

Children's Story Reading: Its Effects on the Predictability of Reading and Writing in Pre-Academic Children

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Abstract

The term 'predictability of reading and writing' refers to the knowledge and skills that pre-academic children acquire to "read" and/or "write" in the reading and writing events they are familiar with. The aim of this study was to expose pre-academic children to two different conditions of short story reading and to identify their differential effects on the predictability of reading and writing. Thirty children with a median age of 50 months participated in the study, divided at random in four groups by the type of intervention: GE1 (listening to the reading of the same short story), GE2 (listening to the reading of five short stories, a different one in each session), each one of them with its own control group (CG1 and CG2, manipulating the short story(s) heard by the corresponding experimental group without listening to them). Our results show that after the intervention participants in the experimental groups had a better performance than those in the control groups in including the basic elements of a story, the conventionality of their scribbles, and the complexity of the sentences used to retell the story. The differential effects of the type of exposure to the stories on the predictability of reading and writing are discussed.

Keywords: predictability of reading and writing, pre-academic children, children's stories, short story reading and writing

1. Introduction

Literacy is defined as the functional mastery of spoken and written language, including speaking and understanding other people's speech, as well as reading and writing, since both linguistic modes are in close relationship (Morrow, 2009). The development of literacy begins at an early age: children acquire knowledge about different aspects of spoken and written language that are necessary for the acquisition of conventional reading and writing skills (formal literacy). The reading and writing knowledge, behaviors and skills that children develop in their pre-academic years is known as initial literacy. Such development is made possible because adults (and older children) usually interact linguistically with younger children, and bring them into contact with written materials that allow the children to notice conventional aspects of reading and writing (directionality, characteristics, uses), as well as find relationships between the two modes of language; that is, learn that what is written in letters corresponds to what is said in spoken words (Guevara & Rugerio, 2014). Ferreiro and Teberosky (2007) distinguish three different levels or approaches that children show in their development towards literacy: (1) the pre-syllabic level, when they can tell the drawing apart from the writing, (2) the syllabic level when they can understand that different chains of letters mean different things, and (3) the alphabetic level, when they establish relationships between sounds and letters.

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However, reading does not consist only of recognizing graphic signs (deciphering). It is an interactive process of communication in which a relationship is established between a text and a reader, who makes sense of the contents of a written text according to his or her knowledge and experiences. During his development as a reader, the child must first be able to understand words, then phrases and sentences, and finally narrative texts. In each one of those stages of learning to read children make use of their linguistic skills and knowledge to anticipate, as they read, what they suppose that is written; that is, they make “predictions that guide their search as their eyes move over the printed material” (Mexico’s Ministry of Public Education, 2015, p. 65). Thus, it is extremely important that pre-academic children have contact with written materials, and especially with narrative texts such as illustrated children’s stories. It is also necessary that those who read them the stories perform different actions that allow the children to discover the relationship between the spoken words, the written text, and the illustrations; e.g., pointing at the text as they read it so that the children become familiar with the letters and conventional aspects of written language, as well as encouraging the children to appreciate the illustrations.

Continuous interactions with stories read to them allow the children to develop their skills to understand and produce narratives, as well as to make predictions about the contents of a story, and enable them to incorporate formal aspects of the written language in their approaches to reading and writing. These aspects are closely linked to the subsequent development of formal literacy (López, Duque, Camargo, & Ovalle, 2014) since, thanks to continuous exposure to literacy-building stimuli, children “anticipate” the forms and functions of reading and writing a language (Goswami, 2001; Guarneros, 2013; Scarborough, 2002), which contributes to their successive approaches to mastering formal aspects of the written language. The term ‘predictability of reading and writing’ (Harste & Burke, 1982/2013) has been defined as the knowledge and skills that pre-academic children (i.e., those who have not been exposed to formal training in reading and writing) acquire to “write” and/or “read”. Predictability is a central feature of the linguistic system, and it refers to the relationship that children, as active language users, establish between a context and a text, the skill they acquire to “read” or “write” in the linguistic situations they are familiar with through their previous interactions with them, without having been exposed to formal training for that purpose. According to several authors (Bravo, Villalón, & Orellana, 2003; Guarneros, 2013; Teale & Sulzby, 1989), children live in an environment that is full of written signs, thanks to which they begin to predict some of the conventions of reading and writing long before they start school.

Authors such as Goodman (1985), Goodman (1991, 1992) and Harste and Burke (1982/2013) have pointed out that, in order for the predictability of reading and writing to occur, the exposure to literacy-building stimuli must be continuous and must take place in real situations (it must be part of the children’s everyday life). It must also be informal; i.e., its outright aim must not be to teach children to read and write. Children learn about reading and writing through their interaction with their functional uses in a particular and situational context. An example of this was shown in the study conducted by Goodman (1985), who found that children could identify popular logos of stores (e.g., McDonald’s), products (e.g., Coca-Cola) and toys (e.g., Fisher Price), and were able to discern that the message was in the printed sign and not in the image, since when they “read” they pointed their finger at the text, not the image. Researchers Romero, Ortega and García (2013) have reported that pre-academic children can only predict the reading of words with which they have had more experience, like their names and the names of relatives or acquaintances, as well as words in signs on their classroom walls.

However, few studies have analyzed the predictability of reading and writing in the sense originally meant by Harste and Burke (1982); that is, under the assumption that children can learn the functions and forms of reading and writing by being exposed to different texts in a particular context, without having received specific training for that purpose. Besides, the few reports available are often anecdotal and not systematic, which has resulted in a lack of clarity in this area. In their study, Harste and Burke (1982) asked a group of pre-academic children aged three to six years old to write a story and read it. They found that the children, in spite of not being able to read and write, showed some knowledge of the conventions of the written language: they “wrote” and “read” their story according to the criteria of their cultural environment (from left to right and from top to bottom, simulating lines, and even using some of the most common letters in the English language), and following the basic structure of stories (setup, development, and ending).

Then they asked the children to write a short letter to another person and read it. Harste and Burke identified similar features in these letters, but the children’s scribbles were more conventional. At this stage the children “wrote” their name or the name of a relative (a similar finding to the one reported by Romero et al., 2013), and when they “read” what they had “written” they mentioned the basic elements of a letter: addressee, message, and sender.

On the other hand, Purcell-Gates (1988) analyzed if pre-academic children could identify differences between a narration and a story, and asked her participants to narrate an event they had experienced and to read a story. She found that although the children were not able to read conventionally they showed some knowledge of the written language, because their verbal expressions were different when they narrated an event and when they “read” a story, both in the vocabulary they used and in the syntax of their phrases and sentences. Such findings show that many aspects of written language are not learnt only at school, but that a great deal of the training for the conventional use of the written language may actually occur through the interaction between the child and active users of reading and writing at home (Purcell-Gates, 1996; Teale & Sulzby, 1989; Vega & Rocha, 2008; Whitehurst & Lonigan, 1998), which may be as important as, or even more important than, similar interactions at school. Research evidence in this area shows that the inclusion of children in reading and writing activities before they begin their formal education promotes the development of different skills and knowledge associated with the functions and conventions of printed texts, as well as their comprehension. These activities have also been reported to help children to improve their vocabulary and use of grammatical structures, to acquire greater confidence as readers, to learn to identify letters, to see reading and writing as an entertaining and gratifying practice, and to become familiar with the features of the written language, all of which lays the foundations for the formal learning of reading and writing (Braslavsky, 2000; Correa, 2009; Vega & Macotela, 2005).

Children’s stories, the texts for children par excellence, are brief narratives that tell a fictional story with a small group of characters and a plot that is relatively simple and therefore easy to understand. They consist of a series of clearly structured elements: the setting of the story and its characters (introduction, or set-up), a central event (development), and the resolution of the situation (dénouement, or ending). Besides, the images they contain give hints on the contents of the text, which may contribute to the predictability of the reading. Because of these features, children’s stories are considered to be “an excellent pedagogical aid to stimulate the development of the values and the teaching of the mother tongue” (Correa, 2009, p. 92) in pre-academic children. Despite its usefulness as a pedagogical strategy to introduce children to reading and writing, no studies have been found that employ the reading of stories as a way to foster specifically the predictability of reading and writing in pre-academic children. For this reason, the aim of this study was to expose pre-academic children to two different conditions of story reading and to identify their differential effects on the predictability of reading and writing.

2. Method

2.1 Participants

Thirty children (nineteen boys and eleven girls) with a median age of fifty months who went to a public pre-academic in Guadalajara, Mexico participated in the study. The inclusion criteria were the children’s age (between forty three and fifty eight months old), not having had any formal training in reading and writing, not having disability that might impair their performance, not having established relationships between sounds and letters, which placed them on a pre-literate stage of development (following Ferreiro & Teberosky’s, 2007 categorization), and their parents’ consent for their participation in the study.

2.2 Instruments and materials

Four questionnaires were used for the initial evaluation phase: (1) a Basic information questionnaire, which asked parents some of their children’s personal data: full name, age, if they had been in a nursery, if they had previously participated in any similar study, and if they had any disability that might impair their performance; (2) the Literacy-building activities questionnaire for parents and caretakers (Vega, 2001), aimed at finding out about reading habits, as well as literacy-building materials available, at home: what type of materials they were, how they were used, and how often; (3) a questionnaire for the children, designed specifically to identify the reading and writing practices at home, and (4) a questionnaire for the children, designed specifically to learn about the history of the participants’ interactions with children’s stories in general and with the stories used in this study in particular.

For the intervention phase, we used the *Cuentos Inolvidables* (Unforgettable Stories) collection of the *Cuentos Clásicos* (Classic Tales) category, in the formative area of Language and Communication of publisher *Grupo Editorial García*, which consists of six stories: *Blancanieves* (“Snow White”), *Bambi*, *La Cenicienta* (“Cinderella”), *Pulgarcito* (“Tom Thumb”), *Alicia en el país de las maravillas* (“Alice in Wonderland”) and *La casita de chocolate* (“The Chocolate Cabin”), all printed on coated fine paper, with 16 pages with colorful images and text in most pages. The texts were chosen because in all of them, the different sections of a story – introduction, development, and dénouement – are clearly delimited, and each one of them describes clearly the personality traits of three characters considered as the main ones. We also used size 2 pencils and bond paper sheets for the children to write, 19 cm by 7 cm white cards protected by a transparent plastic cover and printed with size 120 black Century Gothic font letters, with one correct and six incorrect versions of each child’s name (with changed, added-on and/or omitted letters) for the participants to identify which card had his/her name written correctly, a smartphone to make audio recordings of the interviews with each participant, and a Nikon Coolpix L830 video camera to film the pre-test and post-test phases.

2.3 Design

The experimental design consisted of four phases: initial evaluation, pre-test, intervention, and post-test. Participants were randomly distributed in two experimental groups and two control groups (see Table 1).

Table 1 Experimental design used

Initial evaluation	Group	Pre-test (one session)	Intervention (five sessions)	Post-test (one session)
Interview with parents and children	EG1 n=8	Writing a story Reading that story	Listening to the reading of the same story	Writing a story
	EG2 n=8		Listening to the reading of 5 stories (a different one in each session)	
Identifying their name	CG1 n=7		Manipulating the same story heard by EG1, without having it read to them	
	CG2 n=7		Manipulating the 5 stories heard by EG2 (a different one in each session), without having them read to them	

Keys: EG1 = Experimental Group 1, EG2 = Experimental Group 2, CG1 = Control Group 1, CG2 = Control Group 2.

2.4 Procedure

The school authorities were contacted to explain to them the characteristics of the study and obtain their permission to conduct it. The parents were then called to ask for their voluntary participation, explaining to them that all data would be treated with utmost confidentiality and used for strictly academic purposes. They were also asked to authorize their children’s participation in the program’s activities. Due to the nature of the study, all the activities were conducted individually. The initial evaluation phase was divided in three parts. The first part consisted of an interview with each child’s father or mother, through the application of two questionnaires to collect information about their child, the reading and writing activities conducted at home, and the materials available at home for these activities. The second part was an interview with each one of the children themselves, in which they were asked questions about the reading and writing materials and activities they had at home and if they could write letters, their name and/or other words, in which case they were asked to write them on a piece of paper. In the third part the children were given seven printed cards, one with their name written correctly and six with their name written incorrectly, and they were asked to identify which one of them showed the correct way to write their name.

In the pre-test phase, each participant was asked to write a story, and then to read the story just written. The intervention phase consisted of five five-minute long sessions with the children, conducted individually but differently depending on which group they had been assigned to for the study: the children in Experimental Group 1 (EG1) were read the same story once in each one of the sessions, the children in Experimental Group 2 (EG2) were read a different story in each session, the children in Control Group 1 (CG1) were given the same story as those in Experimental Group 1 but it was not read to them, and the children in Control Group 2 (CG2) were given a different story in each session, the same one as the one heard by children in Experimental Group 2, but it was not read to them. In each session with the experimental groups, the reader-researcher and the child sat down next to each other and the book was placed between them so they could both look at it at the same time.

The reader began by saying the name of the story and then read it slowly, pointing at the text being read so that the child could become familiar with the letters and the conventional aspects of the written language, as well as appreciate the illustrations. The session ended when the whole story had been read, and then the post-test was applied in the same way as the pre-test.

3. Results

The audio and video recordings made during the individual interviews with the children were transcribed and tested for reliability. Two independent reviewers checked that all the transcriptions were complete and accurately written. In case of disagreement regarding the contents of any of the transcriptions, it was reviewed for a second time for full agreement. The interviews with the parents about reading and writing activities at home with their children obtained the following results: 60% of them reported having between 6 and 10 reading materials, and 76.7% that they had children's stories. Only 30% reported doing reading activities more than once a week. 70% of the households had between three and five writing materials, especially coloring books, paper, pencils, and crayons. The practices directed towards writing took place more often than those directed towards reading: 63.33% of the parents reported doing more than one writing activity per week. On the other hand, 70% of the parents mentioned that their children knew between three and five stories, with the most common being Snow White, Cinderella and Alice in Wonderland (80%, 66.67% and 46.67%, respectively), and reported that their children knew what a story was and what distinguished it from other texts (e.g., newspapers, letters, etc.). The parents' answers enabled us to identify that their children had learned about the stories mainly through films (70%) and, to a lesser extent, books (53.33%).

The information obtained through the interviews with the children showed that, while the parents reported having little reading practice with them, 86.67% of the children mentioned that their parents read to them more than once a week from different materials such as stories, shopping lists, food recipes and "things from work", among others. Most participants said that they could write letters (80%), their name (70%) and other words (53.33%), although none of them did that correctly. Some of the participants (48.89%) made drawings, even though they were asked to write. When asked about children's stories, 73.33% of the children said that they liked them, but only 16.67% were able to answer correctly what a story is and what it is used for (some confused them with cartoons, songs, or homework), which seems to indicate that reading stories was not a very regular practice in their homes, despite what the parents reported. Only one participant mentioned knowing Snow White and Cinderella, but through movies, not books. None of the participants was able to identify which card contained their name written correctly, selecting one at random instead.

The results of the initial evaluation allowed us to identify that 76.67% of our sample were at a pre-syllabic stage of literacy, since they were able to tell the difference between drawing and writing. Some of them recognized that letters are arbitrary and are put together in a linear fashion, and said that at least three "letters" must be put together to mean something, which placed them at an early syllabic phase. The remaining 23.33% had apparently not reached even the pre-syllabic phase. To analyze the characteristics of the children's writing in the pre-test and in the post-test, three aspects were considered. The first was the degree of conventionality of the writing, including the directionality used in Spanish (from left to right and from top to bottom), as well as the extension of the writing (in terms of the number of scribbles made by the children). The second aspect was the degree of definition of the scribbles made by the children; that is, their similarity to the letters used to write in Spanish. The third aspect was the organization of the writing; that is, whether the "letters" were put together in lines, which would indicate a text-like organization.

The results of the writing pre-test showed that 26.67% of the participants made random scribbles without any specific order, and such scribbles were similar when they reported having "written" their name, letters and/or words. Only 10% of the participants (P1, P6, and P12) made their scribbles following the conventional criteria for directionality in Spanish. Most of them made differentiated scribbles: the signs made when they "wrote" their name, letters, or words showed different levels of resemblance to the letters of the alphabet and were formed mostly with circles and straight lines, whereas when they "wrote" a story they used mostly drawings. The post-test showed that most participants (70%) showed some advancement (improvements) in several aspects of their writing, although there were also regressions in eight cases.

To illustrate which aspects showed improvement, which remained the same and which worsened (regressed), a comparative analysis was made of each participant’s pre-test and post-test scribbles, based on the three aspects of story writing mentioned above (conventionality, definition, and organization). A value of 1 was given to each aspect that showed improvement, a value of 0 when their performance was similar, and a value of -1 if the scribbles in the “writing” of the story were less organized, defined, or conventional in the post-test than in the pre-test. According to these values, each participant’s performance could be graded between 3 and -3.

Figure 1 shows the comparative results the participants’ performance in the pre-test and the post-test of the “writing” of the story. The group that showed the most improvement was EG1, with six children improving the levels of organization and definition of their scribbles, and four children increasing the level of conventionality in their writing. The children in EG2 showed slightly more advancement than those in CG1. Group CG2 showed the least change.

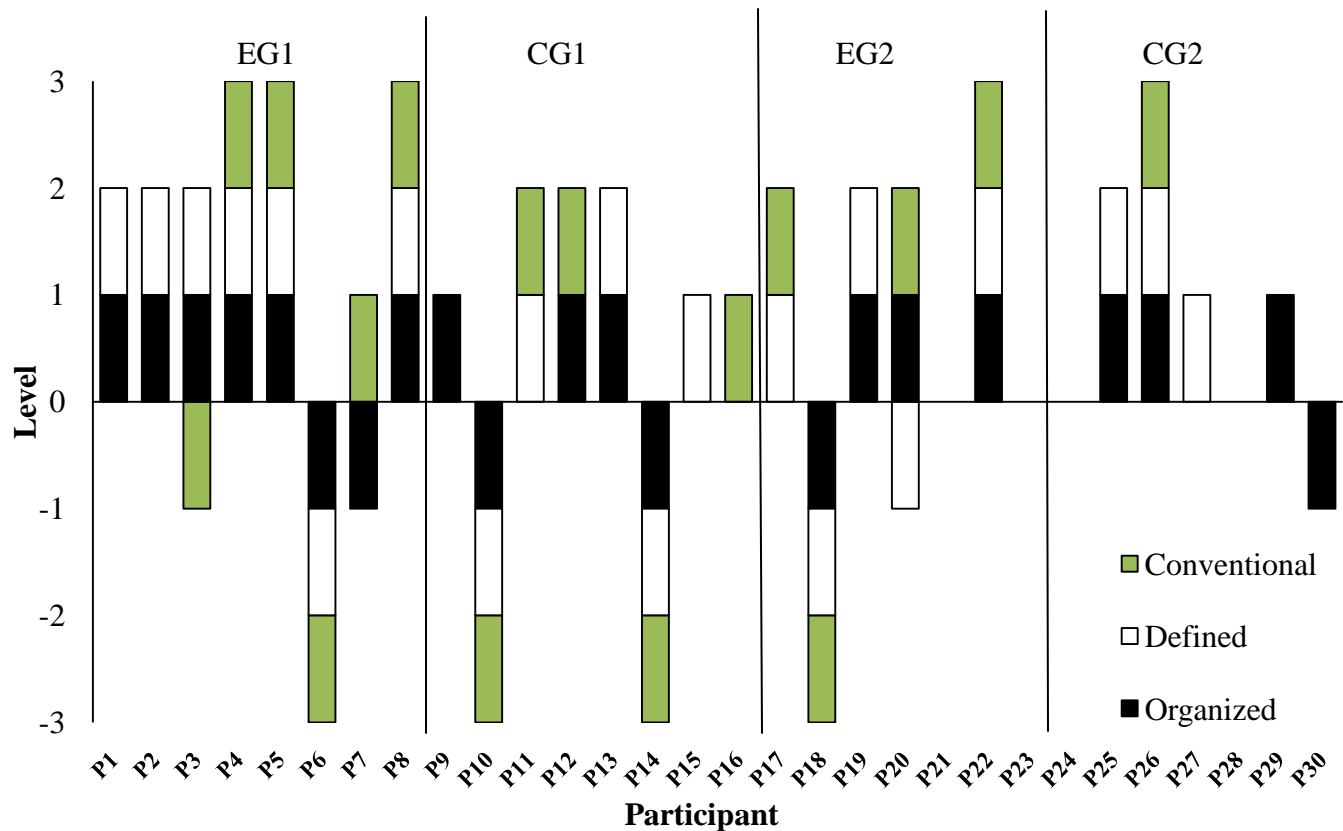


Figure 1. Comparative characteristics of the participants’ scribbles when “writing” a story in pre-test and post-test. The horizontal axis shows each participant’s number, and the vertical axis his/her degree of advancement or regression in the organization, definition and conventionality of the scribbles.

The pre-test and post-test data on the “reading” done by the children of the stories that they had previously “written” were analyzed considering the elements of the story they told: title, setup, development, and ending. During the pre-test, most participants were unable to create a story. Of the children who did “read” their stories, 13.33% mentioned a title, a setup or a development of the story, and 6.66% mentioned an ending. In the post-test, 63.33% of the children “read” their story (20% of the EG1, 23.33% of the EG2, and 10% in each control group). Figure 2 compares the data obtained in each test, showing the percentage of participants who included the basic elements of a story when they “read” their writings. The percentage of children who showed advancement in the four aspects considered was greater in EG1, since after the intervention 75% of them were able to develop a story, although fewer of them also mentioned a title and a setup. The least common aspect was the ending of the story (25% of the participants). EG2 showed similar percentages in the post-test but less advancement, because this group showed the best initial performance. In the final performance, both control groups were below the experimental groups, with CG2 showing the least advancement.

Figure 2 shows the percentage of participants in each group who mentioned the different elements of the story (title, setup, development, ending) in the pre-test and the post-test, when they “read” the story they had made.

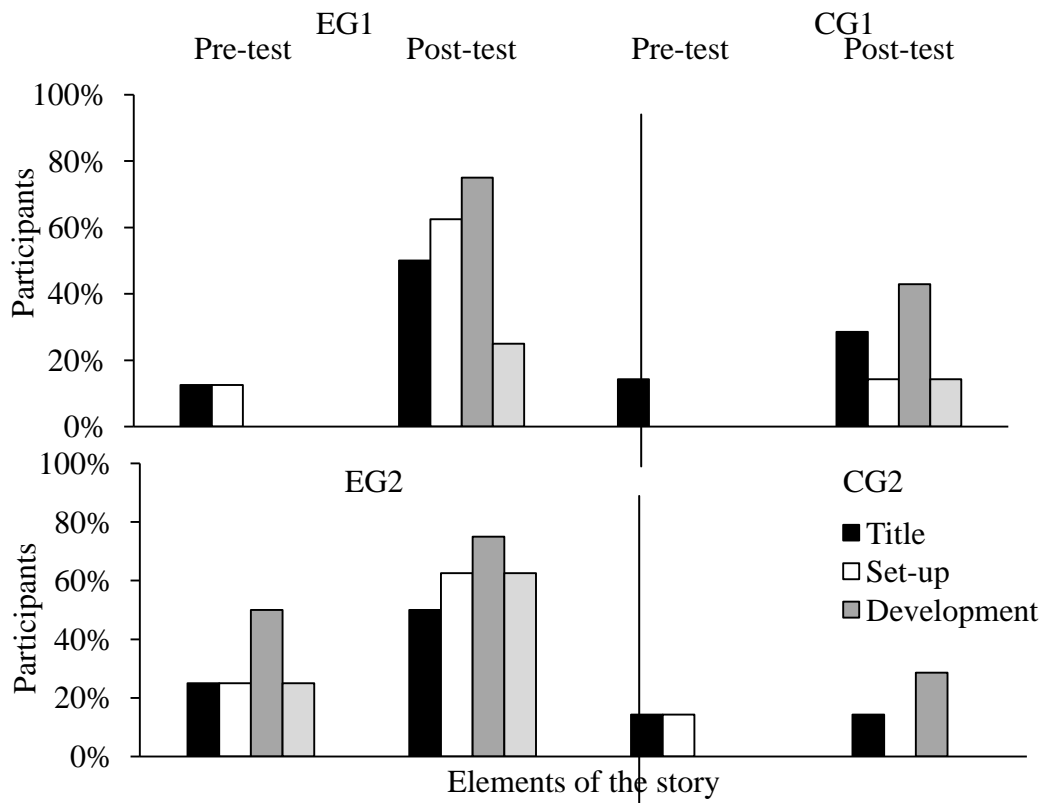


Figure 2. Percentage of participants who mentioned the different elements of the story in the pre-test and the post-test.

The complexity of the sentences used by the participants who did “read” the story they had previously “written” was analyzed with the aim of identifying if they had told their story using well structured, clear and precise sentences. Three criteria were considered: the average number of words used in each phrase (ANW), the incorporation of details by using adjectives or descriptions of situations, places, or conversations (Details), and the syntax of the sentences themselves; i.e., if they included a subject, a verb, and a predicate (Syntax). The three elements of the story– setup, development and ending – were analyzed. The title of the story was excluded from analysis because no complex sentences were required for this element. Table 2 shows the results of this analysis. During the pre-test, the participants who “read” their stories used simple sentences and made mistakes in their grammatical structure (Syntax). They did not provide details through adjectives, conversations, or descriptions of situations, and tended to repeat words continuously. Only participants P12 and P16 used sentences that met all the criteria for syntax and details, but they did not tell the stories complete with all their elements.

The post-test data show differences between experimental and control groups, not only in the number of children who created and “read” their story, but also in the characteristics of the sentences used to tell it. Participants in groups EG1 and EG2 used a larger number of sentences that met the syntax criteria, and also gave more details in each one of the elements of their stories (set-up, development and ending), although only one of the stories (P8) in group E1 met all the criteria in its three elements. In all the cases, the element of the story in which the children’s performance was best was the development: more words per phrase were used to describe it, and the phrases had better syntax and more details.

Table 2 Comparison of the complexity of the sentences used by the participants in each element of their stories (set-up, development and ending) in the pre-test and the post-test: average number of words used per phrase, syntax, and details included.

Group Participant		Complexity of the sentences used in the story																	
		Pre-Test									Post-Test								
		Set-up			Development			Ending			Set-up			Development			Ending		
		AWP	Details	Syntax	AWP	Details	Syntax	AWP	Details	Syntax	AWP	Details	Syntax	AWP	Details	Syntax	AWP	Details	Syntax
EG1	P1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9	YES	YES	9.5	YES	YES	0	0	0
	P2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.5	NO	NO	3.5	YES	YES	0	0	0
	P3	0	0	0	0	0	0	0	0	0	6.5	NO	YES	9.86	YES	YES	9.33	YES	YES
	P5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	11.7	YES	YES	0	0	0
	P7	5	NO	YES	0	0	0	0	0	0	6	NO	YES	9	NO	NO	0	0	0
	P8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	YES	YES	11.5	YES	YES	6.5	YES	YES
EG2	P9	11	NO	NO	17	NO	NO	16	NO	NO	12.7	YES	YES	12.5	YES	YES	12	NO	NO
	P10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23	YES	YES	8.5	YES	NO	1	NO	NO
	P11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	6.5	YES	YES	4.5	YES	NO
	P12	0	0	0	16	YES	YES	0	0	0	0	0	0	14.5	YES	YES	0	0	0
	P14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.3	NO	NO	4.82	YES	YES	4	NO	NO
	P15	12.3	YES	NO	16	YES	NO	0	0	0	18	NO	NO	0	0	0	0	0	0
CG1	P16	0	0	0	31	YES	YES	9.5	YES	YES	11	NO	YES	24	YES	YES	19	YES	YES
	P17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	9.8	YES	NO	0	0	0
	P18	0	0	0	0	0	0	0	0	0	6	YES	NO	9	YES	YES	3.5	NO	NO
	P22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	2	NO	NO	0	0	0
CG2	P25	3.5	NO	NO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	5.38	YES	YES	0	0	0
	P28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	3.17	NO	NO	0	0	0

Keys: AWP= Average number of words per phrase. N/A: Not Applicable (did not tell a story in that phase). Data for the children who did tell a story in bold type. In Details and Syntax, the word YES was used when the criterion was met, and NO when it was not.

4. Discussion

The data collected in the interviews with participants and their parents showed that reading materials in their homes were scarce, as were the reading and writing activities they did with the children. Apparently, the main source of the children's knowledge of the stories was through films. Similar findings have been reported in previous research (Guevara, Rugerio, Delgado, Hermosillo, & Flores, 2012; Romero, Arias, & Chavarria, 2007), which argue that when the household does not provide enough materials and literacy-building practices, an emotional and motivational climate that promotes favorable attitudes towards reading and writing in the children is not being generated, and shared experiences between parents and children aimed at helping the children fully develop their spoken language skills and their familiarity with written materials are not being fostered.

Such claims seem to be confirmed when we analyze the features of the participants' production during the pre-test of our study. When asked to write a story and then read it, very few participants made scribbles following conventional criteria such as the directionality and the shape of the scribbles, and even fewer were able to elaborate a story. Some mentioned a title, set-up, development or conclusion of the story, but their grammar structuring was deficient and none of them was able to structure a story with all its elements. This finding shows that, at the beginning of the study, the children's spoken language performance was more limited than their written language performance, which may be linked with the fact that more materials were available for writing than for reading in their homes, as the parents themselves reported. Since the comparison between writing in the pre-test and in the post-test showed that 70% of the participants made progress in the conventionality, definition and organization of their scribbles, we may conclude that the activities conducted in the study had an effect.

On the one hand, it must be taken into account that the participants in this study were not usually exposed to storybooks, so the mere contact with them may have aroused their interest in the illustrations and the characteristics of the letters in the text, and that this might have prompted them to imitate them. This could explain why most participants, regardless of the group to which they were assigned, showed progress in their writing.

It may have also been the case that asking the children about their reading and writing activities at home, together with exposure to the stories, could have encouraged the children to use the writing materials available at home more often, and thus practice their scribbles. This, however, cannot be claimed with any degree of certainty because the participants were not asked any questions that explored this possible effect. What is clear is that participants in group EG1, who were read the same story five times pointing to the text as it was read to them, were the ones who showed greater gains in the level of organization and definition of their scribbles, as well as in the conventional aspects of their writing. Participants in group EG2, who were read five different stories, also showed greater gains than the children in both control groups.

It must be noted that the scribbles made by participants when they “wrote” isolated letters or their names were different from the scribbles they made when they “wrote” a story. A relatively similar finding was reported by Harste and Burke (1982/2013), who observed that the scribbles used to “write” a story and to “write” a letter were different. Such differences seem to be a result of the different experiences that the children have had with each type of text, since their contact with written materials allows them to identify particular ways in which different types of texts are written. In the specific case of children’s stories, besides consisting of series of letters/words/sentences, they are accompanied by images that reflect what is told in the text, and they have a clearly established structure (title, set-up, development, and ending), which makes them morphologically and functionally different from other types of texts.

The results of our research are relevant because several aspects of the participants’ writing improved without having been given any training designed to improve their scribbles. In fact, participants were not even instructed to pay attention to the letters that were being pointed at while the stories were read to them. This is further evidence that, by listening to and watching while stories are being read to them, children identify that the contents of the story are in the letters and not in the images, as several authors have claimed (Goodman, 1985; Goodman, 1991, 1992; Harste & Burke, 1982/2013). Our research also confirms that the crucial aspects for pre-academic children to learn reading and writing conventions are linked to their involvement in literacy-building environments and their interaction with people who read and write (Vega & Macotela, 2005). The data shown allows us to conclude that reading stories to children and pointing at the text as the story is being read has positive effects on pre-academic children’s writing, and that this strategy works better when the same story is read repeatedly.

On the other hand, it is important to underscore that the effects of the intervention reported here were even greater on the children’s performance when they “read” their own “writing”. The participants in both experimental groups performed better, quantitatively and qualitatively, than the children in the control group. Their descriptions were more comprehensive, detailed and organized, as well as syntactically better, and incorporated a greater number of elements (set-up, development and ending) in their stories. This is especially interesting because, again, participants were not given any training aimed at improving their grammatical structuring, or describing each one of the elements of the story they told. Besides, our data shows that the participants in EG1 had the best performances. This finding is probably the most important contribution of our research, because in the literature on early literacy building and ways to promote it (Aram & Besser, 2009; Kim, 2007; Vega & Rocha, 2008) it has been shown that reading stories is an effective strategy to develop linguistic, pre-academic and conceptual skills in children, but the differential effects of different ways to do this literacy-building activity with children had not been documented.

In this study, the differences between groups were evident and show that, for the children to do better “readings” of their own stories with an adequate linguistic structure, reading the same story several times were the most effective strategy. This may be due to repeated reading helps them learn the story and reproduce its characteristics more accurately, while children who are read several stories must identify the characteristics and elements of the narrative on their own, which may make it more difficult to incorporate such elements into their own story. Considering all the results of the research work reported here we may conclude that, as originally stated by Harste and Burke (1982), children may learn the forms and functions of reading and writing by being exposed to different texts within a particular context, but the most relevant factor to promote the predictability of children’s story reading and writing is the kind of interactions that the children establish with the stories themselves, through the mediation of a reader who gives them different clues that help them infer how to incorporate different linguistic and conceptual aspects into their own spoken formulations and their approaches to formal reading and writing.

This will in turn influence the children's future reading performance, when they must make use of their linguistic skills and knowledge to anticipate and predict words and narratives in a text.

However, it would be advisable to remember that in our study only one of the participants (in EG1) met all the syntax and detail incorporation criteria in the three elements of his story. This suggests that the number of times the children are exposed to the same story should be higher than the five sessions used in this study. It might be assumed that a greater number of experiences of repeated reading of stories, incorporating an increasing variety of texts, will have greater effects in the learning of reading and writing conventions, as well as other aspects of early literacy-building, but such an assumption must be tested empirically. Further research is needed to explore the effects of different aspects of children's story reading and writing; for instance, if the children choose the stories to be read to them or if they do not choose them, if the story is read by a person with whom the child is familiar or a person from school, if the story is read individually to a child or to a group of children, if specific instructions or observations are added on aspects the child must pay attention to while the stories are read. As well as additional effects that a direct instruction on grammatical structure and writing may have. More work on this line of research is important because, as several authors (Aram & Besser, 2009; Guevara et al., 2012; López et al. 2014; Scarborough, 2002) have pointed out, if the linguistic and pre-academic skills linked to literacy building are not developed at an early age, children are likely to have poor reading and writing performances and miss on opportunities to comprehend texts and stories, which may in turn have negative implications for their overall academic performance, including the possibility of developing negative attitudes towards reading.

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