Naming impairment in Dutch patients with MS – Explorative study

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Introduction

Word-finding difficulties

- What?

- When?

- What do patients experience?

- Diagnosis?

- Treatment?

Motivation for research

Objectives

1. Do MS patients experience word-finding difficulties?

   ▶ Are MS patients able to tell that they have a naming impairment?

2. What is the relationship between naming impairment, cognition and disease disability?

3. Which (distorted) underlying processes may influence a naming impairment?

Methods

Nederlandse Benoem Taak (Dutch Naming Test)

    Diagnosis of naming impairment.

VAS-Schaal

    'Self-reported severity' of word-finding difficulties.

MOCA

    Cognitive functioning.

EDSS

    Disability score.

Results

1. Do MS patients experience word-finding difficulties?

- Are MS patients able to tell that they have a naming impairment?

2. What is the relationship between naming impairment, cognition and disease disability?

~~EDSS~~

MOCA and Dutch Naming Test

    MOCA explains 49.6% of Dutch Naming Test

    Sub-tests (52.9%):

        Attention;

        Orientation;

        Abstraction.

3. Which (distorted) underlying processes may influence a naming impairment?

Classification:

- Fonological;

- Semantic;

- Visual;

- Others.

Ridder   Knight

Soldaat   Soldier

Middeleeuwen   Middle Ages

Prins   Prince

Noorman   Northman

Playmobil   Playmobil

Slot   Lock

Handtas   Purse

Shopper   Shopper

Boodschappentas   Shopping bag
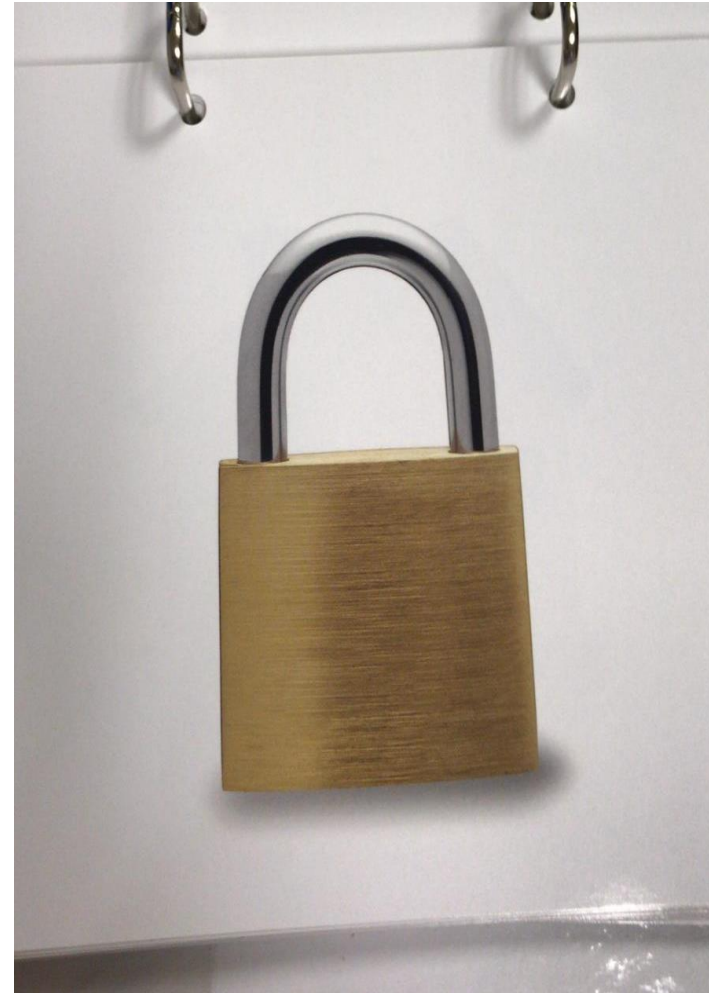
Eiland   Island

Vis

Ingezaaid perkje

Atol

Fish

Sown bedding

Atoll

Lift   Elevator

Ingang   Enterance

Maanzaad   Poppy seed

Een hal   a Hall

Gang   Corridor

Brug

Trap

Hangbrug

Om overheen te lopen

Bridge

Stairs

Wire bridge

To walk over

Koning   King

Joker   Joker

Sinterklaas   Sinterklaas (Bishop)

Kerstman   Santa Claus

Mantel   Robe

Vuur   Fire

Fluweel   Velvet
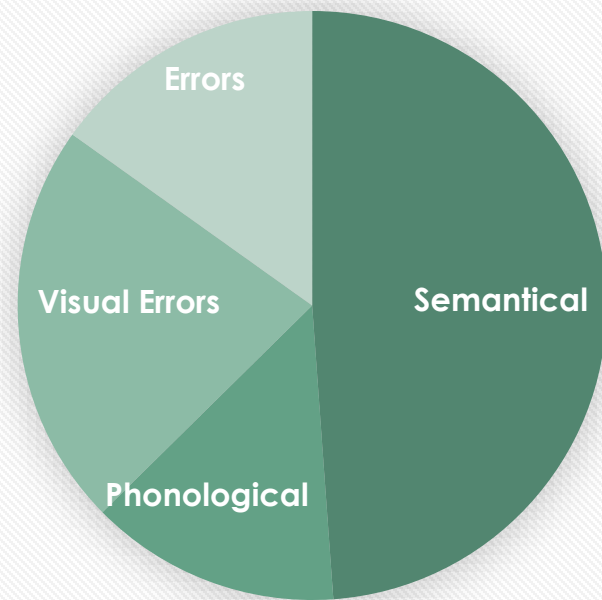
Schilderij Painting

Kleur   Color

Vlag   Flag

Paraplu   Umbrella

Results

Discussion

- ▶ Language problems in MS?
  - ▶ Sometimes apparent, sometimes not → in line with literature
- ▶ Patients with MS are not able to judge their language abilities.
  - ▶ Disease awareness
- ▶ Most errors are semantic errors.

Discussion

▶ Disability (EDSS) has no relation with scores on the Dutch Naming Test.

  ▶ EDSS is removed from the regression model.

▶ MOCA explains half of the scores on the Dutch Naming Test.

  ▶ The subtests of the MOCA responsible for this relationship, are not language related subtests.

▶ It appears that word-finding difficulties in MS are due to a combination of more general cognitive processing difficulties, combined with a decline in semantic memory and lexical access.

Conclusion

▶ 30% of the participants had naming impairment;

▶ Poor awareness of naming impairment;

▶ Most errors are semantic errors;

▶ It remains unclear which cognitive/linguistic functions are involved in confrontational naming