# Editorial

*Social work technologies*

Jørgensen, Andreas Møller; Nissen, Maria Appel; Devlieghere, Jochen; Gillingham, Philip

*Published in:*
Nordic Social Work Research

*DOI (link to publication from Publisher):*
10.1080/2156857X.2022.2076302



*Publication date:*
2022

*Document Version*
Accepted author manuscript, peer reviewed version

**Preprint version of:** Andreas Møller Jørgensen, Maria Appel Nissen, Jochen Devlieghere & Philip Gillingham (2022) Editorial: social work technologies, *Nordic Social Work Research*, DOI: 10.1080/2156857X.2022.2076302

# EDITORIAL: SOCIAL WORK TECHNOLOGIES

Information and Communication Technology (ICT) has become part and parcel of professional social work. With the introduction of new digital systems and techniques, claimed to support social work, it is highly pertinent to explore and reflect on the technological nature of social work. For example, when, how and under which conditions can various technologies contribute to the development of social work or the opposite? What does this imply in terms of understanding the technological 'nature' of social work and its development as a profession?

Since social work's early days, it has been an ambition to create models of social reality that facilitate understanding and practice to deal with complex social and human conditions. In *Social diagnosis* (1917) and *What is social case work?* (1922), Mary E. Richmond argued for a personalised and in-depth social casework approach rather than a superficial, mass-oriented and depersonalised approach to understand the situation of an individual in his/her social environment (Fjeldheim et al., 2015). In *Democracy and social ethics* (1902), Jane Addams addressed the structural conditions which lead to social problems and advocated for a democratic-, experience-, action- and community-based interest in human life to ameliorate social conditions (Seltzer & Haldar, 2015). Richmond and Addams' common ambition was to provide new conceptualisations of social work. They depicted pragmatic approaches to engage with individuals, groups and/or communities in society through practices of investigating, acting upon and thus learning, writing and generating knowledge to understand and solve social problems. Moreover, problem solving was viewed as a complex endeavour involving not only a multiplicity of theories and scientific fields, but also substantial, practical and experience-based knowledge about social systems, institutions, communities, groups and individuals in society as well as technical and material resources. For example, Mary E. Richmond considered the pros and cons of using time saving technical inventions such as telegrams, letters and the telephone instead of face-to-face meetings, observations and conversations. From this perspective, the practice of social work requires more than technical devices (such as a telephone) and the application of a technique (such as being able to make a phone call). In turn and over time, emerging technologies can shape the knowledge, problems and practices of social work.

We propose the term 'Social Work Technology' to designate the knowledge and understanding of techniques and tools and their role in addressing social and individual problems. Understanding this role goes beyond the merely 'technical', to encompass how technological developments become enmeshed with the operations of power that shape and define approaches to social problems and

the practice of social work. In this special issue, the aim is to explore the technological nature of social work in light of developments in digital technology and, more specifically, to identify how social work is being shaped by technology and how social work might shape and use technology to advance the aims of the profession.

Over the last 30 years, ICT has become increasingly complex, automatised, ubiquitous and integral to social work practices (Garrett, 2005; Perron et al., 2010; Peláez et al., 2018). Hill and Shaw define ICT as "a broad term that is used to cover all the digital methods by which information is created, stored, manipulated and shared. This includes computer hardware and peripherals of all kinds, and the software and networks that they use to store, process and communicate information" (2011: 21). More recently, techniques from big data, such as machine learning, have been applied to the administrative data generated by social work practice to improve the matching of clients with services, the targeting of those in need of a service and the management and allocation of resources. Predictive models have been developed to assess the risk of harm to clients and their likely trajectory through a service system. These new developments have been described as 'dataism' and, in this special issue's first article "Dataism versus Relationshipism: A Social Work Perspective", Devlieghere, Gillingham and Roose propose that dataism and relationshipism (a more traditional approach to social work) can be understood as two very different ways to address social and individual problems. Based on a discussion of empirical literature, the authors provide insights into dataism which can assist social workers to engage in participatory design approaches to develop and evaluate digital tools. At a conceptual level, the authors advance the debate about the potential positives and the pitfalls of dataism in social work.

Carney (2009) has shown how strikingly similar visions, values and ideology emerge in social reform in putatively dissimilar countries, as global flows of policy ideas and policy actors influence state policies. Regarding ICT, similar or at least comparable socio-technical solutions are being applied in dissimilar welfare states, and in different wider socio-political contexts (Bartlett & Vavrus, 2017). It is, therefore, of paramount importance that ICT is understood in its proper social, political, professional context. In the article "What kind of social work in what kind of virtual space?" Christensen, Frederiksen, and Madsen ground their approach in Science and Technology Studies, which proposes that technology is a complex and dynamic process which involves functionality, use, competences and the social context in which technology is incorporated. The authors employ Hartmut Rosa's concepts of social acceleration, alienation and resonance to analyse the increasing engagement of social work with digital technologies. The authors draw from the findings of a qualitative study conducted in twelve Danish municipalities and focusing on digital communication devices used by social workers in their daily communication with children and youth aged eight to eighteen. They argue that digital technology can be considered as a double-edged sword in that it can create an appealing sense of intimacy and trust, but, at the same time, distance is created as digital communication excludes the use of particular senses (compared to face to face communication). This distance means that situations might be interpreted differently or erroneously. Digital communication devices should therefore be deployed with care and reflexivity

by social workers and their managers. In line with this, in the article "Platform social work-a case study of a digital activity plan in the Norwegian Welfare and Labor Administration" Aasback conceptualises digital platforms as socio-technical assemblages which include technical elements and organisational processes and standards. Based on ethnographic fieldwork with employees in the Norwegian welfare and labour administration, Aasback examines the affordances of the Digital Activity Plan as a communication and counselling arena, as a contract between clients and the welfare and labour administration, as a measuring tool and as a political instrument.

The consequences of implementing ICT in social work, then, may differ according to social and political contexts. Professional case management systems, such as the Integrated Children's System (ICS), aim to provide methods of practice and business processes which support practitioners to undertake the key tasks of assessment, planning, intervention and review in a systematic manner, and to collect and use information systematically, efficiently and effectively (Shaw et al., 2009). ICS, however, has been criticised for being primarily a managerial artefact which promotes efficiency through standardisation and control, thereby limiting professional discretion. Additionally, it is argued that communication and understanding between social workers and citizens is compromised by the processes of knowledge/language standardisation and categorisation invoked by ICT (White et al., 2010; Munro, 2009; Broadhurst et al., 2010). In Denmark, research has shown that social workers do not view the Digitalisation – Vulnerable Children and Young People (DUBU) (the Danish version of ICS) as conflicting with professional approaches to investigation, discretion and decision-making (Høybye-Mortensen, 2015; Høybye-Mortensen & Ejbye-Ernst, 2019). Indeed, research has shown that ICS/DUBU can enhance attention to and involvement of the child, but not necessarily as much as expected (Sørensen, 2018). In Sweden, research has demonstrated that the Childrens' Need in Focus (BBIC) supported by ICS, leads to more relevant information about and a greater focus on the child. Social workers find that the system supports better assessment, but the cost is increased administration (Matscheck & Eklundh, 2015). In the article "Client information systems' support for case-based social work: experiences of Finnish social workers", Salovaara and Ylönen investigate the extent to which social workers working in municipal social services find client information systems to be supportive of case-based social work. Based on their findings they propose that current client information systems offer some support by storing and documenting information, but that they generally offer poor support for forming comprehensive knowledge and understanding about cases. In the tension that emerges between the demands of client information systems and social work practices, managerial needs are prioritised over those of social workers.

Politically and strategically, ICT is often considered as a response to the challenge of growing demands on service systems and the growing expectations of citizens about the quality and efficiency of their encounters with the public sector. One example is the Allegheny Family Screening Tool, a decision-support and analytical tool that aims to categorise the most vulnerable children in Allegheny County, Pittsburgh, US, and to "increase agency communication and accountability, provide wraparound services for clients, and cut costs" (Eubanks, 2018: 135). A second is in

Nottinghamshire, England, where a Strategic Analytical Unit combines data from various sources such as health, education, employment and law enforcement to identify at an early stage children at most risk of maltreatment. Large scale ICT solutions have been introduced in response to public concerns about the failure to identify and/or solve social problems and effectively, rather than policy or practice failures in individual cases (White et al., 2010; Matscheck & Eklundh, 2015; Sørensen, 2018). In the article "Three roads to Rome? Comparative policy analysis of predictive tools in child protection services in Aotearoa New Zealand, England, & Denmark", Jørgensen, Webb, Keddell, and Ballantyne explore and compare how predictive tools are constructed in political discourse, gain or lose legitimacy, and are promoted to, and challenged by, key stakeholders in Aotearoa New Zealand, England and Denmark. Findings show how similar technological developments are socio-politically conditioned, constructed, implemented or discontinued in diverse ways.

Research on the use of digital data and algorithms suggests that our approach to knowledge, decision-making and governance in the public sector will change (Dunleavy et al. 2006). We know, however, that it is challenging to reach a point where electronic information systems and techniques can assist social work (Gillingham, 2019). An important notion is that the application of algorithms to analyse administrative data to develop predictive models is concerned with identification of correlations between variables rather than causalities, which can lead to inaccuracy and misunderstanding, especially in developing service responses (Mayer-Schönberger & Cukier, 2013). Recent attempts to initiate large-scale projects based on big data in relation to vulnerable children and families and unemployed people have given rise to serious legal problems. Ethical problems can also arise as predictive modelling has to involve some level of categorisation of people and social problems, leading to the marginalisation of groups and individuals (Boyd & Crawford, 2012; Chandler & Fuchs, 2019). Algorithms play a part in social ordering processes (Beer, 2017) by embedding and reproducing specific values and bias (Bozdag, 2013; Noble, 2018), but quite how they do so is not usually clear to professionals and service users (Boyle, 1997; O'Neil, 2017). Therefore, ensuring the transparency of the process by which algorithms create knowledge has become increasingly important in ethical approaches to using predictive modelling (Mayer-Schönberger & Cukier, 2013).

A major point of contention is how ICT and new forms of digitalisation create new and different understandings of the 'social' and how social workers can respond to and take control over these processes (cf. Smith & Eaton, 2014; Emslie & Watts, 2017). Social work is perennially involved in struggles for power, jurisdiction and professionalisation. The approach to and use of electronic information and communication systems, and their role in shaping knowledge, has become an inherent aspect of this. These systems and techniques may be incorporated into various aspects of social work and should ideally be based on a human-centric approach and be at the service of the people to improve their lives and promote their rights. Some have argued for a 'practice-led-approach' in relation to the development of ICT (Hill & Shaw, 2011) and that social workers should

seek to take control over the techniques and tools of their profession (cf. Smith & Eaton, 2014; Emslie & Watts, 2017). There are also consequences for social work social work education, which must prepare future social workers to engage with and reflect upon technologies in social work. In the article "Computer self-efficacy and computer anxiety in social work students: implications for social work education", Meinhardt-Injac and Skowronek present findings from a survey measuring computer efficacy and anxiety among German social work students at the beginning and end of their bachelor programme. Their findings indicate that participation in the bachelor programme did not increase computer efficacy nor reduce computer anxiety among students. Given the pace of digital innovations in social work, there would appear to be an urgent need for training in computer use for social work students.

Explorations and reflections on the technology, techniques and tools that shape social work has become an inherent part of the development of the profession. The research and reflections presented in this special issue have a broader relevance in terms of making visible the legitimacy and purposes of social work as a social-material and symbolic form in society. This refers to the processes, practices, artefacts and forms of knowledge used in social work and which may be supported by digital technology but which cannot be replaced by digital technology. Social work is inevitably tied to technological development, but it remains unclear how such development may support or hinder the aims of social work as a profession. We hope that the articles presented in this issue on Social Work Technologies will encourage critical reflection, scrutiny and debate about the place of digital technologies in social work and the involvement of social workers in the future development of such technologies.

**Guest editors**

Andreas Møller Jørgensen, Aalborg University, Denmark, anmj@socsci.aau.dk
Maria Appel Nissen, Aalborg University, Denmark
Jochen Devlieghere, Ghent University, Belgium
Philip Gillingham, University of Queensland, Australia

**References**

Addams, J. [1902](2002). *Democracy and social ethics*. University of Illinois Press.

Bartlett, L., & Vavrus, F. (2017). Comparative case studies: An innovative approach. *Nordic Journal of Comparative and International Education* (NJCIE), 1(1).

Beer, D. (2017). The social power of algorithms. *Information, Communication & Society, 20*(1), 1-13.

Boyd, D. & Crawford, K. (2012). Critical Questions for Big Data: Provocations for a Cultural, Technological, and Scholarly Phenomenon. *Information, Communication & Society, 15*(5), 662–679.

Boyle, J. (1997). Foucault in cyberspace: Surveillance, sovereignty, and hardwired censors. *U. Cin. L. Rev.*, 66, 177.

Bozdag, E. (2013). Bias in algorithmic filtering and personalization. *Ethics and information technology, 15*(3), 209-227.

Broadhurst, K., Hall, C., Wastell, D., White, S., & Pithouse, A. (2010). Risk, instrumentalism and the humane project in social work: Identifying the informal logics of risk management in children's statutory services. *British Journal of Social Work, 40*(4), 1046-1064.

Carney, S. (2009). Negotiating policy in an age of globalization: Exploring educational "policyscapes" in Denmark, Nepal, and China. *Comparative Education Review, 53*(1), 63-88.

Chandler, D. & Fuchs, C. (2019). *Digital Objects, Digital Subjects: Interdisciplinary Perspectives on Capitalism, Labour and Politics in the Age of Big Data*. London: University of Westminster Press.

Dunleavy, P., Margetts, H., Tinkler, J., & Bastow, S. (2006). *Digital era governance: IT corporations, the state, and e-government*. Oxford University Press.

Emslie, M. & Watts, R. (2017). On technology and the prospects for good practice in the human services: Donald Schön, Martin Heidegger, and the case for phronesis and praxis. *Social Service Review, 91*(2), 319-356.

Eubanks, V. (2018). *Automating Inequality. How high-tech tools profile, police and punish the poor*. New York: St. Martin's Press.

Garrett, P. M. (2005). Social work's 'electronic turn': notes on the deployment of information and communication technologies in social work with children and families. *Critical Social Policy, 25*(4), 529-553.

Gillingham, P. (2019). Can Predictive Algorithms Assist Decision-Making in Social Work with Children and Families? *Child Abuse Review, 28*(2), 114-126.

Hill, A. & Shaw, I. (2011). *Social Work and ICT*. London: Sage Publications.

Høybye-Mortensen, M. (2015). Decision-making tools and their influence on caseworkers' room for discretion. *British Journal of Social Work, 45*(2), 600–615.

Høybye-Mortensen, M., & Ejbye-Ernst, P. (2019). What is the purpose? Caseworkers' perception of performance information. *European Journal of Social Work, 22*(3), 458-471.

Körtner, J. & Bonoli, G. (2021). Predictive Algorithms in the Delivery of Public Employment Services. In Clegg D. and Durazzi, N. (eds.), *Research Handbook of Labour Market Policy in Rich Democracies*, Edward Elgar Publishing.

Loxha, A. & Morgandi, M. (2014). *Profiling the unemployed: a review of OECD experiences and implications for emerging economies*. Social Protection and Labor Discussion Paper, 1424. World Bank Group, Washington, DC.

Matscheck, D. & Eklundh, L. B. (2015). Does BBIC make a difference? Structured assessment of child protection and support. *Nordic Social Work Research, 5*(3), 192-211.

Mayer-Schönberger, V., & Cukier, K. (2013). *Big data: A revolution that will transform how we live, work, and think*. Houghton Mifflin Harcourt.

Munro, E. (2009). Managing societal and institutional risk in child protection. *Risk analysis, 29*(7), 1015-1023.

Noble, S. U. (2018). *Algorithms of oppression: How search engines reinforce racism*. NYU Press.

O'Neil, C. (2017). *Weapons of math destruction: How big data increases inequality and threatens democracy*. Broadway Books.

Peláez, A. L., Pérez G. & Massó, M. V. A. (2018). e-Social work: building a new field of specialization in social work?. *European Journal of Social Work, 21*(6), 804-823.

Perron, B. E., Taylor, H. O., Glass, J. E. & Margerum-Leys, J. (2010). Information and Communication Technologies in Social Work. *Adv. Soc Work, 11*(2), 67-81.

Richmond, M. E. (1917). *Social Diagnosis*. NY: Russel Sage Foundation.

Richmond, M. E. (1922). *What is Social Case Work? An Introductory Description*. NY: Russel Sage Foundation.

Seltzer, M. & Haldar, M. (2015). The other Chicago school – a sociological tradition expropriated and erased. *Nordic Social Work Research, 5*(sup. 1), 25-41.

Shaw, I., Bell, M., Sinclair, I., Sloper, P., Mitchell, W., Dyson, P., Clayden, J. & Rafferty, J. (2009). An exemplary scheme? An evaluation of the Integrated Children's System. *British Journal of Social Work, 39*(4), 613-626.

Smith, R. J. & Eaton, T. (2014). Information and communication technology in child welfare: The need for culture-centered computing. *J. Soc. & Soc. Welfare, 41*, 137-160.

Sørensen, K. M. (2018). The impact of political guidelines on participation of children and families' network in the risk assessment process. *Nordic Social Work Research, 9*(3), 250-261.

White, S., Wastell, D., Broadhurst, K. & Hall, C. (2010). When policy o'erleaps itself: The 'tragic tale' of the Integrated Children's System. *Critical Social Policy, 30*(3), 405-429.