

Investigation of Different Therapy Approaches for Aphasia in the Greek Language

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“Thalis” Aphasia Project

- 3 year 9 months project
- host institution: University of Athens
- 3 different research streams take part:
 - a. Neurolinguistics
 - b. Neuropsychology
 - c. Speech and Language Therapy

Research Aims

- Effectiveness of SLT for word and sentence level impairments, delivered through different therapy approaches
 - a) direct (one-to-one / individual therapy),
 - b) indirect (group therapy) and
 - c) combination therapy (individual and group).
- Relative impact of each therapy approach on outcomes tapping WHO ICF framework levels, including quality of life

Methodology

Participants: 96 individuals with aphasia, meeting pre determined selection criteria.

Design:

a) allocation of people to therapy approach (direct, indirect, combination) by recruitment order.

b) assessments: pre-tx 1, pre-tx 2 (double baseline), post- tx, and 3-month follow-up

Double Baseline Pre – Therapy Assessment

Word Level Therapy

Sentence Level Therapy

**Direct
Approach**

**Indirect
Approach**

**Direct
Approach**

**Indirect
Approach**

**Combination
Approach**

**Combination
Approach**

**Post – therapy
Assessment**

**Post – therapy
Assessment**

**Follow Up
Assessment
(3months)**

**Follow Up
Assessment
(3months)**

Duration of Intervention

12 weeks / 3 hours per week

Direct therapy

3 * 1-hr
one – to – one
sessions
per week

Indirect therapy


2 * 1½-hr
group
sessions
per week


Combination therapy

1 * 1½-hr group
2 * 45-min
one – to – one
sessions
per week

Outcome measures

Primary outcome measures

a. Word Level
Therapy Type  Confrontation naming task
of 260 picture
(Snodgrass & Vanderwart, 1980)

b. Sentence Level
Therapy Type  Description of composite
picture & story sequence
(Nicholas & Brookshire, 1993)

Outcome measures

Secondary outcome measures

Published psychometric scales tapping on all WHO ICF levels:

1. Boston Diagnostic Aphasia Examination (Papathanasiou *et al.*, 2008)
2. Boston Naming Test (Simos, Kasselimis & Mouzaki, 2011)
3. Greek SAQOL-39 (Kartsona & Hilari, 2007, Efstratiadou *et al.*, 2012)
4. General Health Questionnaire-12 (GHQ-12, Garifalos *et al.*, 2001)
5. ASHA FACS (Frattali, Holland, Thompson, Wohl & Ferketic, 1995)
6. Story Retelling (McNeil, 2002)
7. A Sentence-Processing Test (under construction)

Allocation to therapy type

Based on the results of their assessment findings.

Boston Naming Test is low (<20/45): word level therapy type is applied.

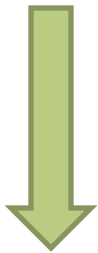
If

Sentence-Processing Test score is low: sentence level therapy type is applied.

Therapy Type

- Principles of impairment - focused therapy
- Focus on specific language deficits

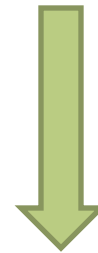
Word Level



Elaborated Semantic
Feature Analysis
(ESFA) Therapy

(Boyle & Coelho, 1995;
Papathanasiou, 2006)

Sentence Level



Mapping Therapy

(Byng et al., 1994)

Elaborated Semantic Feature Analysis (ESFA) therapy

Focus: improve **recalling ability of words** by creating and developing a list of semantic traits related to a specific concept (Semantic Feature Analysis).

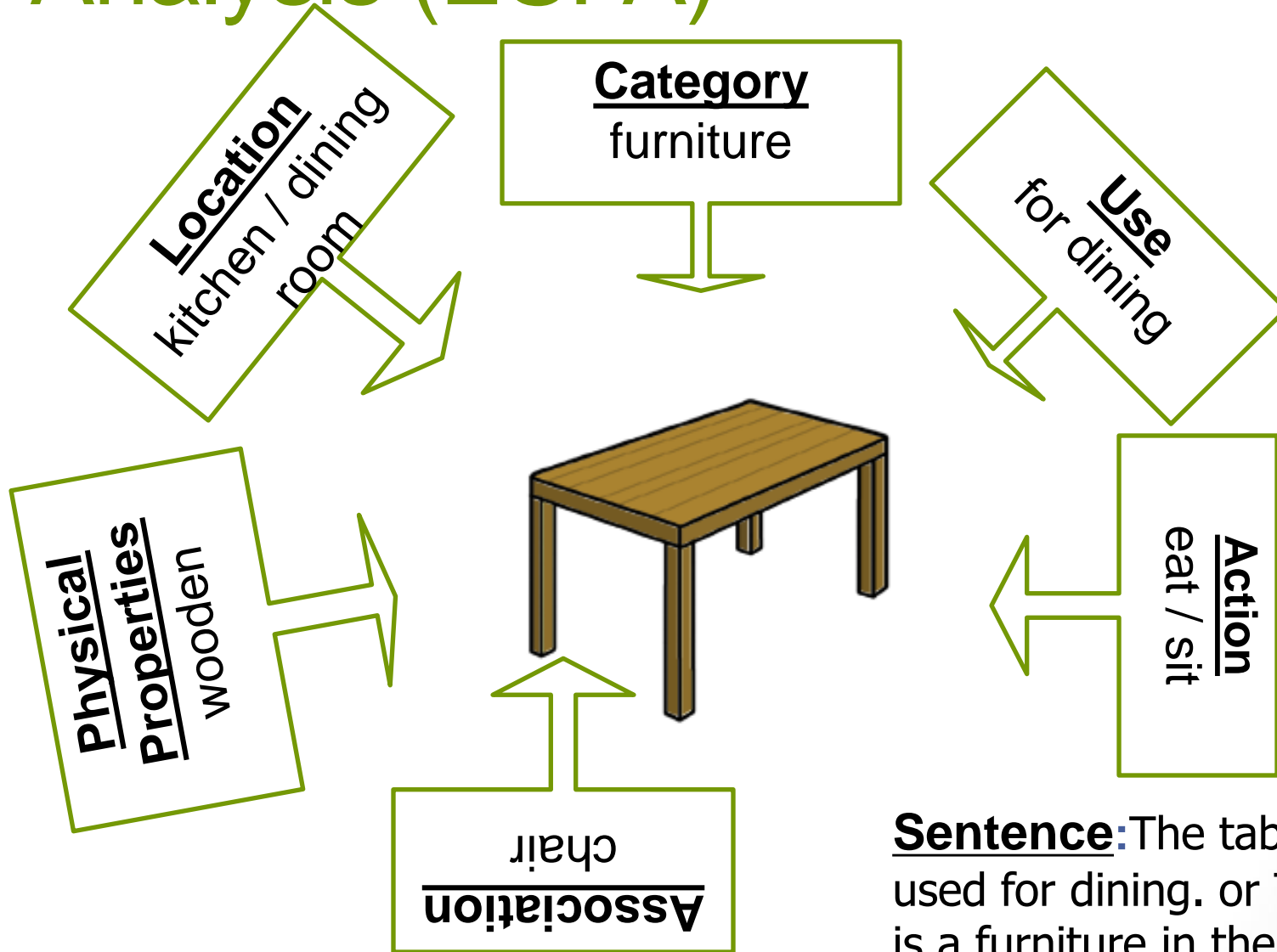
(Massaro & Tompkins, 1992; Ylvisaker & Szekeres, 1985)

ESFA is based on the SFA approach, but also allows the participant to elaborate the described features to a sentence.

(Boyle & Coelho, 1995; Coelho et al, 2000; Boyle, 2004; Papathanasiou, 2006)

Purpose: **transfer the naming ability to connected speech.**

Elaborated Semantic Feature Analysis (ESFA)



Sentence: The table is used for dining. or The table is a furniture in the kitchen.

Mapping Therapy

Purpose: enable the participants to monitor and know how to modify their own production in order to be in greater control over their own output.

Therapy is based on the therapeutic protocol described in Byng et al. (1994).

Therapy comprised from three principal stages, different in their focus.

Mapping Therapy

	Stage 1	Stage 2	Stage 3
Focus	Linguistic conceptualization of events	Production of structured utterances	Generalization of the production

Challenges....

Develop outcome measures for testing grammar structures for the Greek language.

Choose therapy material

a. 260 colorized picture set of Snodgrass &

Vanderwart (1980)

(Rossion & Pourtois, 2004)

- Culture adapted
- Standardize the pictures
- Select normative data

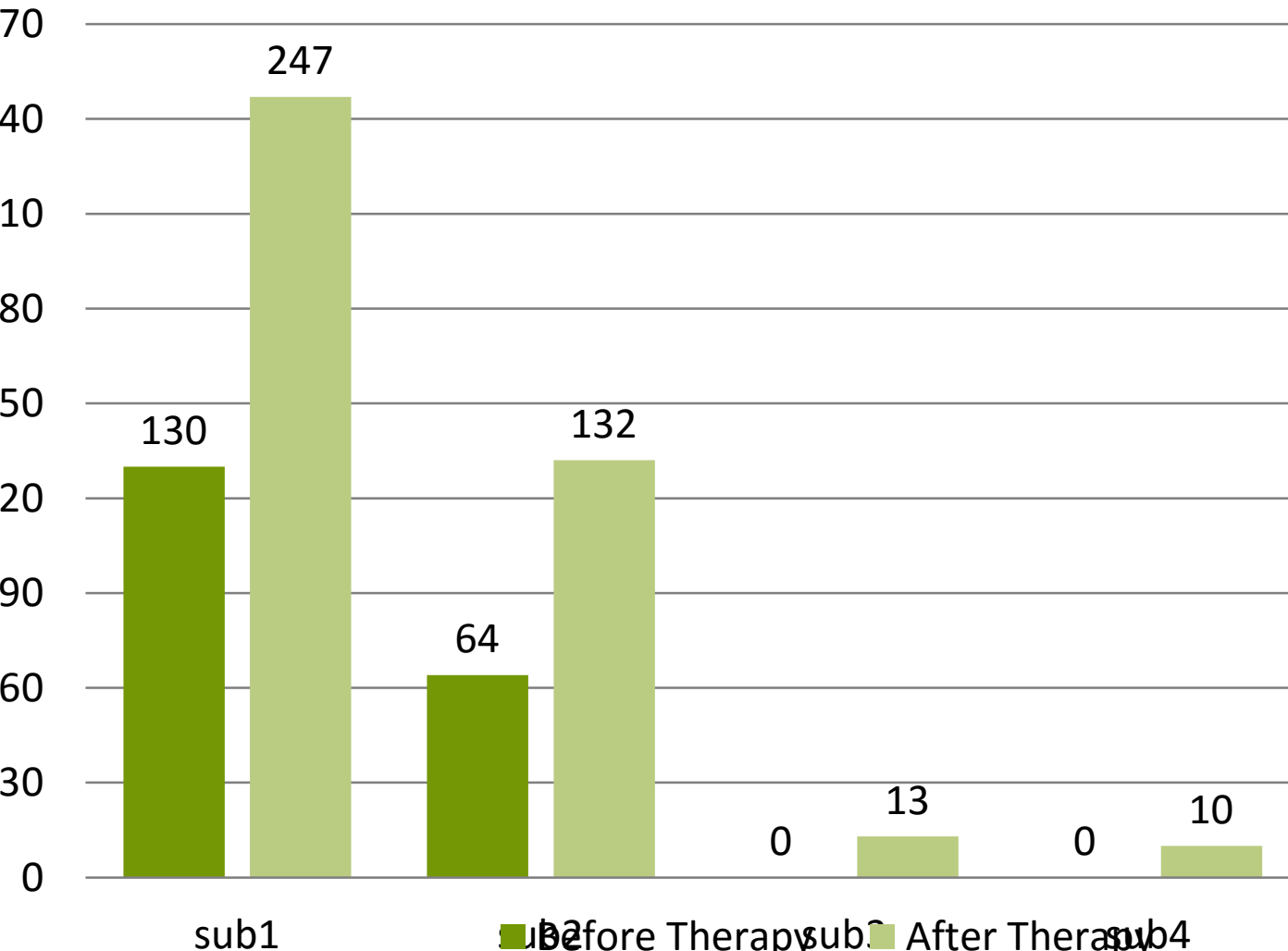
b. Newcastle University Aphasia Therapy: Sentence

Processing Package

(Webster, Morris, Whitworth, Howard, 2009)

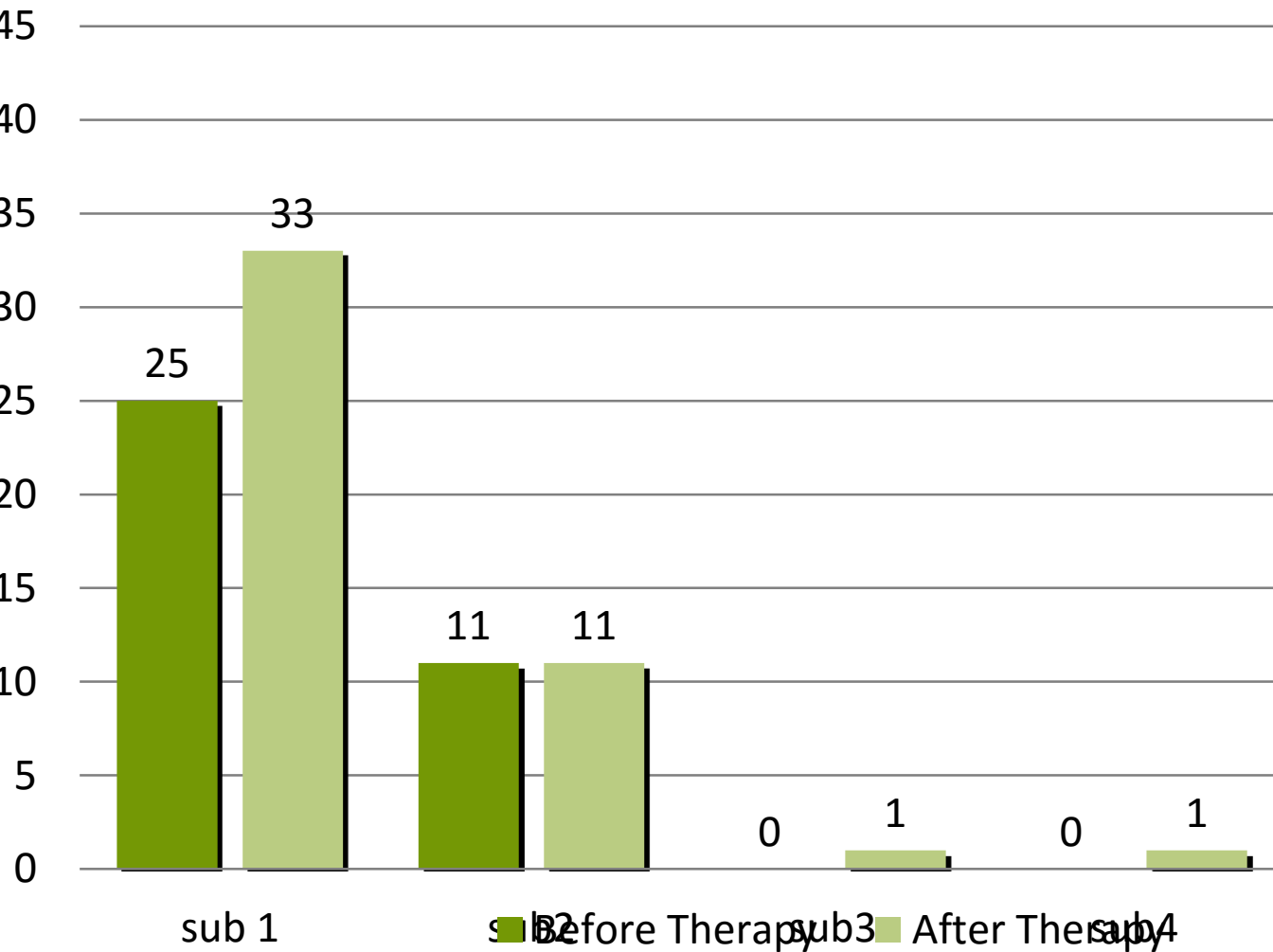
Results

Primary Outcome Measure for Word Level Therapy Type - Direct Approach: Snodgrass Picture Set



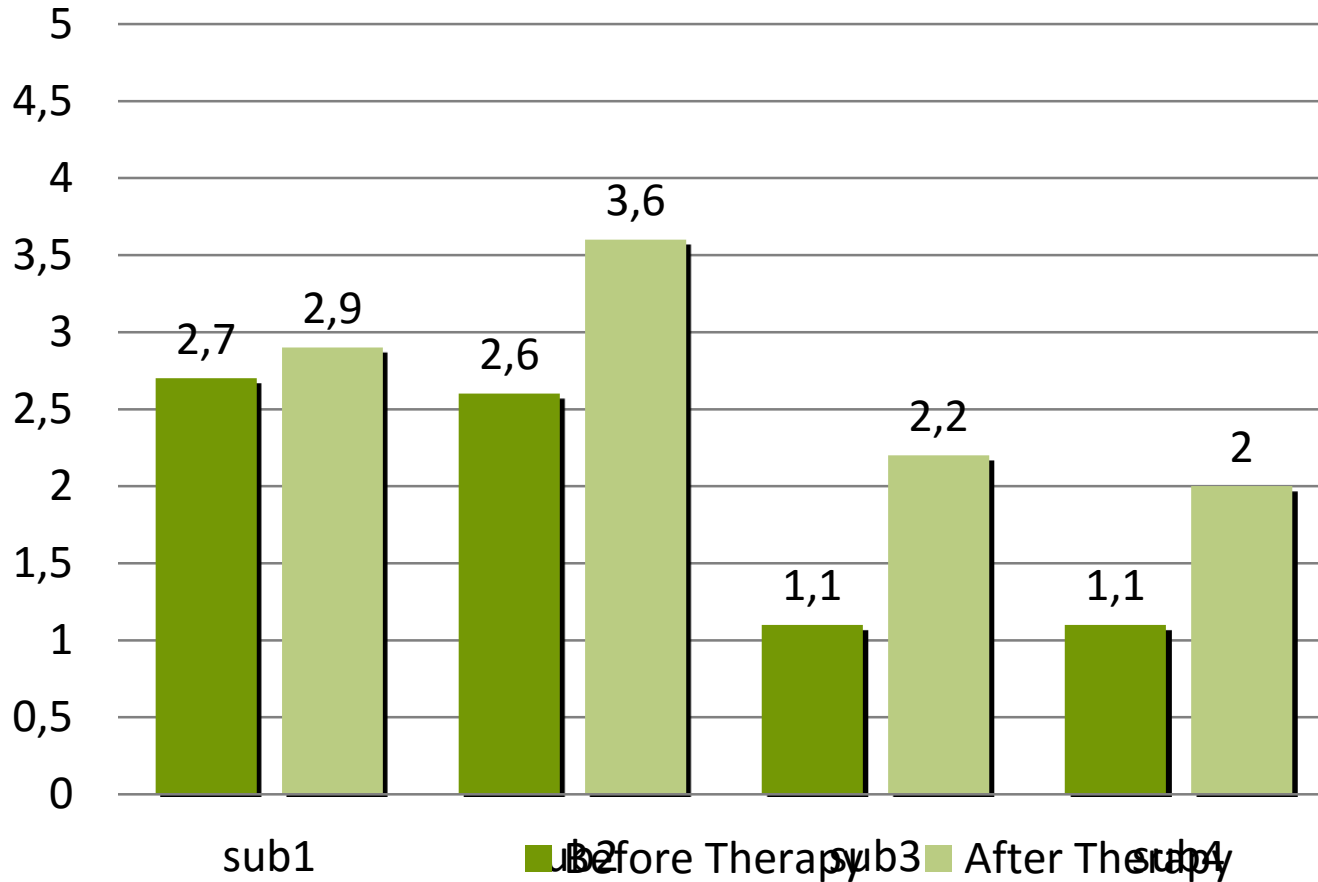
Results

Secondary Outcome Measure for Word Level Therapy Type - Direct Approach: BNT



Results

Secondary Outcome Measure for Word Level Therapy Type - Direct Approach: Greek SAQOL- 39 Communication Score



Discussion

- First findings shows that ESFA results are so far encouraging in improving recalling ability to single word.
- We need further results!!!!

Discussion

- Will provide novel information on the effectiveness of established therapy when delivered in different contexts (direct vs. group vs. combination therapy approach).
- Will show the impacted of each therapy approach on outcomes tapping WHO ICF framework levels, including quality of life.
- Will support evidence – based practice in Greece.
- Will promote cross – cultural comparisons.

A scenic view of a beach with turquoise water and a rocky island in the background. The text 'THANK YOU' is overlaid in large blue letters.

THANK YOU

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