Construction of an instrument for the assessment of children's narrative discourse



Lic./Prof. Ailín Paula Franco Accinelli (CIIPME/CONICET)

• ailinpfranco@gmail.com



CIIPME



objective

- The present project aims to build an instrument to assess the narrative discourse abilities of 3 to 5 year-old children from a dynamic perspective, which contemplates both, the real as well as potential development of the child.
- This instrument will contribute to the knowledge of Spanish-speaking **children's discursive development** and is expected to be a useful tool to be used in **educational environments.**

Specific purposes

- 1. To analyse and describe the **macrostructural and microstructural features of the narratives of personal experience** produced by 3, 4 and 5-year-old children from different socio-cultural groups (middle-class, urban-marginalized populations) from Argentina.
- 2. To build a **multidimensional and empirical scale** based on the analysis of the narratives produced by the participating children.
- 3. To analyse the **validity, reliability and internal consistency** of the instrument.
 - 4. To document the **performance of 150 children in the test.**



Theoretical Framework



Children's narrative discourse

- Extensive form of discourse in which at least **two events and their relationships** (temporal, causal, contrastive, etc.) are described (Ninio & Snow, 1996).
- Series of **singular characteristics** that make it a particular discursive genre:
 - sequential nature: concatenation of events, mental states and occurrences that are interpreted by the subjects in terms of purposes, motivations, intentions, beliefs, affections and values, and that give the discourse its thematic content;
 - referential opacity structuring independently of extralinguistic reality;
 - specialisation in the development of links between the exceptional and the ordinary;
 - o more or less canonical structure.



Children's narrative discourse

An important set of research has highlighted the relevance of this form of discourse for:

- Cognitive development (Bruner, 1986; Fivush & Nelson, 2006; Nelson, 1996)
- **Literacy** (Beck, 2008; Snow et al., 2007; Snow, Tabors, & Dickinson, 2001; Wellman et al., 2011)
- **Socialization** (Aukrust & Snow, 1998; Carmiol & Sparks; 2014; Miller, 1994; Wortham, 2001)
- Schooling (Díaz Oyarce & Mendoza Saavedra, 2012; Pinto, Tarchi & Bigozzi, 2016)

The relevance of assessment \rightarrow early detection of difficulties to provide relevant information to prevent later difficulties and design appropriate intervention strategies.



Children's narrative discourse

- **Children's personal narratives** → natural way of recapitulating past experiences, relating a *verbal sequence of clauses* with a *sequence of events* that it is inferred occurred in the past (Labov, 1972).
- Children's first narratives \rightarrow around **2 years old**. Linguistic recreation of the sequences of actions in which they participate daily.
 - They establish causal and temporal relationships more easily than when they relate unusual situations in their lives (Nelson, 1996).
- Gradually, they can narrate a **particular event located in time**, which constitutes a digression from a general event, as well as **understand and produce fictional narratives**.





The assessment of narrative skills



There are **few instruments** specially designed for their assessment.

- Most of them involve assessing the comprehension and production of fictional narratives in English-speaking population (Cowley & Glasgow, 1997; Gillam et al., 1999; Strong et al., 1998).
- Instruments developed in **Spanish-speaking children** evaluate young children's comprehension and production of **fictional narratives** (Kibrik et al., 2007; Pavez et al., 2008; Signorini, Borzone & Rosemberg, 1989; Strasser et al., 2010).

Two problems





Fictional narratives vs. personal narratives

The development of the structural complexity of personal narratives takes place **before fictional narratives** (Nelson, 1996; Schick & Melzi, 2010)





Recent research with Spanish-speaking children revealed that narratives produced by these populations present **macro-structural characteristics that differ from those produced by English-speaking children** (Carmiol & Sparks, 2014; Silva & McCabe, 1996; Stein, 2015, 2016; Uccelli, 2008).



Two problems

- There are **few studies involving Spanish-speaking children in their native countries** (McCabe, Bailey & Melzi, 2008).
- In Spanish there are **no tests for the assessment of these skills that have psychometric strength** (Acosta, Moreno & Axpe, 2014).
 - Obtaining samples of narrative language from four classic tasks:
 - giving the child the story to tell without any help;
 - telling the story by the adult so that the child can re-tell it with the support of a sequence of images;
 - retelling without the story in front of him/her;
 - answers to different questions.
 - These are the reasons why **other instruments are required that are appropriate for its evaluation in the former population.**

Another problem...

- Available instruments provide static measures of children's performance that consider only their current level of development.
 - Although these measures provide valuable diagnostic information related to children's narrative skills, they do not allow the monitoring of the eventual progress that takes place over the course of a child's development.
- In order to overcome such limitations, **the dynamic assessment strategy** has been proposed (Gillam, Peña & Miller, 1999; Tavernal & Peralta, 2009).
 - This assessment procedure, provides **both diagnostic information and the type of assistance that the child requires** for narrative development.
 - It extends the focus to the levels of potential or proximate development (Tavernal & Peralta, 2009).





Methods



Design



The quasi-experimental, cross-sectional design contemplates two phases:

- 1. The construction of the **empirical assessment scale.**
- 2. The **validation of the instrument** and the **documentation of the performance** of a group of children in the test.



Data

- The corpus includes personal narratives spontaneous and induced produced by 300 children of 3, 4 and 5 years old.
- Children will be administered the PLS5 test (Zimmerman et al., 2012) which assesses language comprehension and production (comprehensive and expressive vocabulary, conceptual development, narrative skills, among other skills).
- For the construction of the empirical scale, it will be considered an additional corpus of 300 personal narratives produced by 3, 4, and 5 years old children from the province of Buenos Aires.

Data collection and processing



Since the support for narrative elaboration that children receive at school differs from and may complement the one received at home (Schick & Melzi, 2010), data collection will take place half at the child's home and half in kindergarten.



- To elicit the narrative, the child will be asked to **narrate a recent personal past experience** (e.g. in which he or she was injured), which will be recorded by audio.
- Data transcription → CHAT format (Codes for the Human Analysis of Transcripts)
- Data processing → CLAN software (Computerized Language Analysis; MacWhinney, 2000).
- The **role of the researcher** as a mediator of the child's activity will be analysed as well (Tavernal & Peralta, 2009).



Analyses

- • The construction of the empirical assessment scale → The analysis of the narratives will consider their macrostructural and microstructural features:
 - temporal organization, structural components, syntactic complexity, length, use of causal and temporal connectors and evaluative resources, among others.
- The validation of the instrument → will include the analysis of content validity, construct validity and concurrent validity (Mikulic, 2018).
 - \circ Content validity \rightarrow an evaluation of **judges** will be carried out.
 - \circ Construct validity \rightarrow a **factorial analysis** will be performed.
 - \circ Concurrent validity \rightarrow the correlation with child performance in the narrative skills assessed using the **PLS5 test** will be considered (Zimmerman et al., 2012).
- The reliability of the instrument will also be analysed through **test-retest procedures**, **internal consistency and between evaluators**.





Objectives

objectives

To study children's narrative production (children from 3 to 5 years old), paying attention to how the **coherence** and **cohesion** of the narrative is built in the **interactive framework.**

To this purpose, these three dimensions and their interrelations will be analysed:



Coherence

Cohesion

Interaction

Corpus

- **Personal narratives** of children from **3 to 5 years old** who participated in the implementation of actions aimed to expand language development opportunities in a network of community kindergartens in La Matanza, Buenos Aires, Argentina (Rosemberg, Stein, Alam & Migdalek, 2015-2016)
 - Analysis of the vocabulary and narrative abilities of preschool children living in urban-marginalized communities.

- "Sharing time" situations, recorded with children from 3 to 5 years old in Entre Ríos and Ruenos Aires. Argentina, where intervention actions have
- in Entre Ríos and Buenos Aires, Argentina, where intervention actions have been performed (Rosemberg & Stein, 2012; Rosemberg, Stein, Migdalek, 2003 -2008)

Sharing time



- A classroom situation in which children narrate personal experiences and teachers collaborate with them through different strategies and conversational movements (e.g. repetition, restructuring and semantically contingent questions) → a way to scaffold the children's discourse and collaborate in the construction of shared knowledge.
- Social, emotional, linguistic and cognitive functions → contribute to the development of participation skills and facilitate socialization processes (Rosemberg & Manrique 2007)
- They encourage the development of discursive skills and, as a result of the need to re-elaborate lived experience, allow the narrative discourse to come into play and with it the temporal organisation of facts and a decontextualized use of language (Cazden, 1989; Michaels 1981, 1988; Snow 1983; Rosemberg & Manrique 2007).
- It facilitates literacy → certain forms of discursive coherence and contextualisation important for the comprehension of written discourse are practised (Michaels 1981, 1988; Póveda, Sebastián & Moreno, 2003).

Mental Models

- When a child or adult is faced with the task of telling a sequence of events that shape a story they first construct a mental model of this sequence.
 - The processing of a sequence of events and a narrative text constitute two cognitive processes that have in common the construction of a mental representation of the events and their relationships in the episodic memory (visual and linguistic data, respectively) (Van Dijk & Kintsch, 1983).
- Children's world is, first of all, a social world of relationships, of events that take part of cultural practices → a dynamic world.
 - Script → is the most appropriate conceptual entity to describe the first representations of children's thinking (eg. bath, mealtime, go to sleep) (Nelson & Gruendel, 1981; Nelson et al., 1983).
 - Stories → reflection and support of these representations (Plana, Silva & Borzone, 2011;
 Rosemberg, 1994)

The study of coherence and cohesion, as well as syntactic complexity, will make it possible to **analyse and understand the underlying mental representations of children**, i.e. how they understand real-life events (new and routine) (Trabasso et al. 1984, 1985).





Coherence and cohesion

- Global coherence → establishment of more distant relations between different parts of the text in order to represent the subject globally. It involves the hierarchical assembly of text segments into a complex structure or macrostructure.
 - Narration: abstract, orientation, complicating, resolution, coda and evaluation (Lavob, 1972).
- Local coherence / cohesion → inter-sentence level and sequentiality, establishment of local relationships between pairs of segments in a text, i.e. between consecutive sentences. Necessary but not sufficient for global coherence.
 - Syntactic complexity of clauses, use of morphosyntax and vocabulary to establish relationships between events, temporal and causal thread of the plot, etc. (Norbury & Bishop 2003; Bishop 2004)





- Cohesive resources → anaphoric expressions. They allow a discourse to be organised, cohesively linking the fragments.
- The possibility of selecting, prioritising and linking linguistic expressions is a
 complex cognitive operation that reveals the human capacity to distinguish and
 contrast the entities that are relevant and that must therefore be presented and
 kept in the foreground.

(Borzone & Silva, 2010; Chafe, 1974; 1976)

- The presence of **relative clauses** in children's discourse → allows children to decentralize and incorporate information by assigning mental states to their partners (Glucksberg et al., 1968).
- Complex process that involves linguistic and discursive development as well as participation in symmetrical conversational interactions and a certain level of ToM (Silva & Plana, 2014).

Interactive Dimension

- 11/11
- The child participates, with **adult guidance**, in routines involving play, work, satisfaction of needs → from their first months of life, children form mental **representations of general events**. Based on these representations, the child begins to understand the world, to perform mental operations and to form new representations (Plana, Silva & Borzone, 2011; Rosemberg, 1994).
- Dynamic assessment strategy → during the assessment process, the adult provides gradual support to the child and can measure whether his/her initial performance improves.
 - Previous research in interaction situations showed that adults facilitate the creation of a context of mutual understanding, helping children to organise their narratives causally and temporally, as well as to include more information, and to produce decontextualized stories (Alam & Rosemberg, 2016; Rosemberg & Silva 2009).

Interactive Dimension

The data collected will provide a clear overview of the importance of interaction for narrative development, and of the role of the adult as mediator and creator of teaching-learning contexts around children's narrative discourse, both at home and in kindergarten.







Example

Cohesion - coreference

Syntactic

complexity

11/11

Correference

*NAH: This is the most terrible thing you've ever heard.

*NAH: Once I was in my aunt's house.

*NAH: I grabbed by my aunt's door

and they had to take me to the doctor

because I was bleeding I was bleeding

I was shaking

and I was shouting like this mummy mummy mummy

because it hurt.

*NAH: **so** they put a bandage on me

but didn't give me an injection

(.) They had done to me an X-ray I think you don't know what it is

an X-ray (.) a picture of the bones.

*NAH: **So when** they took my X-ray they saw the doctor that

had my finger out of place

and it passed in this hand.

*Nah: yes, look,

now I'm cured,

look, squeeze me (.)

See?

Connectors

Structural components

Evaluation

Orientation

Action

Action / Evaluation

Evaluation

Evaluation

Evaluation

Evaluation

Action

Evaluation

Action

Evaluation

Evaluation

Action

Description

Evaluation

Action

Evaluation

Evaluation

(Nahiara, 5 years, personal experience narrative)

Further steps



- The analysis of the data from both corpora, and their interrelationships, will be used to **build an empirical assessment scale** of different dimensions.
- The **validity, reliability and internal consistency** of the instrument will then be analysed.
- Finally, the performance of **150 children** on the test will be documented.

Thank you!

Do you have any questions? Feedback an commentaries are always welcome:

ailinpfranco@gmail.com

Acosta, V., Moreno, A. & Axpe, A. (2014) El estudio de la agramaticalidad en el discurso narrativo del trastorno específico del lenguaje. Onomazein, 29, 119-129.

Alam, F., & Rosemberg, C. R. (2016). "¡ Uy, no!¡ Mirá lo que pasó!". Uso de recursos evaluativos en narrativas de ficción por niños pequeños de poblaciones urbano-marginadas. *Íkala, revista de lenguaje y cultura, 21*(3), 281-297.

Aukrust, V.G. & Snow, C.E. (1998). Narratives and explanations during mealtime conversations in Norway and the U.S. Language in Society, 27(2), 221-246.

Beck, S. (2008). Cultural variation in narrative competence and its implications for children's academic success. En A. McCabe,

A. Bailey & G. Melzi (Eds.), Spanish-language narration and literacy (pp. 332-350). Cambridge, UK: Cambridge University Press.

Bishop, D. (2004). Expression, Reception and Recall of Narrative Instrument, ERRNI Manual. Londres: Harcourt Assessment.

Borzone, A.M. (2005). La resolución de anáforas en niños: incidencia de la explicitud y de la distancia. Interdisciplinaria. Revista de Psicología y Ciencias Afi nes. 22, 2, 155 – 182.

Borzone, A.M. & Silva, M.L. (2010). De las imágenes al texto: focalización y uso de recursos anafóricos en relatos de niños y jóvenes. SUMMA Psicológica. UST, Vol 7, 1, 105-120

Bruner, J. (1986). El habla del niño. Barcelona: Paidós.

Bruner, J. (1990). Actos de significado. Más allá de la revolución cognitiva. Madrid: Alianza Editorial.

Cazden, C. (1989) El discurso en el aula. El lenguaje de la enseñanza y el aprendizaje. Madrid: Paidós.

Carmiol, A. M. & Sparks, A. (2014). Narrative development across cultural contexts. Pragmatic development in first language acquisition, 10, 279-296.

Chafe, W. (1974). Language and consciousness. Language, 50,111-133.

Chafe, W. L. (1976). Givenness, contrastiveness, defmiteness, subjects, topics, and point of view. En C. N. Li (Ed.), Subject and topic (pp. 25-55). New York: Academic Pres

Cowley, J. & Glasgow, C. (1994). The Renfrew Bus Story (American Ed.). Centreville, DE: The Centreville School.

Díaz Oyarce, C. & Mendoza Saavedra, J. (2012). Evolución y progreso en el uso de estructuras evaluativas presentes en las producciones narrativas orales de niños y niñas de escuelas de sectores vulnerables. Onomázein, (26), 391-410.

Fivush, R. & Nelson, K. (2006). Parent-child reminiscing locates the self in the past. British Journal of Developmental Psychology, 24, 235-251.

Gillam, R. & Pearson, N. (2004). Test of Narrative Language. Austin, TX: Pro-ed.

Gillam, R., Peña, E. D. & Miller, L. (1999). Dynamic assessment of narrative and expository discourse. Topics on language disorders, 20(1), 33-47.

Halliday, M. A. K., & Hasan, R. (2014). Cohesion in english. Routledge.

Ibarra, A. B., & Crespo, N. (2014). Comprensión oral de narraciones y producción narrativa: dos medidas a través de una tarea de recontado 1. https://doi.org/10.7764/onomazein.30.7

Kibrik, L., Jaichenco, V., Medina, C., Sevilla, Y., Slupski, V., Ces Magliano, F., Center, B., Pagano, A., Failasi, A., Cavallo, V., Alegre, M. S., Friese, Gabriela, Kauffman, M. y Riva, A. (2007). Evaluación del lenguaje infantil a través de narrativas. Presentación del protocolo y estudio preliminar. Revista Argentina de Neuropsicología, 10, 22-214.

Labov, W. (1972). Sociolinguistic patterns. Philadelphia, PA: University of Pennsylvania Press.

Louwerse, M. M. (2004). Un modelo conciso de cohesión en el texto y coherencia en la comprensión. *Revista signos*, *37*(56), 41-58.

MacWhinney, B. (2000). The CHILDES Project: Computational tools for analyzing talk. Hillsdale, NJ: Lawrence Erlbaum.

McCabe, A., Bailey, A. & Melzi, G. (2008). Spanish-language Narration and Literacy: Culture, Cognition and Emotion. Cambridge: CUP.

Michaels, S. (1981) "Sharing time': Children's narrative styles and differential access to literacy." Language in Society, 10, 1981, pp. 423-442.

Michaels, S. (1988). Presentaciones narrativas: una preparación oral para la alfabetización con alumnos de primer curso. En J. Cook-Gumperz (Ed.) La construcción social de la alfabetización (pp. 109-136). Barcelona: Paidós.

Mikulic, I. M. (2018). Construcción y adaptación de pruebas psicológicas. Ficha de cátedra núm. 2. Facultad de Psicología, UBA. Miller, P. J. (1994). Narrative practices: Their role in socialization and self-construction. The remembering self: Construction and accuracy in the self-narrative, 6, 158-179.

Nelson, K. (1996). Language in cognitive development. Cambridge: Cambridge University Press.

Nerson, K & Gruendel, J. (1981). Generalized event representations: Basic building blocks of cognitive development. En A. Brown y M. Lamb (Eds.), Aduances in d,eaelopmental psycholog. Hillsdale, NJ: Erlbaum

Nelson, K, Fivush, R, Hudson, J.& Lucariello, J. (1983). Scripts and the development of memory. En J.A. Meacham (Ed.), Contributions to hutnan deaelopmmL Buffalo, NY: Karger Basel.

Ninio. A. & Snow, C. (1996). Pragmatic Development. Cambridge: Cambridge University Press.

Norbury, C. F; Bishop V. M. "Narrative Skills of children with communication impairments". International Journey of Language & Communication Disorders 38 (3), 2003, pp. 287-313.

Pavez, M., Coloma, C. & Maggiolo, M. (2008). El desarrollo narrativo en niños. Barcelona: Ars Medica.

Plana, M. D., Silva, M. L., & Borzone, A. M. (2011). Habilidades discursivas y representaciones mentales en niños pequeños. Lenguaje, 39(2), 365-394.

Petersen, D. B., Gillam, S. L. & Gillam, R. B. (2008). Emerging procedures in narrative assessment: The index of narrative complexity. Topics in language disorders, 28(2), 115-130.

Pinto, G., Tarchi, Ch. & Bigozzi, L. (2016). Development in narrative competences from oral to written stories in five- to seven-year-old children. Early Childhood Research Quarterly, 36, 1-10.

Póveda, D.; Sebastián, E.; & Moreno, A. "La ronda' como evento para la constitución social del grupo en una clase de educación infantil". Infancia y Aprendizaje 26 (2), 2003, pp. 131-146.

Rosemberg, C.R. y Manrique, S. "Las narraciones de experiencias personales en la escuela infantil. ¿Cómo apoyan las maestras la participación de los niños". Psyke, 16, 1, 2007, pp. 53-64.

Rosemberg, C. R., & Silva, M. L. (2009). Teacher-children interaction and concept development in kindergarten. Discourse processes, 46(6), 572-591.

Rosemberg, C. & Stein, A. (2012) Situaciones de alfabetización temprana en el jardín de infantes de Entre Ríos, Argentina/Kindergarten Early Literacy Situations in Entre Ríos, Argentina. CONICET (DOI en trámite)

Rosemberg, C., Stein, A & Migdalek, M. (2003 -2008) Situaciones de alfabetización temprana en el jardín de infantes y de alfabetización familiar en Buenos Aires, Argentina/Preschool and Kindergarten Early Literacy and Family Literacy Situations in Buenos Aires, Argentina. CONICET (Doi en trámite)

Schick, A., & Melzi, G. (2010). The development of children's oral narratives across contexts. Early Education and Development, 21(3), 293-317.

Signorini, A., Borzone, A., & Rosemberg, C. (2017). Elaboración de un instrumento para el diagnóstico de la comprensión de narraciones. Lenguas Modernas, (16), 41-68.

Silva, M. L., & Plana, M. D. (2014). Estrategias de relativización en niños pequeños: comparación de desempeños ante producción espontánea y recuperación de relatos.

Silva, M. J. & McCabe, A. (1996). Vignettes of the continuous family ties: Some Latino American traditions. En A. McCabe (Ed.) Chameleon readers: Teaching children to appreciate all kinds of good stories (pp. 116–136). New York, NY: McGraw-Hill.

Snow, C. (1983). "Literacy and language: relationships during the preschool years". Harvard Educational Review 53, 2 pp. 165-189.

Snow, C. E.; Porche, M. V., Tabors, P., & Harris, S. (2007). Is Literacy Enough? Pathways to Academic Success for Adolescents. Illinois: Brookes.

Stein, A. (2015). Narrativas compartidas en el hogar. Un estudio longitudinal de la estructura y el lenguaje evaluativo. Interdisciplinaria, 32(1), 51-71.

Stein, A. (2016). La construcción de la temporalidad en conversaciones en torno a eventos pasados y futuros. Un estudio longitudinal durante los años preescolares. IV Encuentro de Investigadores en Desarrollo y Aprendizaje, La Plata, Buenos Aires, Argentina.

Stein, A., Rosemberg, C. R., Migdalek, M. J., Alam, F., y Batiuk, V. (aceptado). Vocabulary and narrative discourse in preschoolers. A study with children from urban-marginalized communities in Argentina. EARLI Conference, 29 de junio al 1.º de julio del 2016, Oporto, Portugal.

Strasser, K., Larraín, A., López de Lérida, S. & Lissi, M. R. (2010). La Comprensión Narrativa en Edad Preescolar: Un Instrumento para su Medición. Psykhe, 19(1), 75-87.

Strong, C., Mayer, M., & Mayer, M. (1998). The Strong Narrative Assessment Procedures (SNAP). Eau Claire, WI: Thinking Publ.

Tavernal, A. & Peralta, O. (2009). Dificultades de aprendizaje. Evaluación dinámica como herramienta diagnóstica. Revista Intercontinental de Psicología y Educación, 11(2), 113-139.

Trabasso, T., & Van Den Broek, P. (1985). Causal thinking and the representation of narrative events. *Journal of memory and language*, 24(5), 612-630.

Trabasso, T. & Stein, N. (1997). Narrating, representing, and remembering event sequences. En P. W. van den Broek y P. J. Bauer, (Eds.), Developmental spans in event comprehension and representation (pp.237-270). Hillsdale, NJ: Erlbaum.

Uccelli, P. (2008). Beyond chronicity: Evaluation and temporality in Spanish-speaking children's personal narratives. En A. McCabe, A. Bailey, G. Melzi (Eds.), Spanish language narration and literacy development (pp. 175-212). Cambridge: Cambridge University Press.

Van Den Broek, P., & Trabasso, T. (1986). Causal networks versus goal hierarchies in summarizing text. Discourse Processes, 9(1), 1-15.

Van Dijk, T & Kintsch, W. (1983). Strate§es of discourse com?tchension. Nueva York: Academic Press.

Vygotsky, L. (1964). Pensamiento y lenguaje. Buenos Aires: Lautaro.

Wellman, R., Lewis, B., Freebairn, L.; Avrich, A., Hansen, A. & Stein, C. (2011). Narrative Ability

of Children with Speech Sound Disorders and the Prediction of Later Literacy Skills. Language, Speech, and Hearing Services in Schools, 42, 561–579.

Zimmerman, I. L., Steiner, V. G., & Pond, R. E. (2002). Preschool Language Scale (4th ed.). San Antonio, TX: The Psychological Corporation.