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1. Introduction to Special Edition

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Social Robotics in Health and Social Care: Introduction to the Special Edition

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You are very welcome to this Special Edition of the *Irish Journal of Applied Social Studies*. We are delighted to introduce you to a topic that has been of considerable fascination to us over the last number of years, but that may be new to many in the field of care.

Our interest in social robotics stemmed from two discrete sources: **John Pender** is a senior lecturer at Atlantic Technological University in Futures Studies, where he has sought to introduce students of social care, early years education and social work to emergent social, political and technological trends: this inevitably brought him to the topics of digital media, social robotics and artificial intelligence [AI]. As a founding member of the Irish Association of Social Care Educators, and a sociologist with interests in power and discourse, **Perry Share** has written about and studied the professionalisation of the social care field in Ireland, including the development of professional identities. He became interested in the impact that technology may have on professional identity, particularly when expertise was transferred to or embodied in technological devices and/or systems.

Around 2017 the two researchers converged to explore the developing world of social robotics. In November 2017 they convened a 1-day symposium on the topic at (then) IT Sligo, drawing together researchers and practitioners from Ireland, the UK and Denmark. From this, they developed an Erasmus+ collaborative project that was ultimately funded by the EU Commission and that was titled PROSPERO – the **P**edagogy of **R**obotics in the **S**ocial **P**rofessions in **E**urope. This project, that ran from 2018-2022, included academic and practitioner partners from Ireland, Denmark, Spain, Poland and the Netherlands. Subsequently Drs Pender and Share have gone on to conduct research on the deployment of social robots (Share & Pender 2022); write a chapter on technology and care for the latest edition of the *Social Care Work* textbook (Share & Pender, 2023a); to develop a MOOC [Massive Open Online Course] that introduces the topic of social robotics (to be opened later in 2024); and have presented at conferences and practitioner events in Ireland, Finland and Denmark (Share & Pender, 2023b)

We are of the belief that the development of digital technologies, including social robotics and AI (and we see these areas as increasingly convergent), will have an increasing role in the delivery of care. This will be driven by the demographic and other global trends that underpin the ‘crisis of care’ (McPake et al., 2024) and by the significant development in digital technologies that include robotics and Generative AI (International Federation of Robotics, 2024). We are not advocates for these technologies but are advocates for the preparation of the next generation of professionals in terms of a critical and informed approach to these developments. It is for these professionals, and associated educators, institutions, regulators and user groups, to decide if, how and when such technologies can or should be used.

This Special Issue is a product of the PROSPERO project. It features not only participants in that project, but others with whom we have generated connections stemming from our involvement. The consideration and use of social robots in care (and in health and education) is in its infancy in Ireland and we hope this Special Issue will help to generate debate and further research. We also hope that it can help to inform those who help to shape the social professions, such as educators, professional groups, service users and regulators.

Navigating the issue: themes and insights

The papers presented in this Special Issue address a diverse range of topics related to social robotics, from foundational discussions about educational needs and pedagogical changes to specific case studies and critical reviews. Key themes across these papers include:

- *Pedagogical innovation*: the need for educational reforms to incorporate new technologies in care.
- *Ethical considerations*: such as privacy, autonomy and the humanisation of care in the deployment of social robots.
- *Practical applications and limitations*: the effectiveness and limitations of social robots in real-world settings, from classrooms to care facilities.
- *Critical and reflective analyses*: broader philosophical and cultural discussions about the role of technology in society, particularly in care settings.

List of papers

1. *This introduction*

2. *The PROSPERO Project: Building a multidisciplinary pedagogy for health and social care professionals co-providing care with social robots (John Pender & Perry Share)*

This paper provides a contextual underpinning for the issue, detailing the PROSPERO project's objectives, methodologies and outcomes. It discusses the collaborative efforts across multiple European countries to bridge the gap between current care practices and the technological advancements represented by social robots. The authors provide insights into the project's comprehensive approach, that includes the development of a curriculum that integrates knowledge about social robotics with practical care skills.

3. *Ethical complexities within the appearance and usage of social robots: A scoping review (Mads Lund Andersen & Heike Felzmann)*

The field of social robotics is broad and increasingly complex, and ethical issues are to the fore. This comprehensive scoping review explores ethical considerations that surround the appearance and usage of social robots in social professions. It highlights the impact of robots' anthropomorphic and zoomorphic features on human interaction and addresses ethical implications in caregiving contexts. The review discusses the risk of dehumanisation; the importance of respecting human dignity; and the need for privacy safeguards. It advocates for ethically mindful design and calls for more research to ensure social robots enhance rather than compromise care quality, emphasising interdisciplinary approaches to align technological advancements with robust ethical standards.

4. *Robotic babies, data, didactics, and ethics in social work (Mads Lund Andersen, Vivi Friis Søgaaard, Karin Christiansen, Heike Felzmann, Almudena Navas & Míriam Abiétar)*

This paper addresses the specific application of robotic simulations in social work education. It critically examines the ethical considerations and pedagogical challenges associated with using robotic babies in social pedagogical work with young potential parents. The paper provides an analysis of how this technology provides practical and ethical challenges for educators, students and practitioners. Its conclusions have the potential to inform practice in the broader social and care robotics field.

5. *Meeting the attachment needs of nursing home residents with dementia? Exploring the utility of a social robot (Paro baby seal) with residents with dementia, compared to other activities. (Lucia Carragher, Gemma M.M. Jones, Ann Marron & Laura Ballantine).*

This study explores the impact of the Paro social robot, a baby seal facsimile, on dementia patients in an Irish nursing home. It compares Paro's effectiveness against other activities in engaging residents. Twelve residents participated, divided into two groups: one engaged with Paro, and the other in usual activities. Video footage of residents' verbal and non-verbal interactions over a seven-week period was analysed. Findings reveal three main themes: feeling safe and engaged, feeling insecure when alone, and deriving comfort from familiar objects and people. The study concludes that Paro can serve as an attachment object, particularly for residents in advanced stages of dementia, though its effectiveness varies.

6. Can social robot teaching assistants innovate the Irish primary education system? Insights from a pilot study. (Debbie Woodward & John Pender).

Expanding the discussion to educational settings, Woodward and Pender evaluate the effectiveness of social robot teaching assistants in Irish primary schools. Their research assesses how these robots can enhance educational engagement and potentially transform teaching methodologies. The paper discusses both the positive outcomes and the challenges encountered during the pilot study, providing valuable lessons for integrating technology into education.

7. Social robots and independence: A practice report from Holstebro. (Hans Jørgen Niewald, Maria Bisgaard Fabricius & Mette Toft).

This practice report from the Municipality of Holstebro, Denmark, focuses on the use of social robots to support individuals with addictions. It explores the transformations in client-professional relationships and how robots have facilitated greater independence for clients. Briefly presenting an individual case study, the paper provides an account of the practical applications and discusses the broader implications for social care practices.

8. Facilitating reflection on social robots in care: ethics and pedagogy. (Heike Felzmann, Lucy Elvis, Almudena Navas, Miriam Abietar, Esperanza Meri, Karin Christiansen, Mads Lund Andersen, Vivi Søgård).

This article examines the ethical challenges and pedagogical strategies for integrating social robots into social care. It discusses several types of social robots and their associated ethical concerns, such as safety, data privacy and potential dehumanisation of care. The paper highlights the importance of context-sensitive and action-guiding knowledge in the social professions and reviews different approaches to teaching ethics, including theoretical instruction, principle-based teaching and case studies. It proposes a six-component process for training social professionals to manage these ethical challenges, aiming to equip them with the skills for critical ethical decision-making in an evolving technological landscape.

9. 'A compassionate guide for social robots' by Marcel Heerink. (Book Review) (John Pender)

John Pender reviews Marcel Herrink's innovative approach to the philosophical and practical integration of social robots in care. This book review discusses the potential for robots to enhance compassionate care when they are designed and implemented thoughtfully, considering the human aspects of care.

10. 'Robots won't save Japan' by James Wright (Book Review) (Perry Share)

This review assesses James Wright's argument against the over-reliance on robots in Japanese eldercare. Share explores the cultural, ethical, and practical limitations of substituting human

caregivers with robotic technology, arguing for a balanced approach that retains essential human elements in care.

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