

L. Giusti, P. Marti. *Robots as social mediators: a study 'in the wild'*. *Gerontechnology* 2008; 7(2):113. Social interactive robots systems are not designed to help users perform work tasks or save time. They should encourage users to spend time with the system and enjoy the interaction, and their ultimate mission is to engage the users in social exchanges<sup>1</sup>. Social robots are most often evaluated within the same environments in which they were developed, using the analytical tools and assumptions about sociality that evolved in conjunction with its design<sup>2</sup>. In this paper we advocate the importance of analysing human-robot interactions in their natural context of occurrence, outside the laboratory. The ways in which individuals try to get control of interaction and make sense of it are shaped by social, cultural and physical circumstances<sup>3</sup>. This is the reason why it is very important to perform an on-site study of the interaction<sup>4</sup>: a thorough analysis of the context is crucial to the action's interpretation<sup>5</sup>. In this paper we present an ethnographic study carried out in the nursing home 'Casa Protetta Albesani' with the purpose of investigating the role of Paro (a zoomorphic social interactive robot) in mediating social relations within small groups (4 people) of patients who are affected by different degrees of cognitive and behavioural diseases. **Method** In the 1<sup>st</sup> phase we observed the daily life in the ward over a period of two months. We focussed on the social relations among the guests. In the 2<sup>nd</sup> phase we introduced Paro, observing the evolution of the social relations within a group of four people. The patients were selected from the population of the nursing home with a Mini Mental State Evaluation score of >24 (mild or not cognitive impaired) and a diagnosis of depressive disorders. We made sure that the subjects did not have strong personal relationships, picking them from different wards. They were involved in the study for three months, twice a week for about one hour. At the start of each session the therapist invited them to sit down around a table as part of a normal, convivial activity. The sessions were articulated throughout three phases: an initial phase without Paro, an intermediate phase with Paro, and a final phase without Paro. Each session has been video recorded. A video analysis has been carried out in order to highlight the changes between the different phases; in particular, we studied the evolution of the social relations between a single patient and the robot, among patients with the mediation of the robot and among patients without the mediation of the robot. These data have been integrated with the annotations of a therapist, who observed each session in real time from a remote position. **Results and discussion** The collected data show a positive trend in the evolution of the social relations among the subjects. Subjects progressively reinforced and extended social relations among them until they became involved in a full-blooded group social relation. Interestingly, during our observation it emerged that to the role of Paro as social mediator corresponded its progressive fading as catalyst of group discussion and interpersonal exchange: at the beginning most of the social relations established among the subjects were mediated by Paro and then, progressively, the attention on the robot was reduced. This result shows the importance of complementing laboratory work with studies that aim to investigate the life-cycle of a robot in real settings, beginning when people become familiar with the robot and continuing until people forget about it. Such kinds of studies can provide insight for the design and evaluation of socially interactive robots.

#### References

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