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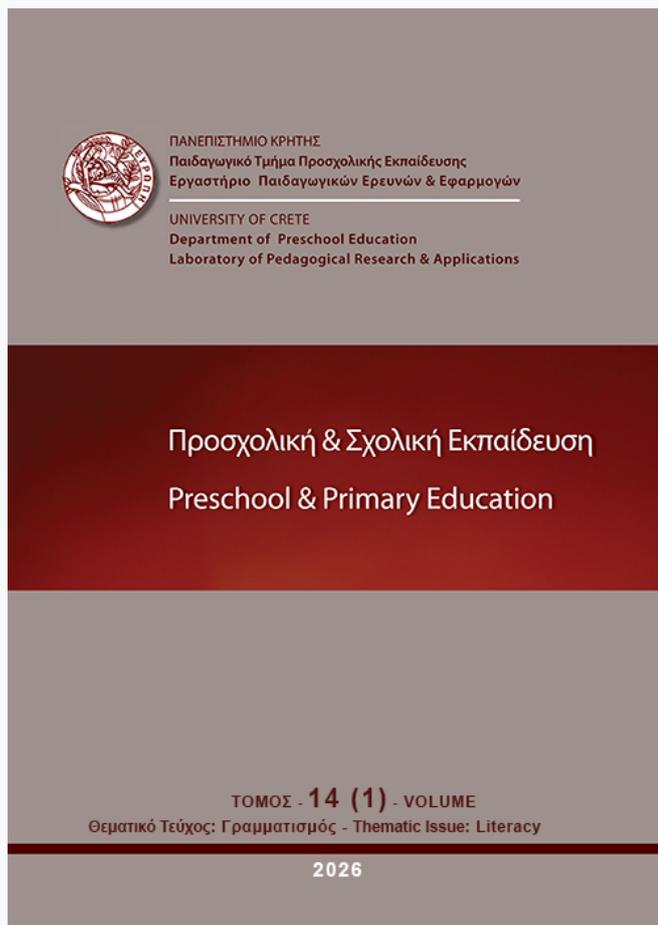
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Using family photos to improve low-income preschoolers' personal narrative skills

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Using family photos to improve low-income preschoolers' personal narrative skills

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Abstract. Adults referring to past autobiographical (personal) events is critical for children's memory and narrative development. Personal narratives are deemed to be most valid type of assessment when it comes to young children's improvement in narrative speech. With this in mind, the purpose of the present study was to enhance personal narrative skills in low-income preschoolers. The sample consisted of 19 children attending a rural kindergarten in Crete, Greece. All the children in the sample came from a low social and economic background. The programme for improving preschool children's narrative skills was implemented individually and consisted of the following stages: a) Presenting a family photo and cards with structural elements, b) Asking the child questions about the family scene based on the cards: who, where, what, how, c) Teachers modelling the whole narrative, d) Following the teacher's pattern, children narrate the whole story. At the end of the programme, the children were able to freely narrate in front of the class complete personal stories with all the structural elements clearly evident. In addition, photographs with familiar scenes, seemed to resolve the elicitation task difficulties, especially for young children and/or for children with low literacy backgrounds.

Keywords: personal narratives, preschool, low socioeconomic background, family photos.

Introduction

Narratives are significant genres both in educational settings and beyond, with storytelling playing a key role in early literacy development in kindergarten (Petersen et al., 2021; Spencer at al., 2013). Extensive research highlights its importance for teaching, language acquisition, and child development (McCabe et al., 2008). Since children can begin to create stories before they learn how to read and write, storytelling serves as a powerful means of enhancing their verbal skills and fostering literacy. Additionally, researchers utilize storytelling as a means of assessment, as the capacity to create a story indicates that young learners can engage in decontextualized language discourse, in which they use more accurate and grammatically complex language than they normally would in everyday conversations (Pesco & Gagne, 2015).

For children to construct a narrative, they need to rely both on their understanding of the narrative content and their awareness of how different types of narratives (personal, fictional) are structured (Flint & Adams, 2018; Kimhi et al., 2018). Knowledge of content refers to what the child knows about the topic or event, while structural knowledge involves how the information is logically arranged and presented in a coherent manner (Khan et al., 2016).

Literature review

Personal narratives

Narrative is a key form of extended communication. Personal narratives, which involve recounting of significant real-life events, constitute a common way of sharing and understanding each other's experiences (Bruner, 1991). Thus, this makes personal narratives an ideal area for studying children's development. Around the age of two-and-a-half, children begin to narrate past events. At this age, they also produce what Labov and Waletzky (1967) identified as the basic structure of a narrative with two independent clauses describing an imaginary or real event in chronological order. In addition, children at this stage can include evaluations that reflect their personal perspective on the events. Although children show early storytelling abilities, becoming a proficient narrator is a gradual process that continues into the school years (Nilsen & Fecica, 2011). To effectively engage their peers or adult listeners, children need an age-appropriate vocabulary, grammar, and strong sociocognitive skills. They must also understand how to organize and present information properly, considering the pragmatic context of language (Mäkinen et al., 2014; Vretudaki & Tafa, 2022).

A well-structured personal narrative revolves around a central theme or peak moment and is composed of a sequence of events arranged in chronological order referred to as narrative or free actions (Georgakopoulou & Goutsos, 2011). A comprehensive personal narrative includes six components: it begins with a summary or introduction that presents the key elements of the story capturing the interest of the audience. The next component is orientation, which provides context by detailing the time, place, and characters involved. Following this, the narrative features complication actions that consist of events that build tension and lead toward the climax. These events are essential to the story's progression and culminate in the climax, which is assessed by the narrator or child (evaluation). This is succeeded by the resolution, where any issues or conflicts are addressed, and concludes with a coda that wraps up the story and reflects on the impact of the events on the child's emotional state (Hudson & Shapiro, 1991; Li, 2023).

Studies have indicated that the structural organization of children's narratives gradually becomes coherent between the ages of three and six (Kanellou,et al., 2016; Sparks et al., 2013). In addition, during early childhood, children gradually produce more extensive narratives as far as the content and the number of structural elements included in their narrative are concerned (Kelly & Bailey, 2013). During this developmental period, as children's narrative skills are formed, their narratives exhibit better organization in terms of logical and temporal sequence as well as greater completeness (Kelly, 2015).

Children's personal narratives shaped by conversations tend to include more explanations and references to the characters' internal thoughts and feelings compared to monologue narratives. The family setting, along with the family's socioeconomic background (which influences their experiences and access to literacy materials), plays a significant role in shaping children's linguistic and expressive skills (Westby & Culatta, 2016).

Research shows that typically developing children possess a "narrative advantage" when telling personal stories from kindergarten through third grade, but this advantage shifts toward fictional narratives as they grow older (Westby & Culatta, 2016). By the end of

kindergarten and the beginning of elementary school, children are expected to share stories about personal experiences (such as events from their summer) whereas by the end of elementary school, they are expected to be able to write autobiographical narratives (Fivush, 2014).

Narrative-based tasks are frequently employed by researchers to assess children's ability in story comprehension. One such task, the story comprehension assessment, involves an adult reading a storybook to the child, followed by a structured set of six comprehension questions or an adult asking the child to narrate the entire story. These procedures are designed to evaluate the child's ability to recall key narrative components, including character names, major plot events as well as to make basic inferences regarding character motivations and the story's central theme.

Narrative interventions for children with language-narrative difficulties

Narrative competence can differ based on several factors, including the type of context being narrated as well as whether children engage in monologic or dialogic storytelling procedures (Brown et al., 2014; Miller et al., 2014; Petersen et al., 2014; Spencer & Slocum, 2010). Social class is a crucial factor in shaping narrative skills (Petersen et al., 2014; Petersen et al., 2021). Additionally, children's understanding of the events and how they are expected to unfold, along with the status of the listener (i.e., whether the listener is familiar with the content or not), are key factors that contribute to narrative competence (Gamannossi & Pinto, 2014). The "who," "what," "where," and "when" of events form the foundation of narratives about personal experiences. These basic elements are crucial, and they represent the surface level of a narrative (Veneziano, 2017).

Several studies have indicated that children with language impairment exhibit deficits in both narrative content and structure. These deficits become especially evident in conditions with limited elicitation support (e.g., a single image as opposed to a picture sequence), in children with more severe language impairments, as well as in cases in which the comparison group is matched by chronological age (Bishop & Donlan, 2005; Fey et al., 2004). More specifically, associations have been established among using mental state verbs, references to emotional states, the number of narrative propositions, and the frequency of complex sentence constructions in both typically developing children aged 6 to 10 years as well as in heterogeneous groups of children with disorders (Colozzo et al., 2011).

Several studies have developed targeted intervention strategies to enhance the narrative skills of young children who might face various difficulties. For instance, Veneziano and colleagues (2019) employed a within-subject design to compare the narratives produced by the same children before and after engaging in a brief discussion about the causes of key events in a story. Twenty-six children, all native French speakers, participated in this study: 13 children diagnosed with developmental disabilities (12 boys and 1 girl), aged between 8 years 6 months and 11 years 8 months (M = 9;7), and 13 typically developing (TD) children (10 boys and 3 girls), aged between 8 years 6 months and 11 years (M = 9;5). Their findings revealed that the children with developmental disabilities not only told the story in a more causally connected manner, but they also included more references to the psychological states of the characters, even though these aspects were not specifically addressed during the conversation . A multiple Base line design with probes across participants was used by Favot et al. (2019) to examine the impact of an explicit personal narrative intervention on the macrostructure of school-aged children's narratives. The study consisted of four children,-two boys and two girls. To be included, each child had to meet the following criteria: (a) a confirmed diagnosis of a developmental disorder (ASD) provided by a licensed paediatrician or psychologist not affiliated with the study; (b) significant difficulties in both understanding and using language, as evidenced by scores on standardized language assessments; and (c)

English as their primary spoken language. In this study, the researchers utilized family photos that captured recent family or personal moments from children's lives to support the intervention. The intervention also included common strategies such as the use of macrostructure icons, the researcher modelling or demonstrating narrative construction, and a requirement for participants to produce complete personal narratives.

In general, a common challenge a researcher encounters when training children with any type of disorder or difficulty in storytelling is finding effective visual aids that motivate them to tell a story in a coherent manner (Miller, 2016; Nielsen & Friesen, 2012). The intervention programme introduced by Favot et al. (2019) appears to have addressed this issue successfully by using familiar visual materials from children's everyday lives making the storytelling process more relatable and engaging for them.

Children from low socioeconomic status – income background

Low-income background, as well as developmental disorders, are the main factors increasing the likelihood that children will start school behind their more privileged peers. Children from low socioeconomic status backgrounds are disproportionately less likely to engage in experiences that support the acquisition of foundational oral language skills such as narrative skills (Buckingham et al., 2013). Economically disadvantaged households often face obstacles such as children's limited access to age-appropriate literature, cognitively stimulating toys, skill-enhancing activities and individualized academic support—thereby reducing their ability to cultivate an optimal environment for early literacy development (Aikens & Barbarin, 2008; Bergen et al., 2016).

Early interventions focused on language development can improve language and literacy outcomes, narrow the achievement gap, and ultimately support the school readiness of children from low-income backgrounds (Dicataldo et al., 2020). Research shows that differences in oral language skills are often long-lasting, meaning that children with the weakest language abilities tend to remain at a disadvantage throughout their lives (Klem et al., 2015; Melby-Lervåg et al., 2012). It is crucial to focus on developing oral language skills during preschool years to prevent future difficulties with reading and writing. Without high-quality, systematic language interventions early on, children's language challenges are likely to persist into elementary school, potentially leading to reading and general academic difficulties (Dickinson et al., 2006; Jackson & Coltheart, 2013).

In a study conducted by Reese et al. (2010), mothers from low-income households participated in an elaborative reminiscing intervention programme aimed at enhancing their children's listening comprehension skills. Post-intervention results indicated that elaborative reminiscing about personal events boosted the quality of children's narratives and indicated measurable improvements in children's listening comprehension. These findings suggest that shared narrative practices can effectively support narrative development in young children from low-income backgrounds.

These results emphasize the importance of focused interventions for children from low-income backgrounds, who frequently encounter difficulties in oral language development. Children with families from a low socioeconomic status background generally exhibit weaker oral language abilities, especially in skills like language processing, comprehension and production in comparison to their more advantaged peers (Pinto et al., 2019)

Studies have demonstrated positive outcomes from interventions in educational settings that incorporate storytelling and narratives to enhance various oral language skills. Given the importance of narrative abilities, such as storytelling and story comprehension for reading and literacy development, interventions that focus on narratives are especially effective in preschool environments (Spencer et al., 2015; Thomas et al., 2019).

Nicolopoulou et al. (2015) implemented play-based activities to promote oral language development in preschoolers from low-income families. By integrating storytelling and story-acting techniques, they aimed to boost children's narrative skills. The findings of their study provide strong evidence that participating in these activities significantly improved several school readiness skills, especially in areas like narrative abilities, early literacy, and social competence.

Spencer and Slocum (2010) conducted a strong narrative intervention programme with five low-income children enrolled in a federally funded preschool programme, Head Start. The intervention focused on teaching children the structural elements of a story. The children applied these elements when retelling stories as well as personal narratives, which constitute a more common form of storytelling in everyday conversations. Researchers created a pool of 10 intervention stories accompanied by five pictures, each one illustrating one or more grammar elements from the story. The researchers also introduced various grammar games related to the story, such as bingo, story cubes, story sticks, and story gestures. The instructor demonstrated how to tell a story using a set of pictures related to the day's story, then identified the story grammar elements by placing corresponding icons below each picture. While one child narrated, the others engaged in story grammar games based on the narrative. In the final phase, the instructor encouraged each child to share a personal story related to the topic. In the end, the five children showed improvement in retelling stories, but they did not show significant improvement in creating personal narratives (Nicolopoulou & Trapp, 2018).

The multicomponent model of comprehension suggests that narrative skills include a broad range of oral language abilities, such as vocabulary, morphosyntactic skills, inferencing, the integration of prior knowledge, the use of story schemas, and metacognitive skills. These abilities develop simultaneously and interact, influencing individual differences in language development (Baker et al., 2013; Dunst et al., 2012; Spencer et al., 2015). While these skills are essential for supporting reading comprehension, they have been insufficiently explored in intervention research, especially for preschoolers from disadvantaged backgrounds. (Adlof et al., 2014; Favot et al., 2019; Nicolopoulou et al., 2015).

Based on the aforementioned studies, it is clearly evident that most of the intervention programmes have been implemented primarily with children enrolled in primary education. Only two studies have explored the effectiveness of narrative intervention programmes in preschool-aged children (Favot et al., 2019; Spencer & Slocum, 2010) particularly those from low-income backgrounds (Nicolopoulou, et al., 2015; Reese et al., 2010). Furthermore, the study conducted by Favot et al. (2019), whose intervention programme was implemented in the present study, included participants with developmental and language disorders. Given this context, it would be of scholarly interest to investigate the efficacy of this intervention programme when implemented with preschool children from low socioeconomic backgrounds, especially those with significantly limited exposure to literacy practices in the home environment.

Method

Purpose

The purpose of this study was to investigate the effects of an intervention programme aimed at enhancing the abilities of a sample consisting of children from low- income backgrounds with the aim of narrating complete and cohesive personal stories.

Research questions

1. Will the children in the sample show significant improvements in their personal narratives between the pre- and post-intervention phases?
2. Will the age of the children in the sample affect their performance in narrating personal stories?

Sample

The sample consisted of 19 children aged 4 to 6, all native speakers of the Greek language attending a rural kindergarten in Crete, Greece. The average age of the children in the sample was 4.8 years (four years and ten months). The total sample consisted of 10 girls and 9 boys. All the children in the sample came from a low social and economic background. Socio-economic status (SES) is a complex concept, encompassing various factors that may influence children's home life as well as cognitive and language development (Dalmaijer et al., 2023). The selected school was located in a remote rural area of Crete, an island in Greece. The received data from the school record book revealed that the fathers of the participating children were farmers, agriculturists or did various seasonal jobs, while the mothers were all involved in household chores. The parents' educational level was low (primary school graduates with two exceptions of high school graduates) while 6 children had been diagnosed by the Interdisciplinary Evaluation, Counseling and Support Center with language and developmental disorders. The assessment procedures during the pre-intervention phase demonstrated children's low performance, which was considerably below the normative level, across all criteria under consideration. Specifically, on the *Raven test* (*M*=15.53, *SD*=1.93), the average standard score of the children in the sample was 90, while the highest standard score for their age group is 140. In the *Speech and Language test* (*M*=9.47, *SD*=2.03), the obtained standard score for this criterion was SS=3, whereas the maximum standard score for the corresponding age group is SS=19. In the Retelling subtest from the *Logometro test* (*M*=2.42, *SD*=.50) with a maximum score of 16 and in the Narration subtest from the *Logometro test* (*M*=1.38, *SD*=1.19) with the maximum attainable score of 14, performance was similarly low. The survey was conducted in a naturalistic setting with the participation of post-graduate classroom teachers. In this way, the research did not disturb children's everyday school life. The research lasted for about five (5) months (October-March). According to teachers' reports, the children in the sample had no prior experience with story creation activities either at school or at home. The study adhered to the guidelines set by the Research Ethics Committee of the University of Crete (https://www.ehde.uoc.gr/index.php/en). Prior to the start of the study, all parents were provided with detailed information about its purpose and design, and they gave their consent for their children's participation.

Measures

The children's nonverbal abilities were evaluated using the Raven's Coloured Progressive Matrices which was standardized in Greek by Sideridis et al. (2015). The test demonstrated a high reliability coefficient of Cronbach's alpha at .87, as well as strong concurrent validity with a value of .97.

Children's narrative skills were evaluated using the "Narration with Pictures" subtest from the Greek-standardized Word and Speech Test (Ikonomou et al., 2007). The children were asked to create a story based on a sequence of pictures. Each narration was recorded and analysed for the presence of specific *morphological* elements (presence or absence of articles, pronouns, nouns, errors in tense use, errors in subject-verb agreement and errors in preposition use), *syntactical* elements (e.g. sentences with adverbial or subordinate clauses - relative, conditional, temporal or causal-) as well as the average utterance length in children's narrative speech. The internal reliability of the test was found to be .85, .82, and .83 for the age groups 3–4, 4–5, and 5–6, respectively.

In addition, children's ability to narrate stories was assessed by Logometro (Antoniou et al., 2022). Logometro is a digital assessment battery that includes tasks systematically measuring a range of oral language skills such as phonological awareness, narrative skills, vocabulary knowledge, morphological awareness, listening comprehension, pragmatics, as well as emerging literacy skills. Test–retest reliability of each Logometro subscale was

estimated between .73 and .96. For the purposes of the present study, the child's ability to retell and produce stories/narratives was evaluated. For the purposes of the present study, children's narrative skills -and more specifically their ability to retell and generate stories- were systematically evaluated. The narratives were assessed in terms of their structural organization, internal coherence, and the logical sequencing of key narrative elements (e.g., use of cohesive devices, temporal ordering of events). Furthermore, narrative content was analysed based on core structural components, including introduction, character development, problem identification and resolution, outcomes, and concluding elements.

Prior to the research, for screening purposes, a personal narrative was collected from each participant by asking each child to 'Tell me about your weekend'. Each personal narrative was evaluated based on the presence of specific structural elements, such as: a) the setting, b) the characters involved in the story, c) the central theme as well as the actions undertaken by the characters and finally d) the emotions experienced by the children during the narrated event. The personal narrative was collected in a quiet room with the participant sitting next to the researcher.

Materials

The researcher/teacher used a whiteboard (40 × 30 cm) and icon cards (5 cm × 5 cm) in each session. Participants' families were initially asked to prepare one personal narrative each week that related to the events that took place during the previous weekend, accompanied with relevant photos and email them to the classroom researcher/teacher every Monday of the week.

Families were asked to include in the prepared narratives information about *where* the event happened (it could be that they stayed at home), *who* was present, *what* they did (this may be more than one piece of information) and finally, the children's *feelings* about the event(s).

Each personal narrative was assigned a score out of a possible eight points. The four components of the narrative were scored based on two criteria: whether the element was present (one point) and whether it was accurate (one point). Accuracy was determined by comparing the participant's narrative to the information provided by their parents in advance. If the information was not included in the parental report, it could be verified with the parents after the session.

Intervention phase

The programme implemented in this study is based on Favot and colleagues' (2019) intervention design. The programme for improving preschool children's narrative skills was effectuated individually and included the following stages: a) presenting a family photo and cards with narrative structure elements, b) asking the child questions about the family scene based on the cards (e.g., who, where, what, how), c) the teacher modelling the complete narrative, and d) the children retelling the entire story following the teacher's example.

The intervention phase, which involved using photos and macrostructure icons, lasted for 8 weeks. The generalization phase, which only used the photos, lasted for 6 weeks, and the maintenance phase, which occurred without any visual aids, also lasted for 6 weeks. In total, the entire intervention process lasted for 5 months.

In each intervention session, the researcher prompted the children by saying, "Tell me about your weekend," while pointing to the "where" icon at the top of the board and asking, "Where did you go?" If the participant answered correctly, the researcher provided positive feedback ("Yes") and repeated the name of the place. Then, the researcher pointed to the "where" macrostructure icon and said, "You told me where." The researcher would then move

the "where" icon to the bottom of the board, signalling that this piece of information had been included in the narrative and that the session was transitioning to the next element.

Similar procedures were followed to prompt responses for "who," "what," and "feelings." In the next phase of the intervention, the participant was asked to recount the entire narrative, with the researcher or teacher pointing to the "where" macrostructure icon as a cue to begin. Once the participant completed their narrative, the researcher immediately provided a model of the full narrative while pointing to the relevant icons. If the participant made any errors or omitted information in their first attempt, the researcher gave them a second chance to retell the full narrative. The researcher offered corrective feedback right away if any mistakes were made or details were missing. At the end of the session, the researcher thanked the participant.

Generalization and Maintenance phase

Two generalization probes were conducted each week in the classroom as part of the regular personal narrative presentation sessions. In these probes, participants presented their narratives to their teachers and peers. The first probe involved the stimulus photo along with the macrostructure icons, while the second probe, conducted later in the same week, used only the stimulus photo. During each probe, the participant sat at the front of the class with the researcher, who held a whiteboard displaying either the photo with icons or just the photo. The researcher prompted the participant by saying, "Tell me about your weekend." During the third generalization probe (Maintenance phase), data were collected in a 1:1 setting. No photos or icons were provided as support.

Interrater Reliability

A second examiner independently scored 20% of the personal narratives produced by the children in the sample in each phase. The interrater reliability was evaluated in two stages to determine agreement on the presence and accuracy of the macrostructure components. In the first stage, the probes were scored for agreement on whether each element (such as where, who with, what, and feelings) was present or absent in the participants' narratives. The mean interrater reliability for the presence of macrostructure components, across all participants and both the "photo only" and "photo and icons" conditions, ranged from 92% to 94%.

Results

Figure 1 shows the effects of the narrative intervention on the participants' personal narrative in all pre and post phases of the program.
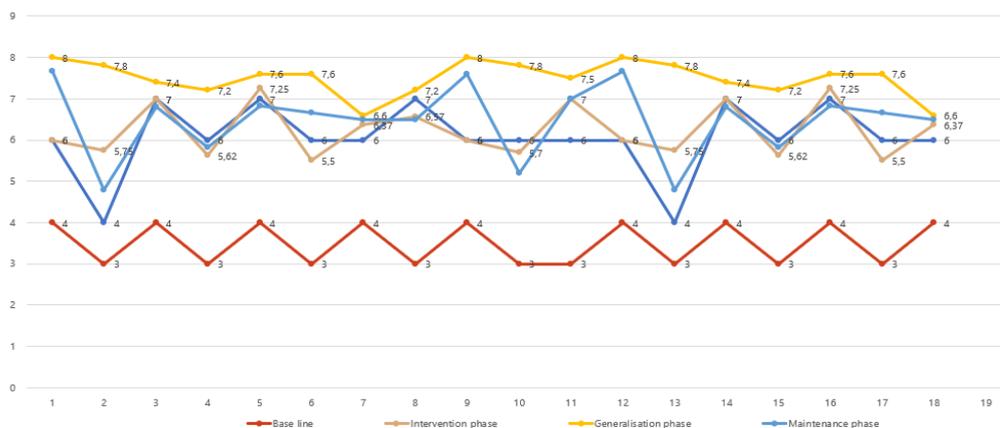

Figure 1 The mean score of the children in the sample in the pre and post intervention phases of the study: Base line, Intervention, Generalization and Maintenance phase

In addition, the chart below demonstrates the effects of the narrative intervention on the macrostructure of personal narrative in the *Generalization phase* (photo only condition) as well as the effects of the *Maintenance phase* (without any visual support).
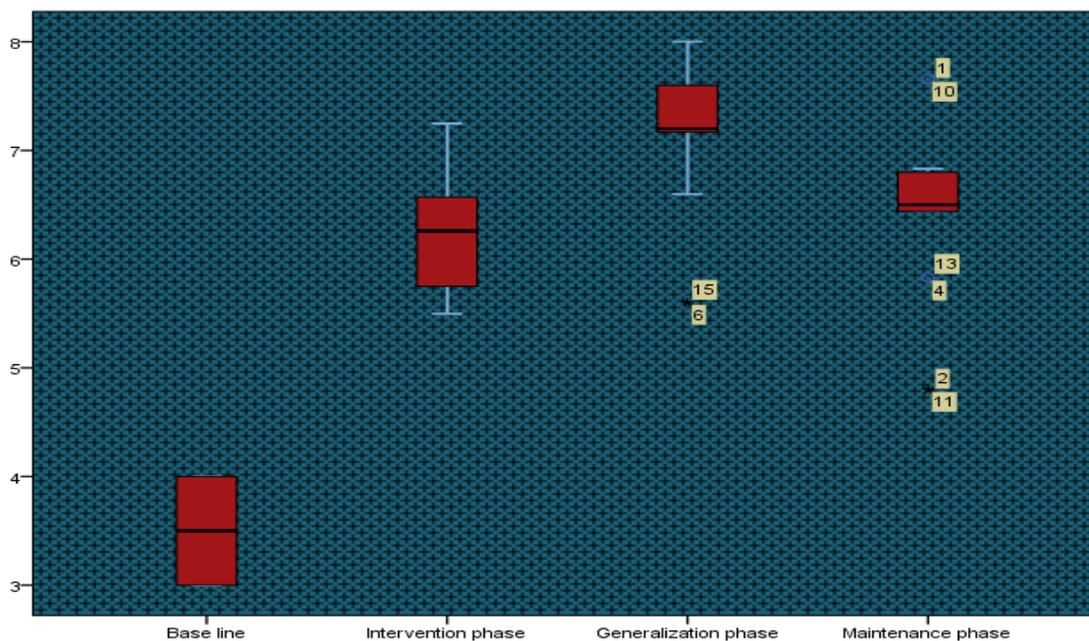
Boxplot 1 Mean scores (*M*) and Standard Deviations (*SD*) of children's performances in personal narratives across all intervention phases (Base line, Intervention phase, Generalization phase, Maintenance phase)

A nonparametric test, *K Related* samples along with the *Friedman* test were used to evaluate if significant changes were observed in participants' personal narratives between the four phases of the programme (Base line, Intervention phase, Generalization phase, Maintenance phase). The results indicated statistically significant differences between the four phases of the programme $x^2(3)=48,284$, $p<.001$. The *Friedman* test demonstrates also the *Mean ranks* of the participants between the phases of the programme indicating how the participants' results differed between these measures (Base line=1.00, Intervention phase=2.42, Generalization phase=3.89 and Maintenance phase=2.68). Considering these results, a *Wilcoxon signed-rank* test was conducted with post hoc Bonferroni adjustment in order to examine if significant differences were observed across the Base line, the intervention phase and the post intervention phases. In particular, between the Base line and the Intervention phase $Z=-3.828$, $p<.001$, between the Intervention phase and the Generalization phase the indicators were configured $Z=-3.826$, $p<.001$ and between the Generalization phase and the Maintenance phase $Z=-2.659$, $p<.05$. Thus, there is significant evidence to verify our general hypothesis according to which significant differences will be observed in the participants' personal narratives between the pre and the post intervention phase.

Furthermore, the Analysis of Covariance (ANCOVA) revealed a statistically significant effect of the children's age on their performance in narrating personal stories during the Generalization phase of the study $F(1, 19)=5.21$, $t=-2.28$, $p<.05$, $p=.036$.

Discussion

The results of this study are consistent with previously reported interventions that have also included the use of macrostructure icons, pictures to represent specific narratives, modelling, and the participant recounting an entire narrative independently (Brown et al.,

2014; Miller et al., 2014; Petersen et al., 2014; Spencer et al., 2013; Spencer & Slocum, 2010). The combination of the processes previously mentioned creates a very supportive intervention framework which appears effectively to help children facing difficulties in their narrative language either due to developmental disorders (Veneziano & Plumet, 2019) or due to a limited exposure to opportunities for literacy in their family environment (Nicolopoulou et al., 2015).

Growing evidence suggests that effective language interventions share a few key features or quality indicators, regardless of the intervention approach, procedure, skill, or disorder being addressed. These features include providing multiple opportunities for learning and practice during each session, maintaining an intensive schedule of sessions, offering systematic interactive and structural support, and giving explicit focus to developing specific skills (Petersen et al., 2013). For this reason, researchers who focus on enhancing the narrative skills of preschool and school-age children with typical and atypical development combine the aforementioned techniques so as to strengthen the results of their intervention. More specifically, the intervention programmes they design are extensive and intensive with systematic practice in the narration of stories (Miller, 2016; Nielsen & Friesen, 2012; Petersen et al., 2014; Petersen et al., 2021). Furthermore, they make use of a series of visual aids, albeit in a reduced number, while practicing the fundamental elements of a story (pictures, cards, figures, miniatures, books without text, sticks, cubes, character cut-outs, drawings…), (Flint & Adams, 2018; Kimhi et al., 2018; Spencer & Slocum, 2010). They also make use of various auditory mediations (explanations, questions, limited discussions, intentional pauses, prompts of various kinds…), processes of facilitation with a specific focus on each structural element, tactile and playful material as well as transitions from retelling (which provides a reference frame from the previous story) to narrating personal stories etc. (Khan et al., 2014; Petersen, 2011; Pico et al., 2021). Despite the researchers' intensive efforts to support children's needs at multiple levels, preschoolers' narratives, especially those of children with an atypical development, consistently exhibit deficits as far as the character's emotional state in the stories they narrate is concerned (Winters et al., 2022).

The current study has shown that the basic intervention techniques which have been previously used by Favot et al. (2019) in their studies with high functioning autistic children, can also be very effective with children from low social-economic backgrounds (with poor literacy experiences, limited vocabulary and a low level of listening comprehension). These common materials and strategies have been used by previous researchers to teach fictional narrative (Pesco & Gagné, 2015). This study demonstrates that these materials and strategies can be used to teach a different narrative genre, specifically personal narratives (Allen et al., 1994; Favot et al., 2019).

Narrative skills are developmental. Younger children narrate stories which are shorter in length and structurally incomplete (Kanellou et al., 2016). With the passage of time, this can be improved and as a result, children who graduate from kindergarten end up narrating more organized stories in terms of structure and content (Hudson & Shapiro, 1991). In the children of this particular study, age appears to play a decisive role, especially in the generalization of its results, that is to say, when children were given fewer visual aids and consequently had to memorize the fundamental structural elements they had to include in their story. The older children in the current study, narrated more organized and complete personal narratives in comparison to the younger ones, proving that systematic practice benefits older children to a greater extent securing its results over time and counteracting the negative consequences of the low socio-economic background (Kelly, 2015; Kelly & Bailey, 2013; Sparks et al., 2013).

In addition, a widening of SES-related differences during school-transition is not inevitable. The present study results show that preschool children's language support mitigated the negative effects of SES background on language development and literacy acquisition (Westby & Culatta, 2016).

As part of the discussion regarding the effectiveness of the intervention program, it is important to mention the progress of the children who participated in this specific program. Many of the children who participated in this study (one year ago) transitioned this year to primary school. According to their classroom teachers' observations in the first grade, these children were more aware of how to use appropriate linguistic forms, demonstrated high availability in their classroom work and seemed to be more emotionally regulated inside the classroom compared to their peers. This can be attributed to the fact that the intervention procedures made children feel emotionally closer to their classroom teacher using her interest in their personal stories as a lever to learn more about their lives and their families. By sharing their personal stories with others, children learn more things about their peers resulting in a more positive school climate and higher learning achievements. This is not a common phenomenon as the vast majority of boys in our rural schools, exhibit very aggressive behaviour, poor language skills and reduced willingness to learn.

Limitations

Ease of adaptation to the classroom is important in the research-to-practice framework (Brown et al., 2014). The intervention in this study required one-to-one intervention and withdrawal from the regular classroom. This may not always be a practical option for teachers. Recent data from our research has shown that researchers and teachers can also implement this intervention programme in small groups. Certain limitations should be acknowledged regarding the generalization of the findings in the present study due to the small sample size. Another methodological limitation concerns the participant selection process, which appears to have been based on convenience sampling.

This intervention also requires commitment from families to provide weekly narratives and photos. This limitation could be addressed by sourcing personal narratives from events within the class and school.

Implications

In general, the use of family photos in this study seems to resolve the major problem preschool children face when narrating personal stories. Many researchers in this field usually use books without text and with familiar topics, such as a visit to the doctor, a birthday party etc. so as to encourage children to narrate their own personal experience/story. Despite the familiarity of the topic, children seem to experience difficulties, producing personal narratives of limited length and quality (Petersen, 2011; Spencer & Slocum, 2010). By following the findings of the current study as well as other studies that have used the same intervention programme in children of typical development as well as children with developmental disorders, it appears that family photos are the most familiar stimuli as they motivate children, in a latent way, to say as much as they can -in other words, to reach their full potential (Favot et al., 2020).

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