

***Cognitiva.PT* Multimedia software for intervention in specific reading and writing disorders**

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Abstract

This paper presents a Reading & Writing software program, *Cognitiva.PT*, for cognitive stimulation and rehabilitation of Specific Reading & Writing Disorders from a neuropsychological perspective. [Since this software is currently available only in Spanish, only the introductory aspects of this presentation are offered in English. If there is interest in access to an English version of the software itself, to a example of its application in a practical case, or simply more information in English, please contact the Journal at

administracion@investigacion-psicopedagogica.org.]

Keywords: multimedia software, specific disorders in reading/writing

Presentation

The reading and writing software program, *Cognitiva.PT*, deals with cognitive stimulation and rehabilitation of Specific Reading & Writing Disorders from the neuropsychological perspective, keeping in mind the diverse functional systems that are involved.

The software development team was made up of a wide range of professionals specializing in various fields: psychologists, educators, speech therapists, computer programmers and designers. This ensures that the program has a solid foundation, efficient technology, and methodological effectiveness.

The application of computer software is a new development, making possible in some aspects a qualitative leap in the areas of diagnosis, qualification and therapy for disorders.

In no instance does *Cognitiva.PT* intend to replace the therapist; rather, it is an open-ended tool with which therapists can plan their therapeutic work according to their own methods and approach. The program simply facilitates and enhances their work.

Cognitiva.PT fully meets all requirements deemed necessary for a cognitive rehabilitation program to be considered clinically useful (Franco, Orihuela, Bueno & Cid; 2000):

-*Flexibility*: able to be adapted to the specific needs of each user

-*Simplicity*: may be used with ease and without requiring continuous intervention from the specialist

-*Utility*: enables attainment of therapeutic objectives and allows for clear improvement in various higher functions

-*Accessibility*: both from a financial point of view and with regard to its applicability and availability in any setting.

Program Content

The content of the program offers a perspective which integrates different processes involved in learning to read and write:

- Visual perceptive processes (visual input)
- Auditory-verbal perceptive processes (auditory input)
- Phonological or indirect route
- Phonological awareness
- Lexical or direct route
- Syntactic processes
- Semantic processes

Strength and scope of the program

The program is designed to serve as an open-ended tool for any working method, trend, or system, through the use of programming personally prepared by the therapist, or programming developed externally by other therapists and teams.

In addition, the databases are sufficiently broad and well-structured, with a large variety of exercises, allowing the therapist to draw up treatment plans which are adapted to the characteristics of the subject by age and pathology.

Its intelligence engine manages the proposed plans in such a way that the development of exercises is auto-configured, adapting itself to student characteristics, while at the same time configurable by the therapist in certain aspects. This provides the program with extraordinary versatility in addressing diverse learning styles and therapies.

The reading and writing program, *Cognitiva.PT*, can be applied in two areas and with two complementary perspectives: rehabilitation and stimulation, or enhancement, of cognitive processes involved in reading and writing.

Program characteristics:

The program offers:

- A chance to work on each process independently, according to needs determined in the diagnosis which must be performed prior to intervention
- Great flexibility and adaptability to the needs of each pupil
- Interactivity to a greater degree than in any other software
- Automatic, immediate feedback of results and error treatment
- Recording of results, enabling the generation of exhaustive progress reports covering the rehabilitation sessions
- Aesthetic and functional design that facilitates use and comfort, always maintaining quality and balance in the pace, proportion and integration of the various elements: image, sound, times, interactivity, etc.
- A high degree of autonomy, freeing the therapist from a large number of tasks, often tedious due to their highly repetitive nature.

For more information, see Spanish version of the article in this Electronic Journal, or contact administracion@investigacion-psicopedagogica.org.

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