

How Narrative Skills Associate With Peer Relations: An Empirical Study on Chinese Primary School Children

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ABSTRACT

Narrative skills are essential for children's social development. However, existing research primarily focuses on narratives' impact on children's cognitive abilities, with limited attention given to the relationship between narrative skills and peer interactions. This study aims to explore how oral and written narrative skills are associated with peer relations from a social perspective. 166 Chinese primary school children were randomly assigned to tasks of oral and written narratives, as well as peer nominations. Results indicate that grade 5 students performed significantly better than grade 3 students in both written and oral narrative tasks. Moreover, the level of written narrative proficiency surpassed that of oral skills. Significant interactions were also found among grade level, gender, and narrative modes. Crucially, narrative skills exhibited positive correlations with peer nominations, with stronger correlations seen for written narratives. These findings have important implications for narrative research and language instruction.

KEYWORDS

Children, Narrative Skills, Peer Relations, Social Development

Narrative, also known as storytelling, is defined as a description of the course and outcome of an event that could have happened, is happening, or will happen (Nystrand et al., 1997). It can be either based on the actual and fictional events, developed from the original content, or even a retelling of the narrator (Berger, 1997; Kim et al., 2018). Ubiquitous in our lives, narratives can either occur in dialogues or in monologues (Bamberg, 2012). A high-quality and well-structured narrative requires

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appropriate grammar, vocabulary, logic, empathy, and memory coherence (Adler et al., 2018; Akdağ & Erdiller, 2013). Thus, narrative skills are usually assessed through macro and micro dimensions. Macrostructure, also defined as the story grammar model (Mandler, 1979; Stein & Glenn, 1979), is the higher-order hierarchical organization of a narrative text (Heilmann et al., 2010). Macrostructural elements encompass a story's characters, time, place, events, actions, consequences, and mental representation (Sung, 2022). Microstructure, on the other hand, is represented by the more minor linguistic elements of syntax and semantics. Microstructure constituents include noun phrases, pronouns, and connectives (Gagarina, 2015). Commonly used assessing indicators of narratives are mean length of utterance (MLU), total number of words (TNW), number of different words (NDW), type token ratio (TTR), etc. (Boerma et al., 2016; Dahlstrom, 2012; Habermas et al., 2009; Reese et al., 2011).

Narratives can be further classified into two categories: oral and written (Fludernik & Ryan, 2019; Ravid & Tolchinsky, 2002). Oral narratives refer to the spoken discourse characterized by the transmission of culture in a way that conveys lived or imagined events to others (Bruner, 1990). By contrast, written narratives have a storage function which allows communication to cross time and space and transfer language from the verbal to the visual realm, thus allowing words and sentences to be presented outside their original context (Keane, 2013). Several factors have been identified to influence children's narrative skills, such as vocabulary (Wood et al., 2016; Souza & Cáceres-Asseņço, 2021), executive functions (Boerma et al., 2016; Kalliontzi et al., 2022), gender (Bigozzi & Vettori, 2015; Troia et al., 2012), socioeconomic status (Mozzanica et al., 2016), and culture (Khimji & Maunder, 2012).

It has been well established that children's narrative experience and skills increase with age (Westerveld & Gillon, 2009). Early studies show that children's oral narrative skills emerge at the age two or three years (Applebee, 1978) when toddlers begin to produce one- or two-event narratives (Roth, 2009). At the age of three to four years, children are thematically motivated with a simple list of events (Imai et al., 1994) but demonstrate an evident lack of application of significant events or sequential orders, identified as the leapfrog narratives (Gardner-Neblett & Iruka, 2015; Stadler & Ward, 2006). Despite the incoherent structures, children at this stage master narrating details from physical aspects of characters to some goal-related actions (Nicolopoulou & Richner, 2007). By the age of five years, with significant progress in conjunctions, verbs, and grammar (Curenton & Justice, 2004), children are able to construct more complex narratives (Kendeou et al., 2008) with a detailed representation of characters (Nicolopoulou & Richner, 2007). Yet, they rarely provide resolutions to their stories, even though they can end their narratives with a high point if they choose (Gardner-Neblett & Iruka, 2015). It is not until the age of six years that children begin to form comprehensive and coherent narratives with sufficient details, such as contextual information and complicating actions (Shapiro & Hudson, 1991; McCabe & Rollins, 1994). At this stage, their narratives are well-formed chronologically and culminate with a high point, an evaluation, a resolution, and remarks (Gardner-Neblett & Iruka, 2015). By the age seven years, children produce narratives with multiple episodes, and later, they gradually embed considerable details and complete the episodes (Crais & Lorch, 1994). Around the age of eight and nine years, children start integrating characters' mental states, such as false beliefs and contrasting points of view, into the plot (Veneziano & Bartoli, 2022). Hamilton et al. (2020) find that the grammatical complexity and propositional content of children's narratives increase from age nine years to 12 years.

Oral narratives may not align with written ones, while preschool children's oral narrative skills are found to be significantly predictive to their written narratives in grades one and two at primary school, with phonological awareness serving as the mediator (Pinto et al., 2015). Many scholars claim oral narrative skills serve as the foundation for the future development of written narratives (Babayigit & Stainthorp, 2011). Evidence shows that the oral narrative structure is significantly predictive to the narrative competence in written productions (Pinto et al., 2016). Moreover, Bigozzi and Vettori (2015) identify both continuity and discontinuity in the transition from oral to written

language, reporting a close connection between oral and written textual abilities when orthographic ability, such as spelling, is taken into account.

In spite of the great contributions achieved in the field of narrative research, the majority of previous studies concentrate on the cognitive factors relating to narratives, and very little is known about how children's narrative skills influence their social development. It is widely accepted that narrative skills not only relate to children's cognitive capacity, language competence (Norbury & Bishop, 2003), and academic achievement (Durlak et al., 2010) but also play an essential role in children's social behavior and social relations, in particular (Havidson et al., 2016). Corsaro (1992) claims that narrative, as a reflection of socialization process, provides a discursive basis for children's social interactions. An increasing number of studies reveal the robust connection between narrative coherence and social connections (Vanaken et al., 2021; Waters & Fivush, 2015). On the spectrum of social factors, peer relation is considered to be one of the most significant variables relating to children's social development; however, very few studies explore the association of narrative skills with peer relations of school children. So far, we have only found three relevant studies in this regard. To be specific, Dray et al. (2009) examines the relationship between children's social awareness and written narratives and finds that children's written narratives are positively associated with their ability to understand and negotiate intergroup relationships. More recent research from Davidson et al. (2016) presents a two-year longitudinal study targeting on 92 children's written narratives and peer experiences. The results indicate that written narrative skills in the first year of the study contributed to peer disliking, level of loneliness, and peer victimization in the second year. Apart from written narratives, a similar positive impact of oral narratives was also found on peer adjustments. The study by Davidson et al. (2013) on the conflicts of 198 third- to sixth-grade children shows oral narratives positively correlate with peer adjustments during middle childhood. Nevertheless, all the aforementioned studies only examine the single narrative mode among the speakers of alphabetic language. Almost no studies explore the possible different impact of oral and written narratives on peer relations under Chinese school context.

PRESENT STUDY

To sum it up, there is a clear lack of empirical studies investigating the oral and written narrative skills simultaneously and how they are associated with children's peer relations from a social perspective. Naturally, answering this question becomes the major objective of the present study. Given the different developmental pattern between oral and written narrative skills, we hypothesize that there will be significant age and gender differences between oral and written narratives levels. Moreover, oral narratives will have more significant impact on children's peer relations than written ones since oral communication serves as the most common way for children's social interactions. Specifically, the following two questions will be addressed:

RQ1: Are there any age and gender differences between written and oral narrative skills of Chinese children?

RQ2: To what extent do Chinese children's narrative skills associate with their peer relations? Are there any differences in the effects of different narrative modes on peer relations?

METHODS

Participants

A total number of 166 children participated in this study. Eighty-three students were from third grade (Mean = 8.95, SD = 0.58, Male = 39, Female = 44) and 83 students from fifth grade (Mean = 10.73,

SD = 0.57, Male = 49; Female = 34). They were all normally developing, Mandarin-speaking children who were randomly selected from a public primary school in southeast China.

Measurement

Written and Oral Narrative Tests

The written and oral narrative tests were adapted from Davidson et al.'s (2016) narrative measures designed to examine children's social and narrative skills. Participants were required to complete personal written and oral narratives on the theme concerning peer engagement on the playground, in which children were expected to narrate how they planned to join the ongoing activity and get acquainted with unfamiliar peers. The length of their narratives was limited to 300 words/3 minutes for the third graders and 400 words/5 min for the fifth graders. To ensure the test's reliability, the task's difficulty level was assessed by two Chinese language teachers from the school, who were blind to the research hypothesis.

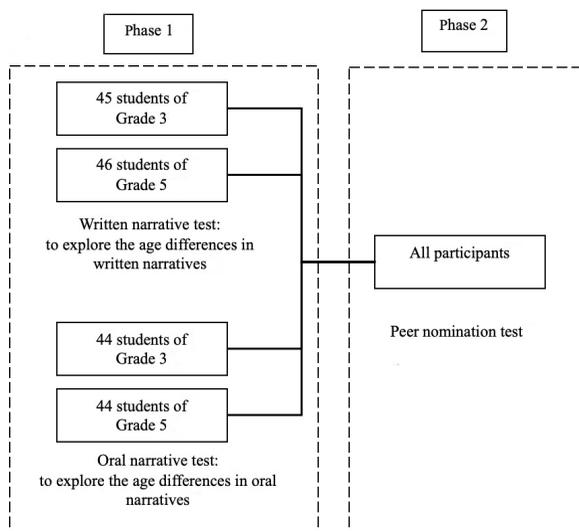
Peer Nomination Task. The peer nomination task of this study was used to measure each participating child's peer relationship according to the negative and positive nominations received from others (Davidson et al., 2016).

Research Procedure

As shown in Figure 1, the experiment included two phases. In the first phase, students were divided into two groups in each grade to participate in oral or written narrative tests. In the second phase, all children were administered into the peer nomination task.

Phase 1 Written and Oral Narrative Test. The written and oral narrative tests were conducted in a quiet classroom, proctored by the head teachers. Before the task, all participants were provided detailed instructions to make sure each of them obtained a good understanding of the theme and task requirements. Then, the written narrative group was given 40 minutes to write a story. After they finished the test, the worksheets were collected. In contrast, the oral narrative group was given four to five minutes for preparation and was then required to produce a story individually. Their oral responses were recorded and transcribed for the final grading.

Figure 1. Research Procedure



Phase 2 Peer nomination. After the narrative tests were completed, all participants were administered into a peer nomination task. First, a peer nomination form containing a list of names of all the students in the class was given to each participant with instructions to circle the names of three classmates they like most and another three they dislike the most. After completion, all nomination forms were collected and coded by the two experimenters independently. Each positive and negative nomination was given one positive and negative point, accordingly. Peer relationship was calculated as the absolute value of positive and negative nominations received by each participant. The total number of positive and negative nominations received was coded as the degree of attention from peers.

Coding

The participants' oral and written narratives were coded and graded with four dimensions adapted from Davidson et al. (2016). In conjunction with the tribute evaluation criteria, this study added two emotional-attitudinal latitudes of motivational prediction and moral concern apart from micro and macro structure evaluation. As shown in Table 1, the macro and microstructure dimension involved 13 marking indicators for the assessment of the children's written narrative skills and 15 for oral narrative skills, among which the last two were used to assess oral clarity and fluency. Each of these indicators had a five-point scale (e.g., 5= conformance; 1= no conformance), while the two indicators for moral concern and motivational prediction were scored by capturing the number of relative keywords and phrases produced by the children in their narratives (e.g., he or she wants, I guess, I think, it shouldn't be/should be like that). There was no upper limit to the number of awardable points; the summaries of each indicator were shown as below. To ensure inter-rater reliability, all data was evaluated by two experimenters separately. The Cohen's Kappa coefficient value was found to be 0.916 for the written narratives and 0.88 for the oral narratives, higher than 0.85, indicating almost perfect agreement between the two raters. SPSS 28.0 was used for quantitative analysis.

DATA ANALYSIS AND RESULTS

Oral and Written Narrative Skills of Chinese Primary School Children

A two-way analysis of covariance (ANCOVA) was conducted to explore the potential effects of grade and gender on narrative skills with written and oral narrative skills as dependent variables, grade and gender as between-subject factors, and the age (month) as covariate.

As shown in Table 2, there are significant main effects for grade/age, $F(1, 157) = 17.09, p < .001$; gender, $F(1, 157) = 5.53, p < .05$; and narrative mode, $F(1, 157) = 17.07, p < .001$. Additionally, a significant interaction is found between grade, gender, and narrative mode, $F(1, 157) = 4.2, p < .05$. Specifically, fifth graders performed better in both written ($M = 41.53, SD = 5.14$) and oral ($M = 42.43, SD = 8.34$) narratives, compared to third graders (written: $M = 33.05, SD = 6.34$; oral: $M = 37.02, SD = 5.69$). Girls ($M = 36, SD = 7.32$) outperformed boys ($M = 34.48, SD = 7.20$). Additionally, children's written narrative skills ($M = 37.18, SD = 7.16$) were significantly higher than their oral narrative skills ($M = 33.25, SD = 6.89$).

As shown in Table 3, the total number of positive and negative nominations (the average degree of attention) received by fifth graders is higher than that of third graders; however, the average score of peer relations of the third graders is higher than that of fifth graders. In addition, girl students demonstrate a higher level of positive peer relationship and degree of peer attention than the boy students.

With regard to the grade-gender-narrative mode interaction, girl's oral and written narrative skills increased with age at a similar rate, with written narratives better than oral ones (see Figure 2a). Unlike girls, boys in third grade had better oral narrative skills than written ones, but their written narrative skills developed faster, gradually surpassing oral skills as they grew older, opening up a more

Table 1. Coding Criteria for Written and Oral Narrative Skills

Dimensions	Indicators	Grading Rules
	The Beginning	At the beginning of the story, children are able to provide a clear indication of why and where the story began.
	Development	The main part of a story is when the child can clearly describe the story's main plot.
	The End	At the end of a story, the narrator gives a clear ending to the story based on the material.
Macro Structure	Structure	A narrative contains all the elements of a story, tells a complete story in detail and logically, and organizes the content well.
	Theme	More than four sentences in a row to maintain the consistency and relative continuity of the story thread; The ability to connect events and ultimately form a thread; Rarely deviates from the story's development. *Please add an asterisk if the story is particularly long.
	Coherence of Logic	A. Horizontal juxtaposed structure, which combines several events that simultaneously reflect a center into a full text, either by time or by space or by nature or by the combination of the above. B. Longitudinal progressive structure method. The arrangement of several things or features of things into a progressive logical relationship. For example, writing about a person's emotional changes.
	Coherence of Time and Space	Use more complex time tokens, such as logical conjunctions to indicate the temporal relationship between events (formerly, later, until... For a while, then, etc.) and use time adverbs to indicate when the event happened (evening, the next morning, many years ago, etc.).
	Coherence of Plot	Children point out the issues that drive the story (good versus bad, good versus evil); Able to identify several different roles and establish relationships for them; Describe in detail the character's cognitive, emotional, and physical states.
Microstructure	Vocabulary	Children use a wide range of words, including adjectives and adverbs, and use descriptive and emotional words.
	Grammar	The narrator uses simple and complex sentences. Sometimes use function word combinations. Complex sentences present juxtaposition, undertaking, causation, transition and so on.
	Tone of Narrative	Children use a narrative tone to explain, illustrate or add details to the story. Making judgmental, contrasting comments, using similes or metaphors, commenting on the story; or a combination of them.
	Dialogue	There's a lot of dialogue in the story, and it lasts a few sentences; The dialogue between the characters is meaningful, containing thoughts, emotions, and information.
	Clarity (only for oral)	Whether the narrator speaks clearly in the process of telling and whether the listener can accurately obtain the information expressed by the narrator's voice signal.
	Fluency (only for oral)	Does the narrator speak in a rhythmic, smooth manner, without excessive pauses, repetitions, prolonged voice, etc., while telling the story?
Motivational Prediction		Children can clearly predict and perceive the behavioral motivation and mental state of others. Include at least one sentence about the main character's goal, reason, or desired outcome. For example, "I tried to walk away, but I wanted my ball back." Keywords can be "I want," "I decide to do something," "my wish is," "I wish," etc.
Moral Concerns		Children develop empathy for others or think from the perspective of others. Understand other people's behavior, and figure out the psychological state and meaning behind their behavior. Relevant phrases include moral auxilia (e.g., should, should), explicit statements of rules (e.g., "It is forbidden to run in the hallways."), use of terms of moral evaluation (e.g., guilt, pride), or explicit moral expressions (e.g., "Teach him a lesson.").

Table 2. Descriptive Statistics of Children's Written and Oral Narrative Skills

Narrative Skills	Grade	N	M	SD	Gender	N	M	SD
Written Narrative	3	42	33.05	6.34	F	22	35.5	5.69
					M	20	30.35	6.04
	5	40	41.53	5.14	F	17	42.35	5.85
					M	23	40.91	4.59
Oral Narrative	3	41	37.02	5.69	F	22	30.36	5.51
					M	19	31.21	4.53
	5	44	42.32	8.34	F	17	37.59	7.18
					M	26	34.35	7.73

Table 3. Descriptive Statistics of Peer Nominations and Peer Relations

Peer Nominations	Grade	N	M	SD	Gender	N	M	SD
Peer Relations	3	83	0.46	6.05	F	44	1.48	2.62
					M	39	0.69	8.29
	5	84	0.33	6.36	F	34	1.97	3.3
					M	50	0.78	7.62
Degree of Concern	3	83	5.23	4.69	F	44	3.7	2.02
					M	39	6.95	6.09
	5	84	5.8	5.38	F	34	4.56	2.63
					M	50	6.64	6.53

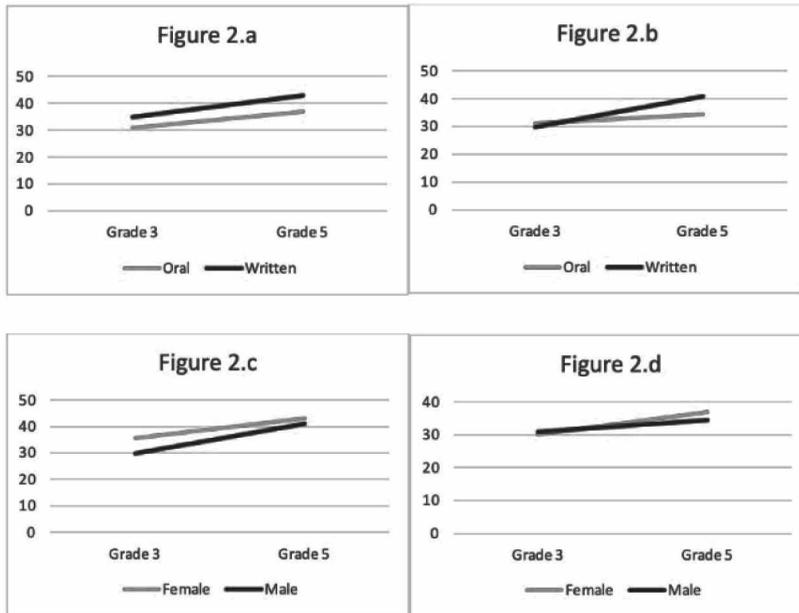
significant gap by grade five (Figure 2b). In addition, even though girls had better written narratives than boys in both grades, boys demonstrated higher increasing rates than girls (Figure 2c); whereas boys' oral narrative skills were slightly higher than girls' oral narrative skills in grade three, but girls' performances exceeded boys performances in grade five (Figure 2d).

Correlation Between Narrative Skills and Peer Relations

Pearson Correlational Analysis was conducted to analyze the correlations between oral and written narrative skills and peer relations. As shown in Table 4, the oral narrative skills significantly correlated with the positive nomination ($p < .01$) and peer relations ($p < .05$) but not with the negative nomination ($p > .05$). Specifically, the oral micro-narrative and macro-narrative skills significantly correlated with the positive nomination ($p < .01$), but not with negative nomination ($p > .05$). Besides, oral micro-narrative skills significantly correlated with peer relations ($p < .05$).

The total written narrative score positively correlated with both the positive nomination and peer relations ($p < .01$). However, the total written narrative scores were not associated with negative nominations. Besides, written micro-narratives positively correlated with the positive nomination and peer relations and negatively correlated with a negative nomination ($p < .01$), while written micro was positively associated with motivational prediction ($p < .05$) but not with moral concern ($p > .05$). Out of our expectations, written narrative skills were found to have higher correlations with peer relations than oral ones (0.31 vs 0.23)

Figure 2. The Interaction Between Grade, Gender, and Narrative Modes. (a) the difference in scores for females using different narrative modes in different grades; (b) The differences in scores for males using different narrative modes in different grades; (c) The performance of different graders and genders under the oral narrative mode; (d) The performance of different graders and genders under the written narrative mode.



General Discussion

This study aims to explore the connections between narrative skills and peer relations among Chinese primary school children. The results yielded two key findings which are of theoretical and practical significance to the narrative research and language teaching.

First, Chinese children's narrative skills generally improve with age. This result is generally consistent with the findings of some previous studies that children's narrative skills develop over times with increasing complexity, vocabulary, and story length (Hao et al., 2018; Sung, 2022). However, unexpectedly, the level of written narrative skills is significantly higher than that of oral ones, which is found to be fundamental and predictive to the development of written narratives (Babayigit & Stainthorp, 2011; Pinto et al., 2015). This result is also counter to the findings of the study on the children with language/learning impairment and low IQ (Fey, et. al., 2004; Gillam & Johnston, 1992). As a response, we believe it could be related to the discrepancy between normal and special educational needs (SEN) children who have been found to demonstrate significant difficulty and delay in written language production (Lane & Lewandowski, 1994; Mackie et al., 2012; Wright, 2018). Second, it could be attributed to the unique Chinese primary school system and curriculum which puts emphasis on children's writing and literacy skills rather than their oral competence. Such priority would result in the advantage of written narratives over oral ones. In addition, the cultural difference in social communications should be considered. Unlike the primary school children in western countries, Chinese students were usually reluctant and shy to orally express their ideas in front of the public due to the concern of their faces (Littlewood, 1999; Shao & Gao, 2016). Last but not the least, the better performance in written narratives may also be related to different testing conditions and requirements between the oral and written tasks. Obviously, the former was more improvised than the latter due to the fact that the participating children were only given five minutes to prepare before they were required to tell the whole story. Although the same period of time was

Table 4. Correlation Between Children's Narrative Skills and Peer relations

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	9.84	1.06	-											
2. Positive nomination	3.04	2.4	0.03	-										
3. Negative nomination	2.54	5.12	-0.07	0.28**	-									
4. Peer relations	0.4	6.19	0.067	0.60**	0.92**									
5. Degree of concern	5.51	5.04	-0.06	0.18*	0.89**	-0.66**	-							
6. Motive Prediction	1.04	1.28	0.26**	0.12	-0.03	0.08	0.02	-						
7. Moral concern	1.18	1.29	0.14	0.16*	-0.03	0.08	0.04	0.47**	-					
8. Macro-narrative	29.11	6.21	0.38**	0.35**	-0.14	0.26**	0.03	0.18*	0.12	-				
9. Written micro-narrative	6.13	1.37	0.25**	0.43**	-0.16*	0.31**	0.04	0.16*	0.11	0.73**	-			
10. Oral micro-narrative	12.24	2.3	0.2	0.42**	-0.05	0.23*	0.19	-0.04	0.1	0.67**	0.82**	-		
11. Total score of Written narrative	35.23	7.27	0.37**	0.38**	-0.15	0.28**	0.04	0.18*	0.12	0.99**	0.81**	0.74**	-	
12. Total score of Oral narrative	39.76	7.62	0.31**	0.38**	-0.05	0.22*	0.16	-0.04	0.04	0.97**	0.76**	0.82**	0.97**	-

* $p < 0.05$, ** $p < 0.01$

given to the preparation of written task, writing was not as spontaneous as telling, and children could revise and modify what they wrote within the time limit. Therefore, the oral narrative task was more cognitively demanding and challenging to the Chinese children.

In addition, the results reveal significant interactions between grade, gender, and narrative mode. Consistent with our hypothesis, girls demonstrate significantly higher narrative skills than boys, which partially verify the findings of previous studies that female's recollections are more vivid and specific than male's (Belfi et al., 2016; Fivush & Zaman, 2013), and girls report more detailed, accurate, complex, and evaluative personal narratives than boys (Denham et al., 2010; Grysman & Hudson, 2013; Schwarz, 2011). One of the plausible explanations could be the gender difference in preference to or familiarity with the narrative topic or content. There is evidence that girls prefer to share memories during conversations to promote intimacy (Elmir et al., 2011; Schwarz, 2011), while boys favor recalling past successes (Elmir et al., 2011). Therefore, the narrative task on how to join the group activity as a new student could be more familiar to girls than to boys. However, it was not reported previously that girls' oral and written narrative skills increase at a similar rate, with written narratives always being better than oral ones, but boys show better oral narrative skills in grade three, but these are gradually surpassed by written skills, which develop faster. This result suggests that, compared with girls, boys demonstrate higher increasing rates in written narratives than girls, who make more rapid progress in oral narratives than boys. Given that the present study only investigates children between eight- and 10-year-olds, the gender difference in narrative developmental pattern needs to be verified by further longitudinal studies with more age groups involved.

The most important contribution this study makes is a deepening of our understanding of the relationship between narrative skills in different modes and how they are associated with peer relations among children in middle childhood. From an oral narrative perspective, oral micro-narratives are positively correlated with both positive nominations and moral concerns. This suggests that children who receive more positive nominations usually have better oral expressions, logical thinking skills, and spatiotemporal narrative awareness, which may facilitate their narratives through correct grammar, rich vocabulary, and dialogue. In addition, they are usually able to make more reasonable moral judgement, which may help them gain favorable comments from their peers. This is partially supported by Davidson et al. (2016) in their study that children's motivation to focus on oneself and others in narratives and their attention to the moral significance of story events are always the best reflections of their social cognitive skills during middle childhood.

The study also finds that oral micro-narratives are positively correlated with peer relationships, confirming that children who are better at oral narratives usually have better interpersonal relationships. Actually, similar positive associations of either oral or written narratives with peer experience and adjustment have been reported by other studies before (Davidson et al., 2013; Dray et al., 2009; Davidson et al., 2016), suggesting that a good command of narrative skills may contribute to peer relations and friendship. However, oral micro-narratives are not associated with negative nominations, which would imply that children who receive more negative nominations are not necessarily poor verbal narrators, but that their unpopularity may be influenced in a large part by personality or other factors, rather than the ability to predict motivation or make proper moral judgments relating to their narrative skills. Moreover, both oral macro and micro-narratives are positively correlated to motivational prediction but not to moral concern, which means that children with strong oral and logical thinking skills are better at predicting or perceiving others' intentions instead of making moral judgments about others. It may also suggest that children who complete moral judgments well might not necessarily demonstrate good narrative skills and vice versa.

It is worth noting that some results do not verify our hypothesis. Among the rest, positive nomination, negative nomination, and peer relations are not correlated to motivational predictions and moral concerns. This implies that children may become popular due to better eloquence and personality rather than good perception of others' psychological intentions and motivations. This finding is inconsistent with the results of a study carried out by Davidson on native English-speaking children (2016). The possible reason may be that some children prefer selecting aggressive behavior as a way of seeking respect, leadership, and power within a group of peers, which may lead to bullies being noticed and admired (Yoneyama & Naito, 2003). Alternatively, there might be some other children who chose to engage in aggressive behavior as a preventative strategy in such a way as to avoid future victimization or rejection.

From the written narrative perspective, the total written narrative score is positively correlated with both the positive nomination and peer relations, suggesting that the better the child's written narrative skills are, the more often they are likely to be liked. However, total written narrative scores are not associated with negative nominations. As a response, we assume that there must be some other underlying factors which may influence children's popularity on one hand. On the other hand, low written narrative skills do not preclude children from having good written narrative skills, despite the high number of peer rejections. Further analysis reveals that written micro-narratives are positively correlated with the positive nomination and peer relations and negatively correlated with a negative nomination, which indicates that children who present stories with richer vocabulary, syntax, and dialogue in their narratives are more favored by their peers and, conversely, children with poor written narratives are more likely to be disliked by their peers. Similar to the oral narratives, written micro is positively associated with motivational prediction but not with moral concern, suggesting that children apt in grammar, syntax, and dialogue have better motivational predictions, but their moral judgment and evaluation skills may be less related to their narrative skills.

It is quite interesting to find that written narrative skills have higher correlations with peer relations than oral skills. In fact, this is against common sense, since oral communication, which has long been considered to be the most frequently used means of communication for children engaging in social interactions (Crais & Lorch, 1994; Diez-Itza et al., 2018), should exert more influence on peer relations than written narrative skills. A more plausible explanation might relate to the unique Chinese social and cultural reality. Unlike western children tending to talk more about the details of their experiences, Chinese children are more concise in their narratives (Han et al., 1998). Since Chinese children, like many other Asian counterparts, are deeply influenced by Confucianism, they are usually discouraged from orally expressing themselves excessively (Sok & Shin, 2023). This is coupled with the fact that, in collectivist societies, people espouse value of altruism more than people from individualist societies do (Chan, 2004). The above phenomenon is also reflected in the content of children's narratives in this study. We found that many children made highly uniform comments about the qualities of their friends: helpfulness, kindness, and other altruistic qualities, which means that they chose their friends based on the qualities that collectivist culture values. However, children in the western countries may be more inclined to focus on whether they have common hobbies, humor, fairness, etc., which is supported by a comparative study reporting that Australian children performed better than Chinese counterparts in inferring the emotional state of others, given that the external behavior and self-control of individuals are more valued in Chinese culture (Wang et al., 2021). Consequently, during the oral communication among Chinese children, the internal mental states of individuals need to be suppressed since being socially divergent is considered inappropriate for social interactions. This may explain why the children in this study are more capable of orally narrating their stories when making moral evaluations but less competent when inferring and speculating about others' motives and mentality, thus greatly undermining the relationship between oral narratives and peer relations.

CONCLUSION

This study aims to explore Chinese children's narrative skills in different modes and how they are associated with peer relations. It yields two key findings. First, Chinese children's written narrative skills are generally better than oral ones. In addition, there are significant interactions between gender, grade, and narrative modes. Second, Chinese children's narrative skills are positively correlated with their peer relations, but written narratives are found to be more significantly correlated with peer relations than oral narratives. The findings of this study have important theoretical and practical implications for narrative research and language teaching. As the first study to investigate the Chinese school-age children's written and oral narrative skills at the macro, micro, and moral/affective-attitudinal levels, it reveals the connections between peer relations and narrative skills in different modes, thus highlighting the importance of narrative teaching not only in children's academic achievement, but also in their social and communication skills, especially for those children with low narrative skills and poor peer relations.

In spite of the above contributions, this study inevitably has limitations to be coped with in the future. First and for most, the potential factors such as isolation, empathy, prosocial behavior, and bullying were not taken into account, which have been found to be significant variables in children's peer relations (Schoeps et al., 2020). Therefore, future studies should be carried out to put these factors into consideration. Second is about the narrative task adopted in this study with only peer acceptance as the theme. Future studies should incorporate more themes into the tasks (e.g., peer conflict) so as to improve the validity and reliability of the research findings.

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