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Social Assistive Robots, Reframing the Human Robotics Interaction Benchmark of Social Success

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Abstract : It is likely that robots will cross the boundaries of industry into households over the next decades. With demographic challenges worldwide, the future ageing populations will require the introduction of assistive technologies capable of providing, care, human dignity and quality of life through the aging process. Robotics technology has a high potential for being used in the areas of social and healthcare by promoting a wide range of activities such as entertainment, companionship, supervision or cognitive and physical assistance. However, such close Human Robotics Interactions (HRIs) encompass a rich set of ethical scenarios that need to be addressed before Socially Assistive Robots (SARs) reach the global markets. Such interactions with robots may seem a worthy goal for many technical/financial reasons but inevitably require close attention to the ethical dimensions of such interactions. This article investigates the current HRI benchmark of social success. It revises it according to the ethical principles of beneficence, non-maleficence and justice aligned with social care ethos. An extension of such benchmark is proposed based on an empirical study of HRIs with elderly groups.

Keywords : HRI, SARs, social success, benchmark, elderly care
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