

# Virtual Humans Playing the Role of Patients in Self-medication Consultations: Perspectives of Undergraduate Pharmacy Students

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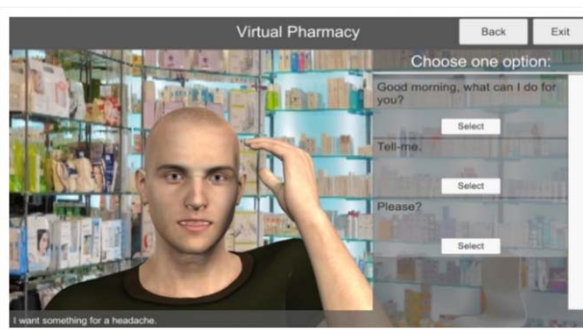
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## ABSTRACT

- i) an interactive application conceived to improve non-prescription medicines consultation skills in undergraduate Pharmacy students and
- ii) a user test carried out with two sets of participants.

## The Application

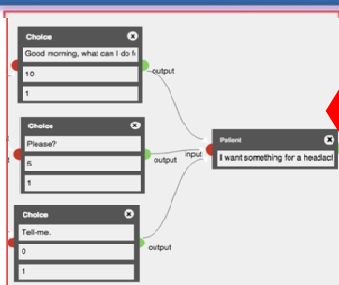
Virtual humans play the role of patients and communicate with the student by speech and by facial and body language.



The application has two usage modes: the **training mode**, used autonomously by the student, and the **assessment mode** which is used by the teacher to evaluate the student's performance.

## The Back Office and the Graph

A **BackOffice Web application** was also implemented to assist teachers' work. It supports the collection of data about students' performance, the creation of new self-medication situations and their posterior insertion in the application.



The teachers depict a graph of the dialogues for the new self-medication situation in an intuitive and user-friendly graphical interface.

## The User Study

Two sets of Pharmaceutical Sciences students participated:

- 10 undergraduate students in the 4th year ;
- 42 students performing their curricular internship behind a counter in a community pharmacy.

The overall results are quite positive; lower scores are related to the realistic appearance of the VH playing the role of patients.

The internships considered the prototype could become a powerful tool to learn and to consolidate knowledge, as long as it offers more situations. They mentioned that it can be a tool for students, but also for professionals that need to review and update their professional capacities: it can help remembering concepts and principles learned in school but already forgotten.



<http://www.di.fc.ul.pt/~apc/VirtualPharmacy/>

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