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Citation	
Issued Date	2010
URL	http://hdl.handle.net/10722/173702
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Comparison of Personal Narrative Telling and Fiction Retelling in Pre-school Children
using Story Grammar Analysis

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A dissertation submitted in partial fulfillment of the requirements for the Bachelor of Science
(Speech and Hearing Sciences), The University of Hong Kong, June 30, 2010.

Abstract

Aim: This study compared the fiction retelling and personal narrative telling in assessing pre-school children's narrative skills in term of macrostructure.

Method: A total of 90 Cantonese-speaking pre-school children aged 3;0 to 6;0 were recruited. Fiction narratives were elicited through retelling with a wordless story book after listened to a model story. Personal narratives were prompted by conversational techniques. Samples were analyzed by story grammar analysis.

Results: Fiction retelling scores showed better age differentiation in the number of story grammar elements, higher reliability and stronger correlation with age and another language measure. The development of story grammar elements was also described.

Conclusions: Fiction retelling was the more sensitive and reliable way to assess Cantonese-speaking pre-school children's narrative skills. With the standardized procedures developed in this study, it is feasible to norm the materials and procedures onto a large group of children for developing a standardized assessment for clinical use.

Narrative is important in clinical settings and provides valuable information about the children's language ability to speech language pathologists. First, narrative assessment can identify the children with language impairment (LI) who tend to produce narratives with fewer story grammar elements (Johnston, 1982; Merritt & Liles, 1987) and shorter mean length of utterance (Bishop & Edmundson, 1987) than the typically developing (TD) children. Second, narrative development shows significant implications on emergent literacy in pre-school children (Dickinson & McCabe, 1991; Paul & Smith, 1993; Westby, 1999). Pre-school children who are able to tell a coherence narrative show more successful school literacy adaptation (McCabe & Rollins, 1994). Narrative is also shown to be a good predictor of later language status in pre-school children with LI (Bishop & Edmundson, 1987).

Personal narratives and fictional narratives in pre-school children have been widely studied. These studies supported that both narrative types are sensitive genre that captures pre-schoolers' language change at textual level when compared to other genres like "descriptive procedures" (McCabe & Rollins, 1994; Peterson & McCabe, 1991).

Personal Narrative Generation

McCabe and Rollins (1994) stated that children refer to real past experience as early as two years old. Rollins, McCabe and Bliss (2000) also pointed out that structural complexity is developed in children's personal narratives before fictions. This is because personal narratives are naturally embedded in pre-school children's social interaction with their parents, peers and teachers. The occurrence of personal narratives is observed to be far more often than the fictions and this reflects the stronger ecological validity of the former (Peterson & McCabe, 1983). Besides, given that personal narratives often include the first

person experience, another advantage of personal narratives production for children over fictions is that the former does not require children taking the third-person perspective of the story characters (McCabe, 1997). Children can concentrate on the organization and interconnection of the narrative and therefore better and more representative story structure can be observed in personal narratives.

Despite the clear validity of personal narratives in reflecting pre-school children's language skills, there were also some weaknesses of personal narrative telling. It has been suggested that culture shows significant influence on children's ability of telling personal narrative. Rollins, McCabe and Bliss (2000) reviewed the studies of personal narrative telling on children of different cultures and found that children of different cultures presented different abilities on personal narratives telling. For example, Japanese and Latino children provide less narrative detail than European North American children and Africa-American children; Spanish speaking children produce shorter narrative, less actions and event sequencing. As a result, personal narratives may not provide a common ground to compare children of different cultures and speaking different languages.

Fictional Narrative Retelling

McCabe, Bliss, Barra and Bennett (2008) pointed out that in real clinical practice, fictional narratives are more widely-used by speech-language pathologists in assessing children's language ability than personal narratives, such as *The Bus Story* (Renfrew, 1991), *Squirrel Story Narrative Assessment* (Carey, Leitao & Allan, 2006), *Expression, Reception and Recall of Narrative Instrument* (Bishop, 2004) and *The Strong Narrative Assessment Procedure* (Strong, 1998). As there are comparable normative data and clear, convenient and standardized scoring procedures provided by these available standardized tests of fictional

narrative, fictional narratives are more ‘popular’ in clinical use (Hughes, McGillivray & Schmidek, 1997; McCabe et al., 2008). In other words, clinician’s selection of narrative types may be based on practicability reasons. Fictional narratives were often elicited through a story *retelling* task which provides a fairer means to assess different children. Using narrative retelling, a clinician can have good control of the narrative length, complexity and error analysis too (Liles, 1993). Besides these, Merritt and Liles (1987) found that fiction retelling task could better discriminate LI children from TD children than fiction telling task. Even though the story structure is presented to the children before they retell, LI children still produced significantly fewer story grammar elements and shorter story length than TD children in retelling task.

On the other hand, there were some critics of the fictional narrative retelling approach for assessing pre-school children’s language. Fictional narrative retelling has been questioned for the representativeness of one’s spontaneous narrative skills. It was because the fictional narrative retelling task was more directive and the narrators may rely more on the pre-structured content rather on the internalized narrative organization (Liles, 1993). Therefore, it was doubted that the child’s performance in fictional narrative retelling task may not be representative of his/ her true narrative skills.

Macrostructure Analysis

Narratives can be analyzed at two levels: macrostructure and microstructure. Macrostructure refers to the interconnection and integration of narrative content (Nicolopoulou, 2008). Examples include the story structure and the temporal and causal relationship between the narrative components. Microstructure refers to the way how the smaller linguistic units are conjoined together within a narrative. It helps to put the

underlying network of ideas into sequences of sentences (Hughes et al., 1997). Examples include cohesive devices and lexical components that mark the temporal information. Schneider and Hayward (2006) claimed that there is a rapid developmental change in macrostructure development for children aged four to seven years old but a plateau for children aged seven to nine years old. This observation is consistent to To, Stokes, Cheung and Tsou (accepted)'s result. This pilot study on school-age children's narratives failed to find a remarkable growth in macrostructure development but only the microstructure measures. It is possible that the abrupt developmental change in macrostructure occurs during pre-school years. Therefore, the focus of the present study was on macrostructure of narratives in pre-school children.

The most widely used approaches for macrostructure analysis are high point analysis and episodic analysis. High point analysis is particularly appropriate for analyzing personal narratives but is not typically applied to fictional narratives for which episodic analysis is more suitable for analyzing fictional narratives (Hughes et al., 1997). For example, fiction retelling assessments like The Strong Narrative Assessment Procedure (Strong, 1998) adopted an episodic analysis. Meanwhile, McCabe and Peterson (1984) demonstrated that episodic analysis was applicable to and useful in analyzing personal narratives. Therefore, episodic analysis will be adopted in the present study because it is suitable for both types of narrative and fair comparison can be made. Story Grammar Approach (Stein & Glenn, 1979) as the most widely studied approach for episodic analysis was adopted in the present study. Using this approach, all stories can be analyzed into smaller components, which includes *setting (S)* which introduces the character, time, location and activity; *initiating event (IE)* which is the problem that causes the protagonist's response; *internal response (IR)* which is

the thought of the characters; *plan(P)* which tells how the characters might solve the problem; *attempt (A)* which is the action taken by the characters; *consequence (C)* which is the effect of attempt; *reaction (R)* which is the thought or action of the characters at the end of the story. According to Applebee (1978)'s narrative stages, children aged 3 years old mainly included *setting* and described actions (which was coded as *attempt* here); at the age of 4 to 5, children started to include *initiating event* and *consequence* as well and at this time, the most basic story episode was considered to complete. Children aged 5 to 7 years old were able to produce narratives with any 2 more story grammar elements from *internal response*, *plan* or *reaction*.

The Present Study

As reviewed in the above studies, both personal narrative telling and fiction retelling have their own strengths and weaknesses in describing pre-school children's language ability, there is still no consensus about which types of narrative assessment is more suitable to assess pre-school children's language ability in clinical practice.

The present study sought to develop feasible and standardized procedures to assess and analyze Cantonese-speaking pre-school children's narratives. The second aim of the present study is to compare whether personal narrative telling or fiction retelling is more valid and reliable in assessing Cantonese-speaking pre-school children's narrative skills. After finding out which narrative type is more age-sensitive, the final aim of the present study is to study the normal developmental trend of pre-school children's narrative skills.

Method

Participants

Ninety Cantonese-speaking pre-school children aged 3;01 to 6;00 were recruited from four kindergartens in Kowloon and the New Territories of Hong Kong with approximately equal number of boys and girls. All the participants were native Cantonese speakers according to the reports of their class teachers. They were divided into six age groups with six months interval. Information of participants was reported in Table 1.

Table 1

Information of Participants

Age group	Mean age	Age range	Male (n=)	Female (n=)
3;00	3;03	3;01-3;06	7	8
3;06	3;09	3;07-4;00	7	8
4;00	4;04	4;01-4;06	7	8
4;06	4;10	4;07-5;00	7	8
5;00	5;04	5;01-5;06	8	7
5;06	5;09	5;07-6;00	8	7

Materials

To collect narrative samples for the fiction retelling task, an eight-picture wordless story named ‘Stealing A Cake (偷蛋糕)’ was constructed based on the framework of story grammar (see Appendix A). The story was about the adventures of a group of hungry animals in the forest when stealing a cake from a hippo’s house. This story was self-constructed instead of using well-known tales. This was to ensure that it was new to all subjects, so that fair and reliable comparison could be made. A story script was written, read aloud and pre-recorded (See Appendix B). The auditory stimuli along with the story pictures were embedded into a powerpoint presentation. Using the same pictures, an eight-picture wordless

story book was developed for the retelling of the story by the children.

Samples of personal narratives were elicited by the investigator's probing and demonstration of personal narratives. According to Peterson and McCabe (1983), at least three personal narratives should be collected from each child to capture the best performance of the child. For the narrative topics, McCabe and Rollins (1994) suggested that pre-school children begin to refer to past experience of misfortune, injury or other negative experience at an early age. Therefore, topics such as losing things, getting sick, getting injured, arguing and breaking things, which could elicit more samples, were adopted. Based on these topics, scripts were constructed according to the framework of story grammar and some of the scripts were presented to the children as demonstration (see scripts in Appendix C).

Procedures

Each child was interviewed individually by an investigator in a quiet room at their kindergartens. After rapport was established, the standardized vocabulary test of *Hong Kong Cantonese Receptive Vocabulary Test (HKCRVT)* (Lee, Lee & Cheung, 1996) was carried out. This language test was used as a measure to test the validity using the narrative analyzing method on the two narratives. Then the child was tested on a trial story named 'Got Lost (迷路了)' to familiarize him/ her with the testing procedures. Afterwards, he/ she put on the headphones, looked at the computer screen and listened to the instructions, 'We are going to tell a story named "Stealing a Cake". It is about a group of animals stealing a cake because of hunger. After the story finished, you have to retell the story to the investigator. Please pay attention to the story.' (我哋今日講嘅故事叫「偷蛋糕」。內容係關於一班小動物因為肚餓而去偷蛋糕。聽完個故事之後，你要講返俾姐姐知架，所以你要留心聽住呀!). Testing story which was recorded as a video in the computer was played to the participants. Then he/

she was told to retell the story as detailed as possible with the story book. Neutral response was given, such as “what’s next?” (之後呢?) and “and then?” (跟住呢?).

After the fiction retelling, personal narratives were then elicited by conversational techniques (Peterson & McCabe, 1983). The investigator asked if the participants had experience on different topics, such as being sick and getting hurt. If the subject had relevant experience, then the research first demonstrated personal narrative prompt on that topic. Then the child was asked to tell a personal narrative of their own experience similar to the prompt on the same topic. Neutral response, such as “tell me more” (講多啲㗎) and “then what happened?” (之後點呀?), was given. These neutral responses just indicated the interest of hearing the child’s narratives. Three personal narratives were collected from each child. The whole process was recorded by a MP3 recorder for transcription and analysis.

Analysis

All the samples were transcribed verbatim and mazes were crossed out. For personal narratives, only 1 of the 3 collected samples was analyzed. Before detailed analysis, the complexity of a narrative could be roughly estimated by its length (McCabe & Rollins, 1994). The number of syllables of the three collected personal narratives was counted. The longest personal narrative was chosen together with the fictional narrative for analysis. Both personal narratives and fictional narratives were analyzed using story grammar analysis approach. Stories components were analyzed and categorized into *setting, initiating event, internal response, plan, attempt, consequence and reaction*. Scoring was mainly based on the presence of the story grammar elements and the relevance of the content. For fictional narrative retelling, scores were given for the information of content in every story grammar element. Provided that the information of content was included, bonus scores could be gained

for mentioning supplementary reference relevant to the plot. There was a maximum score of 41 (see the detailed coding system for fictional narrative in Appendix D for Chinese version and Appendix E for English version). Similarly, for personal narrative telling, scores were given for every story grammar element and bonus scores could be gained for the detail relevant to plot. In other words, the more detailed the plot, the higher the score would be. No maximum score was set (see an example for scoring of personal narrative in Appendix F).

Reliability

Ten percent of the narratives collected (i.e. 9 fictional narratives and personal narratives) were randomly selected for re-transcription and re-coding by the investigator for intra-rater reliability. The Pearson product-moment correlation coefficients between the initial scores and the re-coded scores were .97 for fictional narratives and .96 for personal narratives which indicated high intra-rater reliability for both fictional and personal narratives. Ten percent of the narratives collected (i.e. 9 fictional narratives and personal narratives) were randomly selected for re-transcription and re-coding by another fourth year student of Speech and Hearing Sciences who is familiar with the story grammar components for inter-rater reliability. The Pearson product-moment correlation coefficients between primary and secondary raters' scores were .98 for fictional narratives and .75 for personal narratives. This indicated high inter-rater reliability in fiction retelling but just moderate inter-rater reliability in personal narrative telling.

Results

Scores of Fiction Retelling and Personal Narrative Telling

In order to address the research question of whether personal narrative telling or fiction

retelling was more age-sensitive, the two total scores of each child was compared with reference of age.

Each child's longest personal narrative and fictional narrative were scored according to the coding criteria. Table 2 summarized the descriptive statistics of the scores of fiction retelling and personal narrative telling in different age groups. Figure 1 graphically compared the trends of the mean scores of fiction retelling and personal narrative telling. From the observation, the trend of mean scores of fiction retelling was more robust than that of personal narrative telling.

Table 2

Descriptive statistics of scores of fiction retelling and personal narrative telling in different age groups

Age group	N	Fiction retelling	Personal narrative telling
		Mean (SD)	Mean (SD)
3;00	15	6.87 (3.72)	6.40 (3.11)
3;06	15	11.67 (5.86)	10.27 (5.60)
4;00	15	19.93 (4.54)	12.47 (5.71)
4;06	15	24.60 (4.50)	12.40 (4.94)
5;00	15	24.47 (6.36)	12.47 (4.41)
5;06	15	29.40 (4.52)	18.00 (6.36)

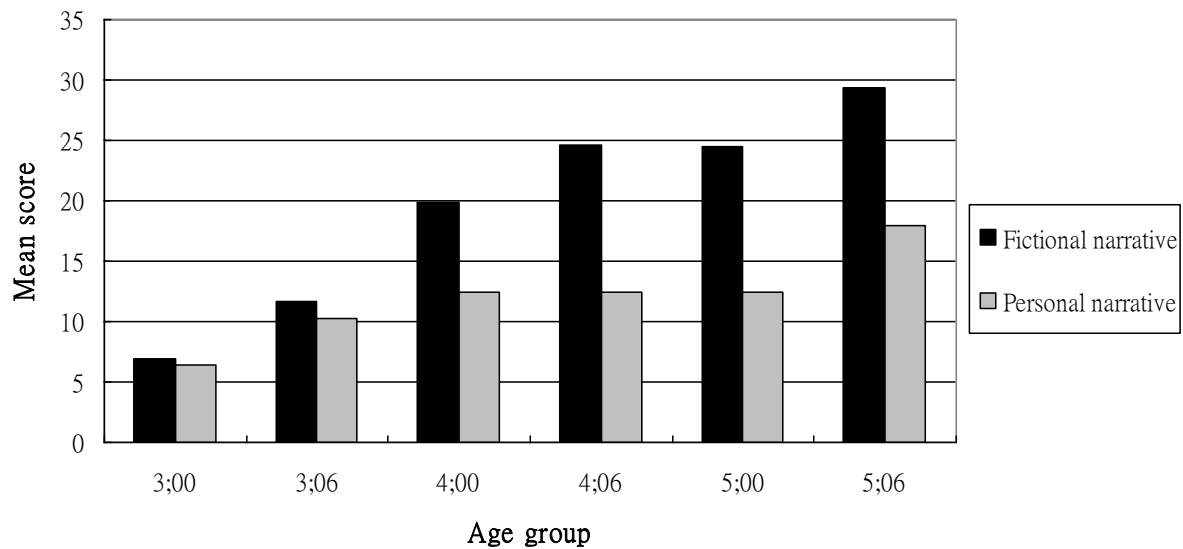


Figure 1. The trend of mean scores of fiction retelling and personal narrative telling.

Levene's Test confirmed that error variance of the dependent variables of fiction score and personal narrative score was not significantly different among groups ($F(11, 78)=1.25, p>.05$) ($F(11, 78)=1.35, p>.05$). Therefore, parametric statistical test could be adopted. Gender was a potential confounder, so it was also included in the analysis. A Two-way ANOVA was carried out to study if there was any main effect of age and gender and the interaction effect between the two independent variables. The results revealed that there was no statistical significant interaction effect between age group and gender in both fiction retelling ($F(5, 78)=.83, p>.05, partial \eta^2=.05$) and personal narrative telling ($F(5, 78)=.71, p>.05, partial \eta^2=.04$). The main effects of gender were also statistically insignificant in both fiction retelling ($F(1, 78)=1.95, p>.05, partial \eta^2=.02$) and personal narrative telling ($F(1, 78)=.33, p>.05, partial \eta^2=.004$). However, the main effects of age group were statistically significant and large effect size in both fiction retelling ($F(5, 78)=44.21, p<.01, partial \eta^2=.74$) and personal narrative telling ($F(5, 78)=7.72, p<.01, partial \eta^2=.33$).

Follow-up post hoc analysis using Scheffe Test was carried out to investigate which

age groups differed on the scores. For fiction retelling, all the age groups generally fell into 3 significant different groups. They were: (i) age groups of 3;00 and 3;06, (ii) age groups of 4;00, 4;06 and 5;00, and (iii) age groups of 4;06, 5;00 and 5;06. While in personal narrative telling, all the age groups were generally divided into 2 significantly different groups only. They were (i) age groups of 3;00, 3;06, 4;00, 4;06 and 5;00, and (ii) age groups of 4;00, 4;06, 5;00 and 5;06. Such age differentiation also confirms with the observation that fiction retelling showed more robust growth than personal narrative telling in Figure 1.

Correlation between Age Groups, HKCRVT and Narrative Scores

In order to examine the validity of the two narrative scores, Pearson product-moment correlation coefficients between the scores, HKCRVT and age groups were calculated. The higher the correlation with the age groups, the more valid the new measures can capture the growth.

Table 3 summarized the Pearson product-moment correlation coefficients between age groups, HKCRVT and the narrative scores of the 2 genres.

Table 3

Pearson product-moment correlation coefficients between age groups, HKCRVT and the narrative scores of the 2 genres

	Fiction retelling	Personal narrative telling
Age groups	.82*	.52*
HKCRVT	.72*	.49*

* $p < .01$

All the coefficients were statistically significant. The correlation coefficient confirmed much stronger and positive association between age groups and scores of fiction retelling

than personal narrative telling.

Similarly, for the correlation with HKCRVT, the higher the correlation, the better the new measures of narrative scores increase with the language ability. HKCRVT was chosen as the reference standard because it is a standardized language test in the local population with relatively clear validity and reliability details. Again the result revealed that fiction retelling had stronger and positive correlation with HKCRVT.

Developmental Trend of Story Grammar Elements

In order to examine the developmental trend of story grammar elements in pre-school children, a criterion of 80% or more children in the individual age group used the elements of story grammar suggested the developmental changes of acquiring the story grammar across different age groups. As long as the child got score in that element, he/ she would be regarded as using that element.

Figures 2 and 3 presented the percentage of children in different age groups using the elements of story grammar in *fiction retelling*. Figures 4 and 5 presented the percentage of children in different age groups using the elements of story grammar in *personal narrative telling*. The comparison of these graphs revealed that children used more story grammar elements (with 80% criterion) in fiction retelling than personal narrative telling in nearly all age groups. The graphs also showed that the development of individual story grammar elements in fiction retelling generally grew more steadily while that in personal narrative telling fluctuated.

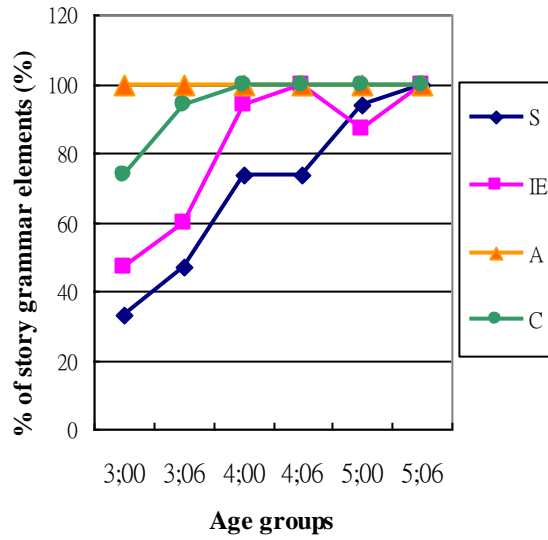


Figure 2. Percentage of children in each age group using setting, initiating event, attempt and consequence in *fiction retelling*.

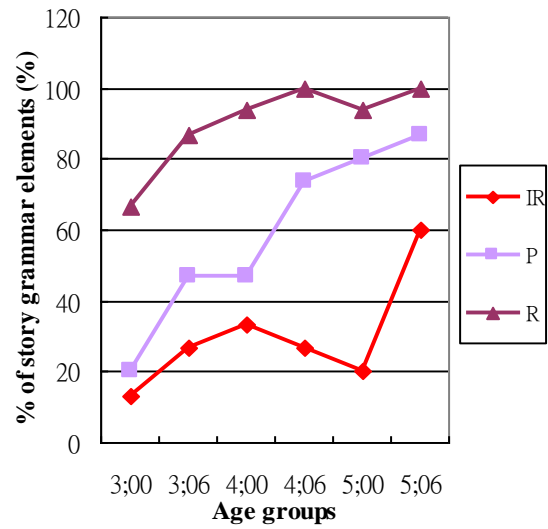


Figure 3. Percentage of children in each age group using the internal response, plan and reaction in *fiction retelling*.

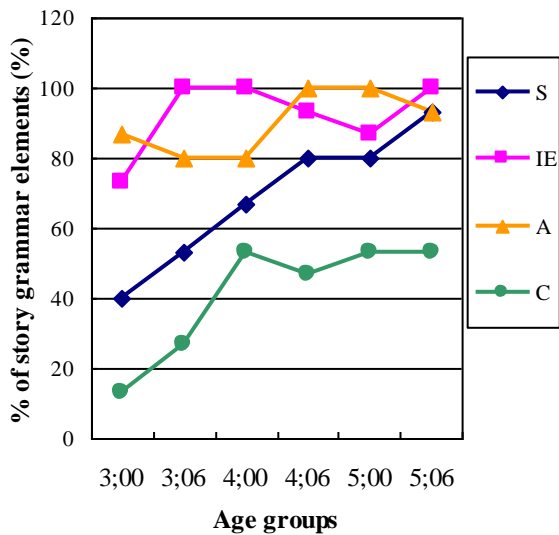


Figure 4. Percentage of children in each age group using setting, initiating event, attempt and consequence in *personal narrative telling*.

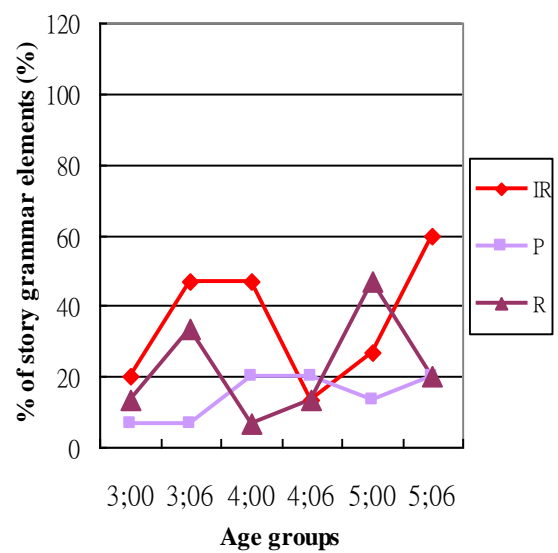


Figure 5. Percentage of children in each age group using the internal response, plan and reaction in *person narrative telling*.

Discussion

There were 3 aims in the present study, (i) to develop feasible and standardized procedures to assess and analyze Cantonese-speaking pre-school children's narrative; (ii) to compare whether personal narrative telling or fiction retelling is more sensitive and reliable in assessing Cantonese-speaking pre-school children's narrative skills; and (iii) to study the normal developmental trend of pre-school children's narrative skills.

The first aim was achieved as illustrated in the method section. The procedures described were feasible, but there was still room for improvement. During the retelling part where the child retold the story to the investigator, explicit reminder may be needed to remind the child that the investigator was naïve to the story. The following sections discussed the other 2 aims one by one.

Comparisons between Fiction Retelling and Personal Narrative Telling

In this study, four measures of (i) the means scores from story grammar analysis, (ii) correlation of the scores and age groups, (iii) the number of story grammar elements used, and (iv) reliability were adopted to evaluate the sensitivity or validity of fiction retelling and personal narrative telling in capturing the developmental trend in Cantonese-speaking pre-school children.

(i) In terms of the mean scores from story grammar analysis, there were more significantly different groups yield in fiction retelling than in personal narrative telling. (ii) In terms of the correlation of the narrative scores, age groups and HKCRVT, the scores from fiction retelling showed much stronger correlations with the two reference measures. (iii) In terms of the number of story grammar elements used, children generally used more story grammar elements in fiction retelling in every age group than personal narrative telling. (iv)

In terms of reliability, though the intra-rater reliability of fiction retelling and personal narrative telling was similar, the inter-rater reliability of the former was much higher than the latter one. This showed that the scoring system of fiction retelling was much more reliable even by different raters. From the above comparisons, we may conclude that the method of fiction retelling can illustrate a more robust story grammar development than the personal narrative telling. In other words, with the same set of analysis method, fiction retelling was more age-sensitive and valid in capturing the developmental trend in Cantonese-speaking pre-school children. This finding appeared to be in conflict with the literatures (McCabe, 1997; McCabe & Rollins, 1994; Peterson & McCabe, 1983) which suggested the personal narrative showed the clearest developmental progression in pre-school children among the genres of narrative. There may be three possible reasons for such discrepancy.

Cultural difference on parenting style. The first reason that may account for the relatively less obvious growth in personal narratives observed in Cantonese-speaking children was the cultural difference on parenting style. The vigorous development of personal narratives documented in the literature was explained in terms of the strong ecological validity of personal narratives. That was, these narratives occurred frequently in children's daily life (Peterson & McCabe, 1983). Rollins, McCabe and Bliss (2000) also agreed that the reason was because personal narrative was naturally involved in pre-school children's social interaction. Bed-time stories and personal experience sharing appeared to be some very common habits among the Western culture. As a result, English-speaking children's personal narratives were well cultivated in their everyday life. However, the assumption of strong ecological validity of personal narratives may not hold the same degree to Cantonese-speaking children as in the Western culture. As the social network of friends may

not be well developed yet in pre-school years, social interactions of pre-school children are mainly with their parents outside school. As a result, the ability of personal narrative telling of pre-school children quite depends on the time and quality of the social interaction with their parents. However, many parents in Hong Kong are working parents. According to the statistic of 2006 Population By-census conducted by Hong Kong Census and Statistics Department, there were 78.1% to 80.5% of working couples over the whole Hong Kong population of couples aged 25 to 44. Moreover, in a recent community survey conducted by The Boys' and Girls' Clubs Association of Hong Kong in 2007 ('The consequence of the working situation of working parents on their children and family'), it was found that around 40% of the interviewed 1553 working parents agreed that they were not able to participate in family interaction due to insufficient time, physical tiredness and mental tiredness after work. These two pieces of evidence supported that Hong Kong parents may not be able to devote sufficient time, physical strength and vigor to interact with their children due to their life-style. Their children's exposure to the personal narratives as well as the chance to tell personal narrative for sharing their own experience in kindergarten or nursery was greatly limited. Therefore, the occurrence of personal narratives in the daily life may be greatly reduced in Cantonese-speaking children when compared to their English-speaking counterparts, so that the skills of telling personal narrative in Hong Kong pre-school children may not be developed as fast as the English-speaking children. This also supported Rollin et al. (2000)'s claim that ability of personal narrative telling varied with cultures.

Variation of the personal experience. The second reason for the relatively insensitivity of personal narrative to capture the developmental progression may be the remarkable variation in the complexity of the personal narrative samples. Liles (1993)

pointed out that the quantity of information is an obvious factor to the narrative complexity. Although demonstrations were given before the participants told their personal narratives to demonstrate the expected complexity, the complexity of their personal narratives varied depending highly on the richness of content of their own personal experience, such as the number of characters involved and the number of episodes. Their performances might be restricted by the plain content of their personal experience even though the longest personal narrative was chosen for analysis among three. The following transcriptions illustrated how the participant's performance might be limited by the richness of content of their personal experience. Both participants 72 and 73 were 5;06. They got similar scores in CRVT which implied that they may have similar vocabulary ability, likewise, they had similar scores in fiction retelling which implied that they would have similar narrative skills too.

Transcription of participant 72

S: 星期日 我同爸爸媽媽去踩單車

IE: 之後爸爸話我唔踩得快

IE: 要坐佢架單車後面

IE: 之後隻腳伸左出去撞到條柱

IE: 我慢慢伸入去嘅時候

IE: 隻腳涉左入去單車個輻度

A: 之後我就大聲喊

A: 之後我去寶姨屋企

A: 媽咪同我貼傷口

A: 跟住有一朝早媽咪叫我著涼鞋返學

A: 而家就著波鞋

Corresponding translation of participant 72

I went cycling with father and mother last Sunday

Then father said I could not cycle with fast speed

(So I) have to sit behind him on his bicycle

Then my leg stretched out and was crushed into a pillar

When I slowly put (my leg) in,

My leg was trapped in the bicycle's wheel

Then I cried loudly

Then I went to Auntie Po's home

Mother helped me to stick a plaster

Then mother asked me to wear sandals to school one morning

I wear sport shoes now

C: 可能行行下好返

Maybe it recovered after walking (for some time)

Transcription of participant 73

Corresponding translation of participant 73

S: 我喺個運動場度跑左 3 個圈

I (have to) run for three rounds in the sports ground

一個圈就 400 米

Each round was 400 meters in length

加埋就 1200 米

So it added up to 1200 meters

IE: 跟住跑跑下就跌親第 2 個圈

Then, when I was running, I felt down in the second round

IE: 好彩無流血

Luckily it didn't bleed

A: 跟住上返去觀眾席

Afterwards I went back to the auditorium

R: 又要開始比賽

Another competition started again

However, Participant 73 got much lower scores than Participant 72 in personal narrative telling. It may be due to the fact that the content of his personal experience was not as ample as that of Participant 72. As it was not bleeding after he was hurt, there were not many subsequent attempts regarding the hurt and hence corresponding consequence regarding the attempts. As a result, he did not have much to tell. In other words, there was remarkable variability in personal experience among children and this influenced the output of the personal narratives. So the performance may cause under-estimation of an individual's narrative skills or language ability. This is why Liles (1993) suggested that fiction retelling can be a solution to the above problem as fiction retelling has good control of narrative length and complexity. As the content of the fiction to be told among children was based on the same story, the complexity of their retold narratives could highly represent their narrative skills.

Memory loading. Even if the children had similar personal experience, their

performances could still vary with their retrieval ability as personal narrative telling had greater memory loading and higher demand on recalling ability on the children than fiction retelling. McCabe (1997) suggested that there is a complex relationship between telling and remembering, telling provides an organized way to facilitate subsequent recalls (Nelson, 1991) while good retrieval of the past experience is the basis for personal narrative telling (McCabe, 1991). From observation, some of the children's experience on certain specific topics might happen long time ago and they reported explicitly that they forgot the details of that experience. On the contrary, fiction retelling does not impose a heavy memory load on children. Bishop and Edmundson (1987) also agreed that if the sequence of the story pictures was represented when the children retold the story, the memory load can be minimized. In this study, the participants were asked to retell the fiction with the story book immediately after they listened to the story, so the demand on memory and recalling ability was not as high as that in personal narrative telling. This may also account for the more obvious growth of fiction retelling as more language samples were obtained from the mode of elicitation.

All these factors render the genre of personal narratives a less sensitive tool for capturing Hong Kong pre-school children's language growth.

Developmental Trend of Story Grammar in Pre-school Children

As fiction retelling was shown to be the more sensitive and reliable way to capture developmental growth, the result from the fiction retelling was used to discuss the normal acquisition of story grammar elements in pre-school children: *attempt* emerged at about 3;00 to 3;06. This was followed by the addition of *consequence* and *reaction* at 3;06 to 4;00. At 4;00 to 5;00, *initiating event* was also established, complete and basic episodes consisting of *initiating event*, *attempt* and *consequence* were observed. Finally, at 5;00 to 6;00, children

also include the elements of *setting* and *plan*.

The finding was generally comparable to Applebee (1978)'s proposed narrative stages. However, the development of *setting* and *reaction* found in this study was different from Applebee (1978)'s. Applebee (1978) suggested *setting* should be acquired at age 3 but only participants with age 5 or older were shown to acquire *setting* in this study. Participants younger than 5 years old tended to skip the introduction to the time, place and characters at the beginning. They did not even introduce the name of characters and just referred them by using pronoun 'they' (佢地) while pointing to the characters in the story books. This might be because the participants assumed to share the same story book with the investigator when they retold the story even though the investigator told them the story book was only read by them. McCabe et al. (2008) explained that even if the children were told to pretend the investigator didn't know the story, they had difficulty in making the presupposition about the investigator knew about the story. It was because the children might assume that the investigator could have access to the story book or shared the common knowledge with them and expect the investigator to fill in what they did not tell.

Besides, Applebee (1978) suggested children should acquire *reaction* at the age of 5. Hughes et al. (1997) also supported that the elements describing the inner feelings or thought are typically included later and less often than *initiating events*, *attempt* and *consequence*. However, the participants in this study included *reaction* in their retold fiction as young as 3;07. This should be accounted for the cultural-specificity of this story grammar element in Cantonese. Ho (2001) highlighted the indispensable sense of "*coda*" in narratives produced by Cantonese-speaking children. Coda, a story component conveyed the thoughts of the narratives about the conclusion of the story. It can be the feeling of the characters or the

moral lesson of the story (Labov, 1972) and is similar to the story grammar element of *reaction* in the present study. Ho (2001) observed that coda (which was coded as *reaction* in this study) is regarded as an optional element in western narrative but it is an obligatory element and serves a very important function in the narrative produced by Cantonese students as it is the way to express the social purpose of telling a narrative and the self-reflection on the narrative told. Narrative without *reaction* at the end is regarded as incomplete and dull by Chinese teachers (Ho, 2001). The teachers emphasize much on the significance of *reaction* to their students in their teaching of narrative skills. Chinese children generally follow such instructions to fulfill the teachers' expectation by including *reaction* at the end of the story. As a result, *reaction* may be developed faster in Chinese pre-school children than their English counterparts.

Conclusions and Clinical Implications

The results of this study suggested that fiction retelling would be a better, more sensitive and reliable way to reflect pre-school children's ability in narration than personal narrative telling given its higher sensitivity and reliability, which are essential to standardized test development.

This study provided preliminary normative data on the story grammar development of Cantonese-speaking pre-school children with means and standard deviations of the story scores in each age group and the general developmental course of story grammar elements. This study can be thought of a feasibility study for future development of narrative assessment for local speech therapists in clinical practice.

Limitations and Suggestions for Further Investigation

From the result of this study, ceiling effect was observed for *attempt*. Ceiling of 100%

was reached even in the youngest age group. Therefore, *attempt* might be acquired even younger than 3;01. Besides, *internal response* was not acquired even in the oldest age group in this study. Therefore, younger and older age groups may be included to complete the picture of story grammar development in these children. Besides, the sample size of 15 participants in each age group in this study may not be representative to the whole population of Hong Kong. Larger sample size can be included in the future study to enhance the power of generalization.

The preliminary normative data of pre-school children's story grammar development was provided in this study. It is suggested that language impaired counterparts can be included to compare their performance with the typical developing pre-school children. Their performances not only served as another evidence to appraise the validity of the tool, but can also suggest the cut-off score to differentiate the typical developing and language impaired children in an assessment.

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Appendix A

Picture Stimuli

1



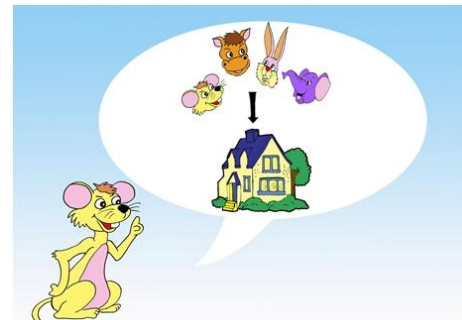
2



3



4



5



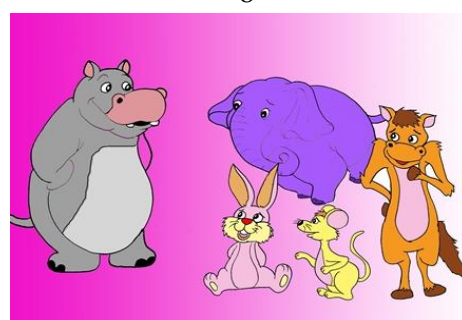
6



7



8



Appendix B

Story Script of the Fictional narratives

Picture 1: 從前，森林入面有幾隻百厭既嘅小動物。

有一日，佢地覺得好肚餓，但係又無野食。

Once upon a time, there were few naughty animals in the forest.

One day, they felt very hungry. However, they had nothing to eat.

Picture 2: 其中有一隻醒目嘅馬仔知道河馬叔叔嘅屋企度整咗一個又香又甜嘅士多啤

梨蛋糕，於是，佢就叫大家一齊去偷個蛋糕。

其他三隻小動物一諗起咁好好味嘅士多啤梨蛋糕，都流晒口水咁話好想食。

A smart horse knew that Mr. Hippo had made a delicious strawberry cake at home.

Therefore, he suggested that they go to steal that cake together. When the other

three animals thought about the delicious strawberry cake, they drooled and

exclaimed that they wanted to eat it very much.

Picture 3: 雖然佢哋知道河馬叔叔好大隻又好惡，但因為佢哋真係好肚餓，所以大家都

決定一齊去偷蛋糕。

They knew Mr. Hippo was so large and fierce, but they were really hungry, so

they decided to steal the cake.

Picture 4: 老鼠仔就諗住一齊由煙囪搵入河馬叔叔屋企，靜靜雞咁將個蛋糕偷出嚟

Little mouse thought of entering Mr. Hippo's house through the chimney together,

stealing the cake secretly.

Picture 5: 老鼠仔第一個竄入去，然後白兔就拉實小老鼠條尾巴，跟住馬仔就拉住白兔隻耳仔，而最大隻既大笨象就捉住馬仔隻腳，一個一個咁竄入河馬叔叔屋企

Little mouse was the first one to get into the house. Then rabbit pulled mouse's tail tightly. After that, horse pulled rabbit's ear. The biggest one, elephant, held horse's leg. They got into Mr. Hippo's house one by one.

Picture 6: 不過，當老鼠拎起個蛋糕嘅時候，唔小心整跌隻杯。

However, when the mouse was picking up the cake, he broke the glass carelessly.

Picture 7: 所以就俾河馬叔叔發現左，河馬叔叔好嬲。

然後佢就即刻將嗰四隻小動物用條繩綁實。

So Mr. Hippo discovered that. He was so angry. Then he immediately bound the 4 animals tightly with a rope.

Picture 8: 最後，佢哋同河馬叔叔講對唔住，佢話以後都唔再偷野食

Eventually, they said sorry to Mr. Hippo. They also promised that they would not steal any food again.

Appendix C

Script of Personal Narrative Prompts in Demonstration

受傷 (Injury)

有一次我自己去公園玩鞦韆嘅時候，唔小心跌咗落地，個膝頭擦損咗流好多血，我好驚訝。隻腳仲好痛起唔到身，我諗住大聲喊有人聽到就會過黎扶我返屋企，於是就大叫大喊，終於有一個叔叔聽到，就扶我起身，仲幫我包紮。包好個傷口之後就唔痛喇，我好多謝叔叔，仲請咗粒糖俾叔叔食添！

One time, when I went to the park and played swing alone, I felt on the floor. My knee was bleeding badly and I was so afraid. It was so painful that I could not get up. I thought someone may hear me and bring me home if I cry loudly. Then I screamed and cried loudly. Finally, a man heard me. He helped me to get up and dressed my wound. After dressing the wound, I no longer felt painful. I thanked the man so much and gave him a candy.

病咗 (Sick)

有一朝早我喺屋企醒嘅時候，覺得好頭暈。我心諗唔知係唔係病咗呢？於是就叫媽媽喇。媽媽就摸下我個頭，話覺得好熱，佢就話不如我睇醫生啦。媽媽叫我換好衫，陪我一齊落去睇醫生。醫生幫我探熱，話我有發燒，仲開咗啲藥俾我食。之後我就喺屋企瞓覺休息，媽媽就幫我敷毛巾喇。

One morning, when I woke up at home, I felt fainted. I didn't know if I was sick, so I called mum. She put her hand on my forehead and said it was hot. She suggested me to see the doctor. She told me to get dressed and then she went with me to see the doctor. The doctor checked my body temperature and said I got fever. He then gave me some medicine. After that, I slept and had rest at home. Mum applied towel on my forehead.

打爛野 (Breaking object)

媽媽有日喺街市買咗一個花樽返黎，我睇下睇下嘅時候唔小心打爛咗！我好怕媽媽會鬧我，就諗住靜雞雞收埋啲碎片唔俾媽媽知，於是我就將 D 碎片收埋喺個膠袋裡面，點知俾媽媽發現咗，話我知咁做係唔啱嘅。之後我知錯喇，以後要做個誠實嘅乖孩子！

One day, mum bought a vase from the market. When I was watching it, I broke it! I was so afraid that my mum would blame me. I planned to hide the pieces without telling my mum. Then I put all the pieces into a plastic bag. However, my mum discovered that. She told me I was wrong to handle in this way. Then I knew I was wrong, I will be an honest girl later on.

同人嗌交 (Arguing with others)

有一日我喺課室玩緊煮飯仔，小明走過黎搶左我啲玩具，我就好嬲好想搶返 D 玩具，於是我就一手推開小明，搶返佢手上面嘅玩具喇！小明俾我推跌之後大聲喊，老師聽到就話我地咁做係唔啱嘅，應該大家一齊玩。我地都知錯喇，於是就好開心咁一齊玩玩具喇。

One day when I was playing cookery toy in the classroom, Ming took my toy. I was so angry that I want to take back my toy. Then I pushed Ming and took the toy from his hand! Ming cried loudly after being pushed by me. Teacher heard that and told us that we were wrong to argue with each other. We should play together. Then we knew that we were wrong. After that, we played the toy together happily.

唔見嘢 (Losing objects)

有一日，我喺屋企執書包準備返學嘅時候，點知我唔見咗本英文書！我心裡好驚，怕搵唔到老師會罰我企。我諗住搵晒間屋嘅所有櫃，都要搵返本書出黎。於是我逐個逐個櫃

打開搵，但係都搵唔到。最後發現本書一直都喺書包裡面！搵返本書真係好開心呀！

One day when I was packing books in my schoolbag at home, I found that my English book was lost. I was so afraid that my teacher would punish me. I planned to search every cupboard at home to find out the book. Then I searched the cupboard one by one, but I still couldn't find it. Finally, I found the book was inside the schoolbag. I was so happy to find out the book.

Appendix D

Coding System of Fictional Narrative (Chinese Version)

	Score
Setting	
從前/有一日	1
森林	1
小動物/[大笨象+老鼠+白兔+馬]	1
Initiating event	
肚餓/ 無野食	1
馬仔 (This mark will only be given when mark in # is gained)	1
[河馬+蛋糕] [#]	1
Internal response	
流口水/ 好想食/ 想食	1
Plan	
[決定/想/話+偷蛋糕]	1
[老鼠仔+ 諗 / 話/ 提議]	1
煙囪 (This mark will only be given when mark in ^ is gained)	1
捐入河馬叔叔屋企/ 捐入去/ 爬入去/ 穿入去 [^]	1
Attempt	
老鼠第一個	1
白兔+ 拉實/ 捉住/ 揸住/ 拉住/ 焯住/ 扶住+ 小老鼠+ 尾巴	1+1+1+1
馬仔+拉實/ 捉住/ 揸住/ 拉住/ 焯住/ 扶住+ 白兔+ 耳仔	1+1+1+1
大笨象+拉實/ 捉住/ 揸住/ 拉住/ 焯住/ 扶住+ 馬仔 + 腳	1+1+1+1

入河馬叔叔屋企	1
老鼠 (This mark will only be given when at least 1 mark in @ is gained)	1
[攞/ 拎/ 偷+蛋糕] @	1
[整跌/ 跌爛/ 打爛/ 整爛/ 打瀉+杯] @	1
Consequence	
河馬 (This mark will only be given when mark in + is gained)	1
發現/ 見到/ 醒左/ 開眼 ⁺	1
河馬/佢 (This mark will only be given when mark in ## is gained)	1
撈##	1
河馬/佢 (This mark will only be given when at least 1 mark in ^^is gained)	1
用繩/ 攞繩^^	1
綁實/ 綁住^^	1
小動物/ 佢地 (This mark will only be given when at least 1 mark in ^^ is gained)	1
Reaction	
佢哋/ 啲小動物 (This mark will only be given when mark in @@ is gained)	1
同河馬叔叔/ 同佢 (This mark will only be given when mark in @@ is gained)	1
對唔住@@	1
以後/ 下次/ 之後 (This mark will only be given when mark in ++is gained)	1
唔偷野食/ 唔偷蛋糕 ⁺⁺	1
Total	41

/ accept the alternative answers

[+] must include all suggested elements in the blanket to gain the mark

Appendix E

Coding System of Fictional Narrative (English Version)

	Score
Setting	
once upon a time/ one day	1
forest	1
animals/ [elephant+ mouse+ rabbit+ horse]	1
Initiating event	
hungry/ nothing to eat	1
horse (This mark will only be given when mark in # is gained)	1
[hippo+ cake] [#]	1
Internal response	
want to eat	1
Plan	
[decided/ thought/ said+ stealing the cake]	1
[mouse+ thought / said/ suggested]	1
chimney (This mark will only be given when mark in ^ is gained)	1
climbed into/ went into/ squeezed into Hippo's house [^]	1
Attempt	
mouse was the first one	1
rabbit+ held+ mouse+ tail	1+1+1+1
horse+ held+ rabbit+ ear	1+1+1+1
elephant+ held+ horse+ leg	1+1+1+1

into Hippo's house	1
mouse (This mark will only be given when at least 1 mark in @ is gained)	1
[took/ stole+ cake] @	1
[broke+ cup] @	1
Consequence	
Hippo (This mark will only be given when mark in + is gained)	1
discovered/ saw/ was awake/ opened the eyes ⁺	1
Hippo/ he (This mark will only be given when mark in ## is gained)	1
angry ^{##}	1
Hippo/ he (This mark will only be given when at least 1 mark in ^^is gained)	1
rope^^	1
bound^^	1
animals/them(This mark will only be given when at least 1 mark in ^^ is gained)	1
Reaction	
the animals/ they (This mark will only be given when mark in @@ is gained)	1
sorry ^{@@}	1
to Hippo/ to him (This mark will only be given when mark in @@ is gained)	1
wouldn't steal food / wouldn't steal the cake ⁺⁺	1
in the future/ next time/ from now on/ again (This mark will only be given when mark in ++is gained)	1
Total	41

/ accept the alternative answers

[+] must include all suggested elements in the blanket to gain the mark

Appendix F

An Example of Personal Narrative Scoring, *Participant 81, Aged 6;00*

Transcription and translation	Scoring
有一次同媽咪去公園玩	<i>Setting:</i>
跟住喺公園度唔小心跌親	有一次 (One time) 1
跟住仲瘀咗	媽咪(mother) 1
我就話俾媽咪聽我隻腳受咗傷	公園 (park) 1
跟住就返屋企搽啲藥膏	<i>Initiating event:</i>
跟住搽搽下就唔痛	喺公園度 (in the park) 1
無晒啲瘀喇仲	跌親 (fell down) 1
One time, played in the park with mother	瘀咗 (hurt) 1
Then fell down carelessly in the park	<i>Internal response:</i> 0
Then it was hurt	<i>Plan:</i> 0
I told mother that my leg was hurt	<i>Attempt:</i>
Then went home and apply ointment	話俾媽咪聽 (told mother) 1
Feeling not painful while applying ointment	我隻腳 (my leg) 1
It was not hurt anymore	受傷 (hurt) 1
	返屋企 (went home) 1
	搽 (apply) 1
	藥膏 (ointment) 1
	<i>Consequence:</i>
	唔痛 (not painful) 1
	無晒啲瘀 (not hurt) 1

	<i>Reaction:</i> 0
Total: 14	