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## CONSIGNELA-APPLI-R-1.0: A RESEARCH TOOL FOR STUDYING IN REAL TIME ELECTRONIC MEDICATION PRESCRIPTION COMPREHENSION IN OLDER ADULTS AND PATIENTS WITH PARKINSON'S DISEASE

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**Statement of the Problem:** If following a medication prescription is a complex task for standard adults, it is often a too complex task for many older adults. Because they are generally prone to complex polypharmacy, may suffer from cognitive, motor, or sensorial decline, and are faced with a standard prescriber-patient communication, elderly people encounter supplementary difficulties. These factors could partially explain why they are frequently non-adherent. Specific tools are needed to analyze the exact nature of these difficulties. Our objective is to present such a tool, that we are developing in a multidisciplinary project, the CONSIGNELA project.

**Methodology & Theoretical Orientation:** CONSIGNELA-Appli-R-1.0 is an application designed to study in real time older patient's and parkinsonian patient's behavior while consulting and understanding fictive medication prescriptions on tablets and touch-screens. It can display the same prescription in different formats (textual or tabular), and can simulate virtual and interactive pillboxes that can be filled by pressing, in a given order, different objects represented on the screen. It automatically stores the beginning, duration and end of every patient's action while he/she is consulting the prescription, and is filling the pillbox.

**Conclusion & Significance:** Preliminary results of a pilot study carried out with young adults showed that our application is operational. The next phase will consist in using it alone, or coupled with an eye-tracking device, to study cognitive processes and visual strategies of older non-impaired people and patients with Parkinson's disease interacting with fictive prescriptions. CONSIGNELA-Appli-R will be of particular interest for understanding why impaired and non-impaired older patients may encounter difficulties with some prescription designs.

### Biography

Elodie Vandenberg is a neuropsychologist. She is currently writing a thesis on the cognitive processes involved in prescription comprehension in older adults and patients with Parkinson's disease. By adopting an experimental approach, she aims two objectives: To enrich existing models of procedural document's processing by taking into account user's characteristics, and to identify the prescription designs that are the most adapted for different older adult cognitive profiles.

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