarin, Japanese, Thai, etc., different words are indicated by fixed pitches and they mark meanings, attitude and emotion of a speaker. Words themselves, in this sense, are evaluative in tone languages. In contrast, intonation languages such as English, Spanish, German and many other languages in the world, convey the meaning of sentences from the patterns of rises and falls in pitches. The tone-intonation contrast in Mandarin and English might explain the differences in use of words per se and stressors in Chinese- and English-speaking children respectively. In other words, when phonology is being marshaled to distinguish one word from another, as it is in Chinese, it is not, therefore available for use as pure prosodic evaluation.

This study found significant correlations between words per se and many other evaluation devices in Taiwanese children. As stated before, words per se was the device used most frequently by Taiwanese children and about one third to half of the evaluation comments were carried by words per se. Also, words per se were correlated with ten other evaluative devices used by Taiwanese children. Moreover, results of principal component analysis showed that words per se were grouped into one factor with gratuitous terms (intensifiers or delimiters such as "very" "a little bit"), exaggerations, judgments and causal explanations. This finding is also reasonable because words per se such as evaluative adjectives, adverbs, and verbs usually occurred with gratuitous terms in order to achieve the effect of emphasis. Excerpt 1 was an example:

Excerpt 1: Mei, Girl, 4;6

Experimenter:	*na4 ni3 you3yi2ci4 da3 fan1 dong1xi1 de0 shi2hou4 shi4 ze3yang4*?
	What happened when you spilled something one time?
Child:	*you3shi2hou4 wo3 da3 fan1 dong1xi1, yi1fu2 dou1shi4 shi1shi1de0*.
	Sometimes I spilled something, (my) clothes were <u>all</u> wet.
Child:	*ran2hou4 wo3 jiu4 yao4 qu4 huan4 yi2jian4 le0*.
	Then I changed another one.
Child:	*hao3 ma2fan2*.
	(It was) <u>very</u> inconvenient.
Experimenter:	*ran2hou4 ne0*?
	Then what?
Child:	*wo3 jiu4 zhi3shi4 xiang3 dao4 hao3 fan2 hao3 sheng1qi4 o0*.
	Whenever I thought (of it), (itwas) <u>very</u> annoying, (I felt) very angry.
Child:	*jiu4 jue2de5 hen3 dao2mei2 de5 shi4qing2*.
	Then (I felt it was) <u>very</u> unlucky.

Excerpt 1 is a personal narrative produced by a girl Mei who was four and half years old when she told this story. In this story, the evaluative adjectives such as in*convenient, annoying,* and *unlucky* were used with the intensifiers *all* or *very* to show the intensity of Mei's feelings towards the spilling event.

Excerpt 2 shows that the use of words per se not only co-occurs with intensifiers but also with causal explanations:

Excerpt 2: Jie, Boy, 8;3

Experimenter:	*na4 ni3 ji4de2 ni3 you3yi2ci4 gen1 jie3jie3 chao3jia4 fa1sheng1 le0 she2me5 shi4*?
	Did you remember what happened when you had a fight with your elder sister?
Child:	*wo3 bei4 ta1 chuai4 dao4*.
	I was stamped by her.
Child:	*ran2hou4 wo3 jiu4 hen3 sheng1qi4 yi1zhi2 da3 ta1*.
	Then I was very angry (I) kept hitting her.
Child:	*wo3 da3 da4 ta1de5 ji3zhui1gu3*.
	I hit her spine.
Child:	*ran3hou4*...
	Then...
Child:	*zhen1de5 hen3 yong4li4 zhe4yang4 da3 wo3de0 ji3zhui1gu3*.
	(She) hit my spine very hard really like this.
Experimenter:	*en1*.
	hm.
Child:	*ran2hou4 wo3 you4 geng4 sheng1qi4 de5 ba3 ta1 da3 de0 hen3 can3*.
	Then I hit her very fiercely, even more angrily.
Child:	*ran2hou4 yi1zhi2 chao3*.
	Then (we) kept fighting.
Child:	*ran2hou4 guo4 yi1hui3er0 you4 zhi2jie1 chuai4*.
	Then after a moment (I) stamped (her) directly .
Child:	*yin1wei4 wo3 hen3 tao3yan4 wo3 jie3*.
	Because I hated my sister very much.
Child:	*ran2hou4 ran2hou4 wo3 jiu4 na2 na4ge4 zhen3tou2 a0, chen4 ta1 zai4 shui4jiao4 de5 shi2hou4 ne0, ran2hou4 da3 ta1de0 lian3*.
	Then then I took that pillow (and) then hit her face when she was sleeping.
	(child laughed)
Child:	*ran2hou4 ran2hou4*...
	Then, then...

Experimenter:	*da3 ta1de5 lian3*?
	Hit her face?
Child:	*ran2hou4 yin1wei4 ta1 hen3 sheng1qi4 jiu4 pa2 qi3lai2 you4 kai-1shi3 da3 wo3*.
	Then because she was very angry (she) stood up then (she) began hitting me.
Child:	*ran2hou4 wo3 jiu4 na2 na4ge4 zhen3tou2 yi1zhi2 da3*.
	Then I took that pillow kept hitting (her).
Child:	*ran2hou4 wo3 jiu4 ba3 ta1 chuai4 de0 geng4 can3*.
	Then I stamped her even more fiercely.
Experimenter:	*ran2hou4 ne0*?
	Then what?
Child:	*wo3 you3 fang2yu4 a0*.
	I was defensive.
Child:	*wo3 dou1 xian1 fang2yu4 ran2hou4 zai4 da3*.
	Then I defended (myself) first, then hit (her) again.
Child:	*ran2hou4 wo3 jie3jie3 bei4 wo3 da3 de0 bi3jiao4 can3*.
	Then my sister was hit more fiercely than I was.
Child:	*wo3 bei4 ta1 da3 de0 geng4 can3*.
	I was hit even more fiercely by her.
Child:	*yin1wei4 ta1 dou1 yong4 ma1 na4ge4 su4jiao1 guan3*.
	Because she used my mom's plastic tube.
Child:	*ju2se4de0*.
	(It was) orange.

Excerpt 2 is a long story told by a boy Jie who was eight years and three months old. In this story, Jie used a number of words per se such as the evaluative verbs *stamp, kept,* and *began* and the evaluative adverbs *fiercely*, and *directly* in this story. As in Excerpt 1, the intensifier *very* also occurred together with word per se for emphasis of effect. Moreover, Jie used a causal connective *because* to explain why he "stamped" his sister and why his sister hit back, as well as why a hit (by a plastic tube) was more fierce.

Another interesting finding obtained from this study is that only thirteen to twenty-five percent of narrative comments were evaluative in the personally experienced stories narrated by Taiwanese children. In contrast, about half of narrative comments produced by American children were evaluative. This striking difference in the amount of evaluative comments Taiwanese versus American children included in their personal narratives might be related to different language experiences children have in their families. Previous research comparing mother child conversation about past events in Japanese versus Canadian families found that

Canadian mothers requested more evaluation comments from their children than did Japanese mothers (Minami, 1994; Minami & McCabe, 1995). Another recent study comparing mother-child talk during joint book reading in American and Taiwanese families also found that American mothers request significantly more evaluations from their children than do Taiwanese mothers (Luo, Snow, & Chang, 2012). Both studies suggest that compared to Asian mothers such as Japanese and Taiwanese mothers, American mothers put more emphasis on children's self-expression and hence provide their children with more chance to express their own perspectives on and feelings towards what happened in real life or in books (Chao, 1995; Wang, Leichtman, & Davies, 2000). Being reared in families with different cultural beliefs of sense of self, Taiwanese and American children in this study demonstrate differences in the amount of evaluative comments included in their personal narratives.

Specifically, the Taiwanese children are being raised to possess an interdependent self, one in which mothers emphasize social interactions and proper behavior when they converse with their children about past events (see Koh & Wang, this volume). This is in stark contrast to American mothers who emphasize autonomy and self-expression in such memory conversations in order to encourage their child to develop an independent self (see Koh & Wang, this volume). We know that North American, relative to Japanese, mothers request evaluation comments of their children more frequently (Minami, 1994; Minami & McCabe, 1995). Wang, Doan, & Song (2010) found that Chinese mothers mentioned internal states (which is an aspect of evaluation as we define it here) significantly less frequently than did American mothers in out-of-context memory conversations, while Koh and Wang (this volume) found that Chinese immigrant parents made *more* frequent mention of such states. In addition, to exploring probable antecedents of the Taiwanese children 's relative reticence regarding their feelings about past events, it is worth considering what some consequences of this tendency might be. Another study by Wang (2009) may shed some light in this regard. Wang had Asian-born and Euro-American undergraduate students record daily events in journals for a week. Students were then given a surprise test on their ability to recall the events they had recorded in their own journals. Wang found that Asian-born students recalled significantly fewer personal episodes than their Euro-American peers – they literally forgot the events they had chosen to write about only a few days earlier.

An Asian-American novelist, Gish Jen (2013), in a series of essays explores issues of having an interdependent self in an autobiography written by her Chinese-born-and-raised father. Unlike what any Euro-American would think of doing but perhaps familiar to Chinese narrators, he begins with reference to a family genealogical record that indicated 4,000 years earlier two sons were born to an Emperor

who gave them the last name of Jen. He talks much about how many and which generations there were in his family, about the province they lived in, as well as the house they collectively inhabited, and other aspects of the context of his birth. He doesn't give his birth date until page eight of the volume, and the first real event he reports is one that happened to him when he was ten years old.

Wang (2006b) reviews research that demonstrates that European and Euro-Americans have an earlier onset of autobiographical memory, report a greater number of childhood memories, and provide more specific details in their accounts of past personal experiences compared to Asians and Asian-Americans. She links such findings to a study in which Chinese and Chinese immigrant mothers were less elaborative and evaluative[3] than Euro-American mothers when reminiscing about past events with their children. She also found that shared memory reports were positively correlated with maternal elaborations and evaluations during reminiscing. It is tempting to speculate that evaluation is a means by which narrators underline the important aspects of a memory and, in the process, strengthen it.

We would be remiss not to offer an example of a typical narrative by a six-year-old Taiwanese child. Consider the following:

Excerpt 3: Being frightened (Girl, 6;4)

Experimenter:	*zuo2tian wo3 zai4 da3sao3 fang2jian1 de0 shi2hou4, yi1zhi1 zhang1lang2 pa2 dao4 wo3de5 jiao3 shang4.* Yesterday when I cleaned my room, a cockroach crawled up my leg.
Experimenter:	*wo3 jiu4 xia4 le0 yi1 tiao4.* I was frightened.
Experimenter:	*ni3 ne0*? How about you?
Experimenter:	*ni3 you3 bei4 she2me0 dong1xi1 xia4 dao4 guo4 ma0*? Have you ever been frightened by anything?
Child:	*wo3 yi3qian2 you3 xia4 guo4 dan4shi4 wo3 wang4 le0.* I was frightened (by a cockroach) before too but I forgot.
Experimenter:	(laughs)
Child:	*wo3 yi3jing1 you3 yi1ci4 zai4 xi3 zao3 de5 shi2hou4.* Once when I already was having a bath...

3. But note that Wang (2006 b, p. 1798) defines evaluations as "any instance of confirmation, negation, questioning, or emphasis of the child's previous statement... (e.g., "Oh yes, you played in the sandbox" contained two evaluations in her coding scheme)" – a different definition from the one we used for *evaluation* in the present project.

Child: *wo3 jie3jie you3 kan4 dao4 ...*
My older saw...
Child: *wo3 jie3jie3 you3 kan4 dao4 wo3...*
My older saw I...
Child: *kan4 dao4 wo3 shen1 shang4 you3 mao2mao2chong2.*
Saw a caterpillar on me.
Experimenter: *ran2hou4 ne0*?
(laughs) Then what?
Child: *shang4 ci4 wo3 zai4 xi3 zao3 de0 shi2hou4...*
(laughs) When I took a bath last time...
Child: *ran2hou4 xi3 peng4 dao4 yi2ge4 yi2ge4...*
Then washed then touched a a ...
Child: *jie3jie3 kan4 dao4 mao2mao3chong2 zai4 wo3 shen1 shang4, wo3 bu4 zhi1dao, wo3 bu4 zhi1dao4 na4 shi4 she2me0 dong1xi1.*
When my older sister saw the caterpillar on me, I did not know I did not know what that was.
Experimenter: *ran2hou4 ne0*?
Then what?
Child: *jie2guo3 jie3jie3 kan4 dao4 le0, ran2hou4 ta1 jiu4 da4 dao4 le0.*
And my older sister saw (that) then she was frightened.
Experimenter: *ni3 jie3jie3 jiu4 xia4 dao4 le5.*
(laughs) Your sister was frightened.
Child: *jie2guo3 wo3 ma1ma1 jiu4 ba3 yi1 zhang1 wei4sheng1zhi3 na2 qi3lai2.*
Then my mom took a piece of toilet paper.
Child: *ran2hou4 jiu4 ba3 na4ge4 chong2 zhua1 qi3lai2 diu1 diao4 le0.*
Then she caught the caterpillar (with the toilet paper) (and) threw (the caterpillar) away.
Experimenter: (laughs)
Child: *ran2hou4 wo3 jia1 you3 yi1 dui1 ma3yi3.*
Then there were a bunch of ants in my house.
Child: *wo3 you3yi1ci4 xia4 dao4 le0.*
I was frightened one time.
Experimenter: *shi4 ze3me5 yang4*?
What happened?
Child: *wo3 xia4 dao4...wo3 jia1 yi1 dui1 yi1 dui1 chao1 duo1 ma3yi3 de5*
I was frightened...there were a bunch of, a bunch of, super many ants in my house.

Experimenter: (laughs)
Child: *ran2hou4 ta1 jiu4 na2 yi1ge4 na4ge4...*
Then (she) took a that...
Child: *yi2ge4 jiao1dai4.*
A tape.
Experimenter: *en1.*
Hm.
Child: *yi2ge4 jiao1dai4.*
A tape.
Child: *ran2hou4 ta1 na2 yi1ge4 jiao1dai4 ta1 na2 yi1ge4 jiao1dai4 qu4 nian2, ran2hou4 wo3 ma1ma1 jiu4 ba3 wo3de0 jia1dai4 na2 qu4.*
Then (she) took a tape when (she) took a tape to stick, then (my) mom took my tapes.
Experimenter: *o0.*
Oh.
Child: *na2 qu4 nian2 ran2hou4 ta1 you4 qu4 na2 ling4 yi2ge4 jiao1dai4.*
(She took a tape) to stick (the ants) and then (she) took another tape again.
Child: *jie3jie3 dou1 bu4 bang1mang2 yin1wei4 ta1 zai4 hua4hua4.*
(My) older sister did not help at all because she was drawing.
Experimenter: *ran2hou4 ne0?*
Then what?
Child: *wo3 qi2ta1 dou1 bu4 ji4de2 le0.*
I could not remember anything else.

Note that this narrative includes what the Euro-American author of this chapter considered to be a narrative that is a collection of experiences. The Taiwanese author of this chapter considered it to be typical of the narratives produced by six- to eight-year-olds in her corpus. About one-third to half of Taiwanese six- to eight-year-olds narrated at least one story with a collection of experiences (six-year-olds: 50%, seven-year-olds: 44%, eight-year-olds: 36%). Taiwanese children of other ages did not include collections of experiences in their personal narratives so much as the six- to eight-year-olds did, However, it is interesting to find that of the 1124 personal narratives in the original Peterson and McCabe (1983) corpus, only 33 (2.93%) were narratives that included mention of more than one experience in the same narrative. This compares to 54 of 596 (9.1%) narratives that were collections of experiences in the present Taiwanese corpus. The difference in the propensity of Taiwanese versus U.S. children to tell collections of experiences in the same narrative was very significant, $X^2\,(1) = 30.42$, $p < .001$.

In sum, Chinese-speaking children showed significant development both in terms of various measures of the length of their narratives and in terms of the average number and proportion of their comments that are evaluative. In the latter respect, they differ from American children, who did not show significant increases in proportions of evaluation with age. Taiwanese children also differed from American children in that they evaluate between 13 and 25% of their narrative clauses, while the American children evaluate 50% at all ages studied. A third way that Taiwanese children differ from American peers is that the ways they evaluate are much more correlated. Only the two phonological evaluation devices (stressors and elongators) were correlated in the American corpus (elongators never appeared in the Taiwanese corpus, and stressors were very rare). Taiwanese children primarily relied upon words per se to evaluate their narratives. Mandarin Chinese-speaking children's notably less frequent inclination to tell what events meant to them compared to Euro-American children reflects deep cultural differences regarding and affecting their sense of themselves. A fourth way in which children in the two cultures differ is in their propensity to tell collections of experiences (Taiwanese) versus single experiences in a unified narrative. These differences show how children reared in Chinese and American cultures see their experiences differently and how their experiences were represented in different language systems. For future research, it would be interesting to further explore how use of evaluative comments relate to sense of self, and what role evaluations play in autobiographic memories in Chinese and American children or in Chinese-English bilingual children.

Acknowledgements

This study was supported in part by funding from National Science Council to the first author. We like to thank Wan-yu Tsai and Ya-hui Luo for their assistance in coding and analyzing the data. Special thanks go to the children who participated in this study.

References

Bamberg, M., & Damrad-Frye, R. (1991). On the ability to provide evaluative comments: Further explorations of children's narrative competences. *Journal of Child Language*, *18*, 689–710.

Berman, R., & Slobin, D. (1994). *Relating events in narrative: A crosslinguistic developmental study*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Bretherton, I., Fritz, J., Zahn-Waxler, C., & Ridgeway, D. (1986). Learning to talk about emotions: A functionalist perspective. *Child Development, 57*, 529–548.

Bruner, J. (1986). *Actual minds, possible world*. Cambridge, MA: Harvard University Press.
Bruner, J. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.
Chang, C. J.(2008). Narrative development in Mandarin-speaking children in Taiwan and Mainland China: Scripts, personal narratives, and fantasy narratives. Taipei, Taiwan: National Science Council. (NSC94-2413-H-003 -044)
Chang, C. J. (2004). Telling stories of experiences: Narrative development of young Chinese children. *Applied Psycholinguistics*, *25*, 83–104.
Chang, J. W. (2001). *A developmental study of narrative structure and evaluative devices*. Unpublished Master's thesis. Providence University, Taichung, Taiwan.
Chao, R. K. (1995). Chinese and European American cultural models of the self reflected in mother's childrearing beliefs. *Ethos, 23*, 328–354.
Dunn, J., Bretherton, I., & Munn, P. (1987). Conversations about feeling states between mothers and their young children. *Developmental psychology*, *23*(1), 132.
Huang, J. (2002). A developmental study on children's evaluative comments in narration. Unpublished Master's thesis. Fu Jen Catholic University, Xinzhuang, Taiwan.
Gussenhoven, C. (2004). The phonology of tone and intonation. Cambridge, UK: Cambridge University Press.
Karmiloff-Smith, A. (1986). Some fundamental aspects of language development after age 5. In P. Fletcher & M. Garman (Eds.), *Language acquisition* (pp. 455–474). Cambridge, MA: Cambridge University Press.
Jen, G. (2013). *Tiger writing: Art, culture, and the interdependent self*. Cambridge, MA: Harvard University Press.
Koh, J.B.K., & Wang, Q. (this volume). Narrative self-making during dinnertime conversations in Chinese immigrant families. In A. McCabe & C. Chang (Eds.), *Chinese Language Narration: Culture, cognition, and emotion*.
Labov, W. (1972). *Language in the inner city.* Philadelphia, PA: University of Pennsylvania Press.
Luo, Y., Snow, C.E., & Chang, C. (2012). Mother-child talk during joint book reading in low-income American and Taiwanese families. *First Language, 32*(4), 494–511.
MacWhinney, B. (2000). *The CHILDES project* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
MacWhinney, B., & Snow, C.E. (1985). The child language data exchange system. *Journal of Child Language, 12*(2), 271–295.
Miller, P. J., & Sperry, L. L. (1988). Early talk about the past: The origins of conversational stories of personal experience. *Journal of Child Language, 15*(2), 293–315.
Minami, M. (1994). English and Japanese: Cross-cultural comparison of parental styles of narrative elicitation. *Issues in Applied Linguistics, 5*(2), 383–407.
Minami, M., & McCabe, A. (1995). Rice balls and bear hunts: Japanese and North American family narrative patterns. *Journal of Child Language, 22,* 423–445.
Nelson, K. (1986). *Event knowledge: Structure and function in development*. Hillsdale, NJ: Lawrence Erlbaum Associates.
Peterson, C.,& McCabe, A. (1983). *Developmental psycholinguistics: Three ways of looking at a child's narrative*. New York, NY: Plenum.
Preece, A. (1987). The range of narrative forms conversationally produced by young children. *Journal of Child Language, 14,* 353–373.
Reilly, J.S. (1992). How to tell a good story: The intersection of language and affect in children's narratives. *Journal of Narrative and Life History, 2*, 355–377.

Sah, W. H . (2007). A longitudinal investigation of Mandarin-speaking preschoolers' relation of events in narratives: From unrelated to related events. *Taiwan Journal of Linguistics*, *5*(1), 77–96.

Sah, W. H. (2011). Emotion expressions and knowledge of story structure: A study of Mandarin-speaking children's narrative development. *Taiwan Journal of Linguistics*, *9*(2), 61–100.

Shiro, M. (2003). Genre and evaluation in narrative development. *Journal of Child Language, 30*, 165–195.

Snow, C. E., & Dickinson, D.K. (1991). Skills that aren't basic in a new conception f literacy. In E.M. Jennings & A.C. Purves (Eds.), *Literate systems and individual lives: Perspectives on literacy and schooling*, pp. 179–191. Albany, NY: SUNY Press.

Snow, C. E., Porche, M. V., Tabors, P. O., & Harris, S. R. (2007). *Is literacy enough? Pathways to academic success for adolescents*. Baltimore, MD: Paul H. Brookes.

Uccelli, P. (2008). Beyond chronicity: Evaluation and temporality in Spanish-speaking children's personal narratives. In A. McCabe, A. Bailey & G. Melzi (Eds.), *Spanish-language narration and literacy: Culture, cognition and emotion* (pp. 175–212). New York, NY: Cambridge University Press.

Wang, Q., Leichtman, M.D., & Davies, K. (2000). Sharing memories and telling stories: American and Chinese mothers and their 3-year-olds. *Memory, 8*, 159–177.

Wang, Q. (2006) a. Culture and the development of self-knowledge. *Current Directions in Psychological Science, 15,* 182–187.

Wang, Q. (2006) b. relations of maternal style and child self-concept to autobiographical memories in Chinese, Chinese Immigrant, and European American 3-year-olds. *Child Development, 77*(4), 1794–1809.

Wang, Q. (2009). Are Asians forgetful? Perception, retention, and recall in episodic remembering. *Cognition, 111*, 123–131.

Wang, Q., Doan, S. N., & Song, Q.F. (2010). Talking about internal states in mother-child reminiscing influences children's self-representations: A cross-cultural study. *Cognitive Development, 25*, 380–393.

Wolf, D., Moreton, J., & Camp, L. (1994). Children's acquisition of different kinds of narrative discourse: Genres and lines of talk. In J. Sokolov & C.E. Snow (Eds.), *Handbook of research in language development using CHILDES*, pp. 286–323. Hillsdale, NJ: Lawrence Erlbaum Associates.

Wang, Q. (2009). Are Asians forgetful? Perception, retention, and recall in episodic remembering. *Cognition, 111*, 123–131.