Pragmatic intervention in children and adolescents with Down syndrome: the role of support in script construction

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BACKGROUND

People with Down syndrome (DS) show a relative strength in non-verbal cognition, social skills and language comprehension, which allows them to perform well in narrative tasks, one of which is scripts. The pragmatic intervention based on structured storytelling allows the subject to communicate their experiences in a coherent way and is highly effective when the interlocutor uses conversational strategies in the development of narrative tasks (Ninio & Snow, 1996). In addition, in pragmatic intervention, the use of visual material may favour the recall of the content of narration in subjects with DS.

The aim is double: to determine whether DS subjects narrate stories coherently and use pragmatic markers suitable for discourse and communicative context; and to improve narrative skills when intervention is supported by a Prezi presentation with pictograms and verbal support.

METHOD

Subjects: The sample is 10 Spanish-speaking subjects with DS ranging in age from 9 to 17, belonging to the Down Syndrome Association in northern Spain.

Materials: 2 Prezi presentations:
- 44 ARASAAC pictograms telling a script: "A haircut at the hairdresser´s", formed by 3 episodes and 10 events.
- 102 ARASAAC pictograms telling a script: "A birthday party at home", formed by 7 episodes and 20 events.

Procedure: In pre-test and post-test, each subject narrated two scripts, an easy script "A haircut at the hairdresser´s", and a difficult script "A birthday party at home", only with conversational support. For the intervention, a weekly session took place for four weeks, where the subjects were trained through verbal imitation to use basic lexicon and discursive markers to tell the story, employing ARASAAC pictograms in Prezi presentation and with conversational, historical and psychological support by the researcher. Pre-test and post-test narrations were recorded and transcribed using the CHILDES Project (MacWhinney, 2000). The narrative structure was coded and analyzed in terms of episodes and events. The frequency of discourse markers and the vocabulary was also coded and analyzed.

PREZI PRESENTATION
EASY SCRIPT = 10 EVENTS
"A haircut at the hairdresser´s"

The design is a pre-test post-test cuasi-experimental design.

FOUR INDIVIDUAL INTERVENTION SESSIONS (one per week)

ARASAAC pictograms in Prezi presentation **+** Verbal imitation of lexical items **+** Conversational, historical and psychological supports

PRE-TEST

Easy Script:
Tell me, what is a haircut like at the hairdresser´s?

Difficult Script:
Tell me, what is a birthday party like at home?

CONVERSATIONAL support

What else?
Can you tell me anything else?

CONVERSATIONAL support

What else?
Anything else?
Can you tell me anything else?
What happens at the end?

HISTORICAL support

Where do you have to go?
What is there on the table?
Do we give something to the host?
And what can we do at the party?
And what do the guests do?
When do you leave?

PSYCHOLOGICAL support

I am so happy to meet my friend!
What a beautiful party!
The food looks delicious!
I love chocolate cake!
Come on! Blow out the candles!
Will you like my gift?
Smile!!! Say cheese!!!

POST-TEST

Easy Script:
Tell me, what is a haircut like at the hairdresser´s?

Difficult Script:
Tell me, what is a birthday party like at home?

CONVERSATIONAL support
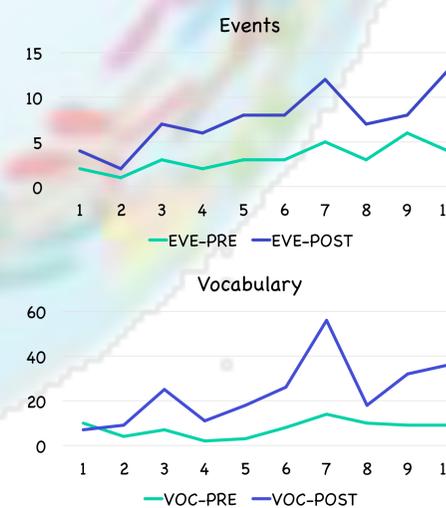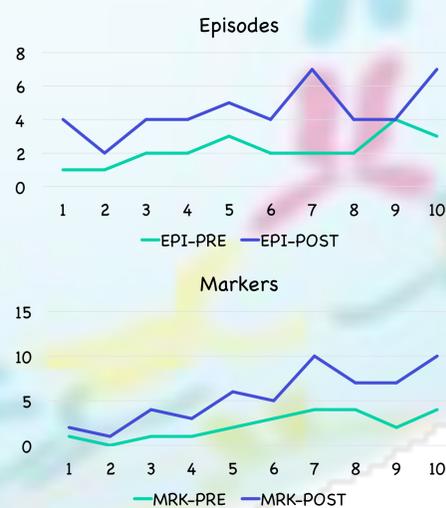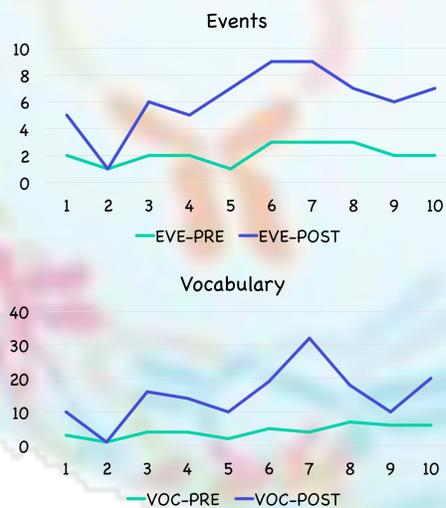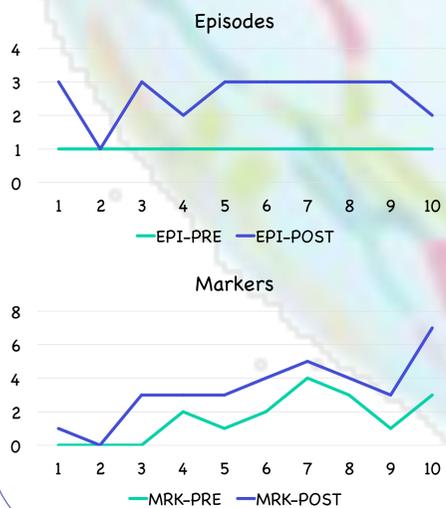
What else?
Can you tell me anything else?

PREZI PRESENTATION
DIFFICULT SCRIPT = 20 EVENTS
"A birthday party at home"

RESULTS

Easy Script: A haircut

Episodes
EPI-PRE — EPI-POST

Events
EVE-PRE — EVE-POST

Markers
MRK-PRE — MRK-POST

Vocabulary
VOC-PRE — VOC-POST

Difficult Script: A birthday party

Episodes
EPI-PRE — EPI-POST

Events
EVE-PRE — EVE-POST

Markers
MRK-PRE — MRK-POST

Vocabulary
VOC-PRE — VOC-POST

IMPLICATIONS

Participants increased the number of episodes, events, markers and vocabulary after the intervention.

The narration of a script improves when the intervention is supported by pictograms, in verbal imitation and in conversational, historical and psychological support provided by the interlocutor. The use of visual support and conversational strategies by the interlocutor are key elements for the progress of the narration of a script.

References

ARASAAC. Autor pictogramas: Sergio Palao. Propiedad: Gobierno de Aragón. Procedencia: ARASAAC http://arasaac.org. Licencia: CC (BY-NC-SA).
MacWhinney, B. (2000). *The CHILDES Project: Tools for Analyzing Talk*. 3rd Edition. Mahwah, NJ: Lawrence Erlbaum Associates.
Ninio, A., & Snow, C. E. (1996). *Pragmatic development*. Boulder, CO: Westview Press.