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"Isn't it funny the children that are further away we don't think about as much?": Using GPS to explore the mobilities and geographies of social work and child protection practice



Tom Disney^{a,*}, Lisa Warwick^b, Harry Ferguson^c, Jadwiga Leigh^d, Tarsem Singh Cooner^c, Liz Beddoe^e, Phil Jones^f, Tess Osborne^f

^a Department of Social Work, Education and Community Wellbeing, Northumbria University, Coach Lane Campus, Newcastle NE7 7XA, UK

^b Centre for Social Work, Law and Social Sciences, University Park, Nottingham NG7 2RD, UK

^c Department of Social Work and Social Care, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK

^d Department of Sociology, Lancaster University, Lancaster LA1 4YN, UK

^e Faculty of Education and Social Work, University of Auckland, Epsom Avenue, New Zealand

^f School of Geography, Earth and Environmental Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK

ABSTRACT

Social work is an inherently mobile and spatial profession; child protection social workers travel to meet families in diverse contexts, such as families' homes, schools, court and many more. However, rising bureaucracy, managerialism and workloads are all combining to push social workers to complete increasing volumes of work outside their working hours. Such concerns lead to the perception that social workers are increasingly immobilised, finding themselves desk-bound and required to spend much of their working day navigating time-consuming computer systems. This immobilisation of social workers has considerable implications, restricting professionals' abilities to undertake the face-to-face work required to build relationships with families. However, until now, the actual movements of social workers, and how (lack of) movement affects ability to practice, remain unknown. In this paper we report on innovative research methods using GPS [Global Positioning System] devices that can trace social workers' mobilities and explore the use of office space, home working and visits to families in two English social work departments. This article presents unique findings that reveal how mobile working is shaping social care practitioner wellbeing and practice.

1. Introduction

Social work is an inherently mobile and spatial profession. Child protection social work occurs in, and necessitates visiting, diverse spaces, such as homes, schools, courts, hospitals and many more. Indeed, movement itself is understood as a necessary facet of effective child protection practice (Ferguson, 2010). Despite the assumed everyday mobilities required by the very task of meeting face-to-face with children and families in need, there have been noted concerns regarding the ways in which the bureaucratisation of the profession increasingly inhibits the time available to do this vital aspect of the work (Broadhurst et al., 2009; Munro, 2005; Rogowski, 2011). Emerging evidence suggests the emphasis on completing managerial targets coupled with increasing workloads - is pushing social workers to carry out increasing volumes of work outside their contracted hours (Ravalier, 2018; Unison UK, 2017). Such concerns lead to the perception that social workers are increasingly immobilised, finding themselves desk-bound and required to spend much of their working day sedentary, navigating time-consuming computer systems (Munro, 2005; Munro, 2011). The core concern regarding the increasing immobilisation of social workers is the implication that it has restricted professionals' abilities and time to undertake the face-to-face work required to build relationships with children and families (Broadhurst et al., 2009; Munro, 2011). However, until now, the actual movements of social workers, the number of hours they work at home, if the profession is becoming increasingly sedentary and the implications of this, remain unknown. Additionally, whilst there have been rich ethnographies of the office environment (Jeyasingham, 2016; Leigh, 2017), and engagements with the mobile, embodied experiences of home visiting (Ferguson, 2016a; Muzicant & Peled, 2017), the literature is yet to engage with connecting the 'full world' of the social worker, in tracing the ways in which the experiences and spaces of home, office and

* Corresponding author.

E-mail address: tom.disney@northumbria.ac.uk (T. Disney).

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Received 13 December 2018; Received in revised form 15 February 2019; Accepted 16 February 2019 Available online 18 February 2019 0190-7409/ Crown Copyright © 2019 Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/BY/4.0/). practice intermingle to shape child protection practice.

This paper is based upon research that emerged from a study which sought to utilise GPS technology for the first time in social work. Our aim was to map participants' mobilities and use interviews and diaries to explore the everyday working patterns of child protection workers. In this paper we draw upon mapping techniques used in geography (see Jones, Drury, & McBeath, 2011; Jones & Evans, 2012). Through this approach we were able to understand the movements of a full working day from a sample of child protection social workers from the moment they left their home to the final moments of their working day, often late in the evening completing case notes and reports at home. This is important if we are to understand how a social worker's home life and work patterns influence their case work. This article makes these connections in an original and innovative way, significantly illuminating the complexity of everyday mobilities in social work. In doing so it presents GPS technology as a powerful tool for mixed-methods research in social work.

The article begins by contextualising this study and situating it within the existing literature around social workers' experiences of work, bureaucratisation and mobile working. We then outline the mapping techniques employed in this study. We then present the results of our study with child protection workers; firstly, around the unbounded nature of office space, noting how mobile working can mean that distressing emotions associated with work can pervade the home. Secondly, we trace wider mobilities in everyday child protection practice, exploring the impacts of journeys and distance on social worker wellbeing and practice. Finally, as this is a novel technique within social work research, we substantively reflect and caution about the potential ethical implications of this technology, before we discuss and conclude our findings.

2. Work environments and mobility in social work

There has been sustained interest in making sense of the ways in which the working and mobile practices of social workers have been shaped by bureaucratic and managerial shifts (Broadhurst et al., 2009; Hanna, 2010; Jeyasingham, 2016; Jones & Evans, 2012; Munro, 2005, 2011; Spolander et al., 2014). Against this backdrop the single biggest concern is that social workers spend more time doing bureaucratic tasks, thus reducing the time available to engage in direct work with service users.

In a broader context of austerity and increasingly stretched resources, further changes have occurred in the use of work spaces, with some survey data indicating that 60% of social workers are now working in hot-desking environments (Ravalier, 2018). Hot-desking, also referred to as agile working, is an increasingly common practice whereby workers no longer have a fixed desk and instead share working spaces (Jeyasingham, 2014). Hot-desking is often presented as a means to facilitate productivity, as it is believed that increased contact between workers can foster a more creative environment. Such discourses have been critiqued within academic literature. Hirst (2011), for example, notes that the intended objective of increased mobility (and thus productivity) may not occur evenly throughout organisations. Going further, Brown and O'Hara (2003, p. 1577) note that hot-desking policies can lead to a sense of the work place as 'commoditised and depersonalised', they note that the desire for intensely mobile workers may reduce face-to-face contact and meetings with colleagues. In contrast, Milward, Haslam, and Postmes (2007) note that a team identity is fostered more effectively through assigned desks, rather than open plan

agile working conditions (see also Halford, 2004). Such practices are also noted as potentially engendering a sense of isolation and stress in work (Jeyasingham, 2018).

This shift has collectively led to social workers working increasing numbers of hours at home in order to complete mandatory tasks (Ravalier, 2018). Recent survey data suggests that social workers in England spend on average 12 h a week undertaking extra bureaucratic work in their own time (Unison UK, 2017). Further survey research suggests that social workers spend in the region of 25% of their time working directly with children and families (Ferguson, 2016b). However, there are well-documented limitations to self-reporting in survey methods (Bryman, 2004), and our study uniquely aims to bridge this gap in research knowledge by exploring how mobility and stillness shape, and are shaped by, the practice of child protection social work. These changes have also facilitated the growth of 'agile working', and this has contributed to 'shifting boundaries between work, public and private spaces' (Jeyasingham, 2018, p. 2). As Jeyasingham (ibid) notes, there is a paucity of research considering such practices beyond the office. Taken together this suggests that increases in mobile working and the mobility of workers is increasingly blurring the boundaries of different spaces (home/office), and that mobility is something to be desired.

What is absent from the literature and research knowledge is an attempt to capture exactly what social workers do in an average working day, and explore how these practices are shaping their wellbeing and practice. With this in mind, we present qualitative GPS techniques as an effective means to illustrate the complexity of working practices and environments of contemporary child protection practice. Before considering literatures concerning GPS techniques, we first explore the related concepts of mobility, stillness and affect.

3. Mobility, stillness and affect

The literatures discussed above indicate how movement is positioned as a desirable facet of contemporary child protection practice (to spend more time with children and families), presenting the sedentary social worker at their desk as problematic and frustrated. However, this position fails to account for the nuances of mobility, and the complex emotions and feelings it can produce, the impact of which need to be considered.

There has been a foregrounding of movement in the social sciences research since Sheller and Urry's (2006) call for attention to the 'new mobilities paradigm'. The discourses currently present in social work reflect a typical trend in wider literatures concerning mobilities, which often present mobility as necessarily associated with progress, freedom and wellbeing (Disney, 2017; Horton, Christensen, Kraftl, & Hadfield-Hill, 2014; Sager, 2006) and arguably productivity, or as something that one can be excluded from (Uteng, 2009). However, as geographers such as Moran, Piacentini, and Pallot (2012) have noted, this presents mobility as an ontological object, something to have or not, rather than encapsulating the complexity of mobilities and the experiences of them. They indicate instead how mobility can be coercive and disciplined, producing docile bodies (after Foucault, 1979). Such work highlights the nuances of mobilities and the meanings and experiences associated with them.

While mobility is typically prized, the opposite is often thought of 'stillness', which is conceptualised as inactivity or wasted time (Bissell & Fuller, 2011). However, movement and stillness should not be understood as necessarily oppositional, for instance '[anyone] who travels

a lot knows that this entails waiting in line, sitting with a book, bored or in anticipation. Then when we travel we often travel sitting down and strapped in' (Cresswell, 2012, p. 648). Sedentary states have been explored in terms of comfort, which has been critiqued for often being equated with 'conservatism and complacency', rather than the 'condition of possibility' it can facilitate for many everyday tasks (Bissell, 2008, p.1703). Indeed, being 'still' at a desk often entails plenty of embodied movement that characterises office-based work. It is notable that even if a social care practitioner was notionally 'still' in the office, they were in reality often intensely mobile in a number of different ways; in moving around the building (attending child protection conferences for instance), or walking around the room to liaise with colleagues. At a basic level, their bodies moved while sitting at a desk with repeated micro-embodied movements, such as typing, answering the phone or adjusting a seat, all of which have emotional implications. Reconsidering mobility and stillness in such ways again indicates the complexity and nuance of movement, which is currently lacking in wider social work literatures.

Importantly, mobility and stillness are also intertwined with emotion and affect (Adey, 2008). Affects are related to, but different from emotions, in this respect we might understand emotions, sensations and feelings as expressions of affects (Anderson, 2006). Affects are 'the result of the encounter between objects and bodies' in diverse contexts (Adey, 2008, p. 440), some environments are designed to engineer particular mobilities, affects and emotions. For example, security spaces within airports are physically designed to restrict movement and act as a form of affective restraint, anaesthetising passengers into becoming compliant (Adey, 2008). Bissell (2008) similarly explores sedentary states and proposes a conceptualisation of comfort as 'affect resonance' when working with the proximate environment. While certain elements of mobility may produce affective resonances such as comfort, they may also produce the opposite and be corrosive and detrimental to wellbeing. As we will go on to discuss, such mobilities draw affective qualities with them, crossing what are often considered to be bounded spaces of work and home.

The mobilities that are therefore so prized in social work, inclusive of travelling to meet families and to circulate in agile working spaces, are complex and generative of affects that may impact on practice and wellbeing in particular ways. Capturing these processes has, until now remained difficult. We will now present a tool that we argue is effective in representing the complexity of mobilities and affects in child protection practice.

4. GPS techniques for social research

The idea for this project was inspired by geographers' mapping techniques, using software such as Geographic Information Systems (GIS), which is designed to capture, store and visually represent spatial data of various phenomena (Schuurman, 2013). GIS has been used by geographers for decades, although traditionally to represent quantitative datasets, mapping trends such as poverty or health determinants within populations. However, geographers have also experimented with how to fuse such technology with qualitative data collection to understand how spatial phenomena are socially and culturally constructed (Arpagian & Aitken, 2018; Bell, Phoenix, Lovell, & Wheeler, 2015; Elwood & Cope, 2009; Jones & Evans, 2012; Teixeira, 2018). More recently they have been exploring how simple, cheaper and more readily available GPS-enabled technology can be used for mapping techniques. GPS has also been readily adopted in health-related

disciplines to explore diverse phenomena, such as gathering survey data on people with tuberculosis in South Africa (Dwolatzky, Trengove, Struthers, McIntyre, & Martinson, 2006) and exercise in residential neighbourhoods (Rodriguez, Brown, & Troped, 2005), heralding a spatial turn in health research.

GPS devices have often been used in studies to enhance traditional qualitative data techniques, for instance Bell et al. (2015) provided participants with GPS devices to understand their relationship to wellbeing by generating personalised maps to prompt personal narratives about engagements with green spaces. Similarly, Jones et al. (2011) conducted two small-scale studies employing GPS-devices to explore the impact of studentification on areas bordering a university. and the experiences of fear in urban environments. The latter involved providing participants with GPS-enabled personal digital assistants (PDAs) so that they were able to rank certain areas they walked through in terms of how safe they felt. Walking interviews were conducted and mapping information from PDAs was used to enhance the qualitative data collected. Jones et al. (ibid) note their study offered rich qualitative and quantitative data that could be used to inform policy. Their studies are also illustrative of the utility of GPS technology for capturing mobilities. Critically for research into social care, GPS-enabled technology has also been employed to conduct research with 'vulnerable' participants; in exploring discourses around children's 'independent mobility', Mikkelson and Christensen (2009) employed GPS techniques (combined with more traditional ethnographic and survey methods) to understand children's movements in suburban Denmark. Their findings contributed significantly to understanding the ways in which children's mobilities are complex and shaped not just by the physical environment but also by social environmental factors, such as gender, social networks, cultures of social cohesion within families, institutional attendance, risk perceptions and risk management. Such shifts highlight the possibility of employing these mapping techniques in social work research.

To date, there have been limited engagements with mapping techniques in social work, but an exception is the work of Teixeira (2018) who provides an excellent overview of the history GIS and its applicability to social work. Her recent work (ibid.) documents the combined use of GIS and participatory photo mapping. Teixeira's study involved 10 high school youth aged between 14 and 17 and aimed to provide insights around their 'micro-geographies [which could] then be contextualised with other data sources ... to paint a more complete picture of the environment' (ibid, p. 13). Ultimately, Teixeira argues, such data could be used to better understand the lived worlds of the families and children for social workers to improve and enhance practice. We concur, but note additionally that spatial mapping techniques might also be applied to understand the working mobilities and practices of social workers themselves, in order to better understand and improve practice. Furthermore, as Teixeira notes, GIS requires certain basic training thus restricting its availability for social research. We thus advocate for the adoption of cheaper and more widely available GPS technology, which can be used to illuminate hitherto hidden areas of child protection practice.

5. Methodology

There are numerous methodological possibilities afforded by the use of GPS as discussed above, however given that this is a novel methodological technique in social work research we adopted a relatively simple approach. This case study is drawn from, and embedded within,



Fig. 1. Holux RCV-3000, copyright authors' own.

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Table 1	
Sample	

Sample.			
Small team office	site	Hot-desking site	
Period 1	Period 2	Period 1	Period 2
FSW 1 - STO TM 1 - STO SW 1 - STO SW 2 - STO	FSW 1 - STO TM 2 - STO SW 1 - STO SW 3 - STO	FSW 1 - HDO SW 1- HDO SW 2 - HDO Device failed	FSW 1 - HDO SW 1 - HDO SW 3 - HDO TM 1 - HDO

FSW = Family Support Worker.

TM = Team Manager.

SW = Social Worker.

STO = Small Team Office.

HDO = Hot Desking Office.

a wider longitudinal research project: 'Organisations, staff support and the dynamics and quality of social work practice: A qualitative longitudinal study of child protection work', funded by the Economic and Social Research Council (Grant Number: ES/N012453/1). The wider project was set across two different local authorities, located roughly 200 miles apart (see Ferguson et al., forthcoming). Researchers spent fifteen months in two local authority child protection teams, primarily seeking to explore how relational work with children and families on child protection plans was informed by organisational culture, staff support and supervision. One of the local authorities had adopted hotdesking (detailed above) and the other was a more traditional small team office. The wider research project was approved by ethics committees at both the universities and local authorities associated with the research. Further attention will be paid to the on-going ethical dimensions of this method in more depth following the findings.

We provided participants with a Holux RCV-3000 (see Fig. 1). This device was chosen for its relative affordability, size and battery strength.

Participants were provided with a Holux device and asked to use it over two separate 7-day periods, including any non-working periods such as TOIL,¹ holiday and weekends. We asked participants to turn on the device whenever they were undertaking work - from the moment they left the house in their car, or in the house if they were working from home before leaving for the office or appointments - and keep it with them at all times. The aim was to capture the full extent of work and worker mobilities in child protection practice. As well as using the Holux device, we asked participants to complete a simple diary detailing planned and unplanned activities during the day. The diary was purposefully simple in its design. The reasons for this are threefold. First, in light of the above literature detailing the increasing bureaucratic demands made on social workers, we did not wish to impose further demands on their already stretched time. Second, an overly complicated tool could distract from their work and we did not want to hinder by imposing further bureaucratic tasks likely to disrupt the standard working routines and mobilities we were keen to capture. Third, we were primarily interested in the relationship between mobilities and geography that the GPS-enabled interviews facilitated us capture. The diaries therefore served as a tool to remind workers of their working weeks.

For our study the GPS sample was drawn from both field sites. It comprised 12 workers (6 from each site) including a range of managers, social workers and family support workers (see Table 1).

After each 7-day period the devices were collected and the data extracted to generate maps detailing the working patterns and movements of workers during this time. This data generated is quantitative, detailing times and places of movement, but it has qualitative functions. Participants were interviewed about their personalised maps using semi-structured interviews to elicit reflections about their movements to, from and within certain spaces. The written diaries were used to corroborate reflections and provide further information about the activities indicated on the maps. Data collected in the GPS-enabled interviews was transcribed verbatim and imported into NVivo 11 alongside other data from the wider study. Following an initial stage of analysis, the GPS-enabled interviews were then extracted into an individual NVivo file and analysed again thematically according to this aspect of the study.

This technique was not without problems; we encountered some technical and practical challenges. Jones et al. (2011, p. 183) note that GPS is a 'temperamental technology' and in built up areas, or if participants move around before the GPS signal has locked onto their location, it can produce 'scatter' suggesting movement where there is none or generating a somewhat indistinct map. We found that several of the maps had moments of 'scatter' rendering them more difficult to interpret. Similarly, the battery life of these devices is not limitless and when participants forgot to charge them or were intensely mobile over a sustained period of time the battery would drain very quickly meaning some mapping data could be lost. Finally, using the devices for 7 days meant that some participants struggled to remember their activities. In hindsight, it may have been more effective to have used the devices over a shorter time period. Ultimately, we found that the written diaries were effective in addressing areas where the device had faltered, or the worker was unsure of their movement at a given time. Similarly, most devices were used correctly and that quantitative data is presented here in tables alongside the maps generated.

6. Findings

Although this sub-study was limited in terms of duration, it generated some fascinating insights into the ways in which movement and space were caught up in participants' everyday lives. We present two themes from this data: the porosity of office space and the general mobilities of participants. These findings are indicative of the utility of GPS technology, and the relevance of spatial data, to social work research in general.

6.1. The affective qualities of the unbounded office

Much of our ethnographic data, gathered in the course of 'hanging out' in the child protection teams, suggested that working patterns were rarely contained within physical office spaces. Social workers and managers often spoke of working at home, or at the very least thinking about work beyond the confines of the office. These data indicated to us

¹ **Time Owed In Lieu:** time off work given to workers to replace overtime undertaken.

that there was a wider geography of interconnected spaces of child protection practice that are conventionally considered as distinct and separated from one another. Space is to be understood through its multiplicity and is produced through a complex interplay of interrelations (Anderson, 2008; Massey, 2005); it is porous and constituted through experiences and processes from both outside and within. Economic geographers have long considered that office environments do not constitute separate, distinct arenas from everyday life, but are inextricably enmeshed and interlinked with, and shaped by, wider processes, practices and spaces. For example, McDowell (2008) notes that economic activities are a part of, and shaped by, wider social activities and experiences of home (see also Lorne, 2015). Mobile and agile working practices are increasingly blurring the already porous boundaries of home and work for social workers. Crucially, the office space may seep into home life, with implications for mental health and wellbeing, something the GPS device was able to capture effectively. Interviews with participants revealed a worrying trend of unwanted work not only beyond office spaces, but also beyond office times:

"So I start, the majority [writing up case notes] every Friday from 8 o'clock [PM] until whatever time in the morning to type up all my visits from that week, and to type up any assessments or conference reports for the following week, so it's prepared ready. And whatever time I finish there's, sometimes I won't, on occasions if I go in [to the office] on a Friday and I'm absolutely shattered I won't do it, but then you can guarantee I'll think about it at least 20 million times, oh my God, I need to do this, so then it plays on my mind."

(SW 2 - HDO)

Indeed the quantitative data extracted from this social worker's GPS device powerfully illustrated this; over one 7 day period this person contributed an extra 14 h and two minutes of work. Agile working policies to increase worker mobility in the office are often promoted as a way to improve efficiencies in organisations and yet they risk facilitating and normalising overwork (Gillies, 2011), social worker fatigue and, potentially, burnout. This may contribute to the stress of workers in an already emotionally challenging role.

Jeyasingham's (2018) recent work explores how some workers engaged in agile working so they could seek solitude from colleagues, with others reporting they found comfort in the intimate practices of working at home. Our findings add a further dimension to this, highlighting instances where unwanted work permeated their home spaces, invoking distress for some of our participants. For example, this candid explanation of the way in which a social worker's home had become 'toxic' because work had so thoroughly enmeshed itself where it should not have been:

"That was another thing I... when I had a kind of a... basically a nervous breakdown ... my home was polluted with the issues that were going on in work because I had spent lots of my time working at home, at my kitchen table, writing statements... there was no... there was no place that wasn't tainted with the stresses so I could remember sitting at the table, you know trying to find a bit of peace of mind and I am on bloody antidepressants ... that [previous working from home arrangement] went badly wrong and so I am quite averse to bringing it in to my space."

(SW 3 - STO)

This social worker's experience is indicative of the ways in which

mobile work that encroaches into the home generates particular atmospheres. The surrounding objects of work permeated this social worker's domestic space with stress, making it toxic and corrosive to their mental health.

All team manager or social worker participants told us they worked on weekends or during their annual leave. As we read through the maps with them there were multiple occasions of spatial data generated in evenings or even at night as social workers or managers attempted to finish notes or checked in on a case that was concerning them. Interestingly, the family support worker from the hot-desking site (FSW 1 - HDO) was the only participant who did not have access to technology which enabled them to work from home. However, this did not eliminate the emotional pressures of their work seeping into their home environment:

"We don't have a [work-enabled tablet] as a FSW. So, the possibility of me rushing home and finishing that case note off like most social workers do, I can't do, you know. So, if there is something that I might, you know, not having something and going home and thinking, oh, did that happen? Did that, did I do this, did I, you know. So, I'll be in a panic all night about that and be worrying myself sick...".

(FSW 1 - HDO)

We had expected this participant to indicate that the inability to take work home with a physical object meant reduced anxiety. However, it appeared that the knowledge that others were able to engage in work at home and the very absence of the tool induced affects, such as stress, which might have been thought to be otherwise confined to the office. Such responses indicate the complexity of how the spatial porosity of the office was experienced. The blurring of domestic and working boundaries can have a considerable effect on the wellbeing of workers, something this method captured effectively.

6.2. Experiences of wider mobilities and stillness

As noted, a key reason for employing the GPS devices was to explore the experiences and meanings of social worker movements, journeys and sedentary moments. We were not surprised that these emerged as strong themes and demonstrated a wider network of mobilities. We were however struck by the complexity of how these were experienced and articulated in interviews.

Generally the data reveals similar mobile patterns between the two field sites; social workers could be intensely mobile over a period of days, and then sedentary for a period of time in the office. Through interviews and diaries participants were able to articulate how these 'sedentary' moments of time were absorbed with work, which was often experienced as relief and sought after. This suggests that the relationship between child protection practice, work and mobility is more complex and nuanced than is often presented. Increased mobility is not necessarily always a facet of the work that social workers valued exclusively. Being *still* in the office was, at times, a much sought after state in order to complete various bureaucratic tasks:

Researcher: "What's it like when you have a day in the office?"

Social worker: "It's like gold [...] Because you feel that you can make some headway with stuff [...] they're just rare opportunities to feel that you're making some progress."(SW 2 – HDO)

SW 2 - HDO

Total distance travelled (km):	
Time spent in office:	
Time spent on visits:	
Time spent travelling:	

78.06

Date	Location	Arrival	Departure	Total Time
17-May	Visit	09:13	10:51	1hr 38mins
	Office	11:00	12:15	1hr 15mins
	Visit	12:20	14:28	2hrs 8mins
	Office	14:33	16:31	1hr 58mins
	Visit	16:35	17:28	0hrs 53mins
	Visit	17:35	18:20	0hrs 45mins
18-May	Office	07:10	15:08	7hrs 58mins
	Visit	15:11	15:34	0hrs 23mins
	Visit	15:55	16:32	0hrs 37mins
	Visit	16:53	17:34	0hrs 41 mins
		07.04	07.50	
19-May	Visit	07:21	07:52	0hrs 31mins
	Office	08:03	10:54	2hrs 51mins
	Visit	11:05	12:01	0hrs 56mins
	Visit	12:19	12:39	0hrs 20mins
	Office	12:57	14:20	1hr 23mins
	Visit	14:39	15:07	0hrs 28mins
	Office	15:26	15:58	0hrs 32mins
	Visit	16:05	16:14	0hrs 9mins
	Visit	16:23	17:09	0hrs 46mins
	Visit	17:16	17:30	0hrs 14mins
23-Mav	Office	07:04	16:36	9hrs 32mins

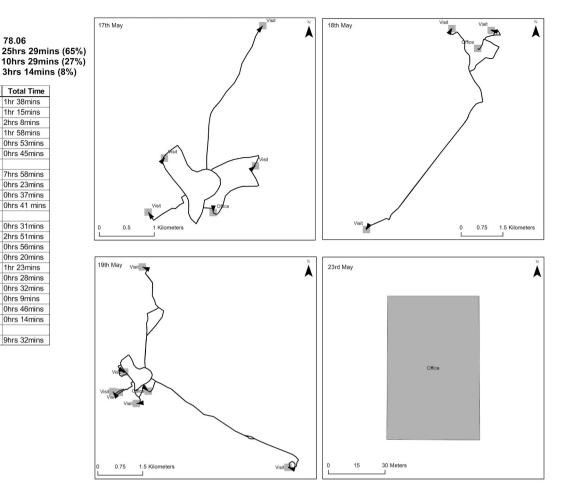


Fig. 2. SW2 - HDO.

In reviewing this social worker's map (see Fig. 2, 23rd of May) in the course of an interview, we were surprised to hear this time described as 'gold', but this was echoed by many of our participants. To be sedentary in the office was often described as a relief, but also paradoxically exhausting because it involved considerable volumes of work - it is also important to note the emotional toll this could extract from workers. One social worker told us how his body would ache and sweat from prolonged periods of being sat at his desk. He would seek to alleviate this through seeking a moment of stillness outside:

"[But] I, I find sitting at the computer exhausting ... I sometimes stop, you know, I won't just, I will [pop out], sit and stop and just lean against a wall and have a breather and smell a flower, you know what I mean?"

(SW 3 - STO)

This highlights the complexity of notionally sedentary states in the office; these moments were productive and sought after, and participants were keen for us to understand this, but concurrently they could also generate a sense of physical and emotional exhaustion.

In exploring movement beyond the office, an interesting finding emerged in the course of comparing the interviews and spatial data generated by the two family support workers in our sample (one from the hot-desking office and one from the small team office). There was a striking contrast in the everyday mobilities between these two workers, ostensibly employed to undertake the same task (see Figs. 3 and 4):

Although FSW 1 - STO had neglected to use the GPS device for one of the allotted days, it is clear that this individual was more mobile during the remaining days. During the course of the interview, he

described his journeys during this time period, noting that they were not atypical, and explained that his journey on the fourth day of using the device involved a long trip in order to facilitate contact between a child in care and the child's mother. He explained:

"[I was doing contact for this child] the other day you know, we were singing 'Wheels on the bus' and things like that, anything that can kind of make him, it's a bit like we talked about the other day, and that anything that will kind of make him feel a bit more relaxed and comfortable, because you know, ultimately I'm either a stranger or somebody they've only met a couple of times, so you try and make them feel as relaxed and at ease as you can because, you know you want them, you don't want them to feel distressed do you?"

(FSW 1- STO)

He was able to explain to us the importance of such journeys in the wider context of this case, and felt he was fulfilling a valuable role within the wider social care team. His descriptions encapsulate the way in which movements can be generative of affects and emotions, and the relational work that is facilitated by the car as an important space of practice (Ferguson, 2009).

In contrast, FSW 1 - HDO informed us he had taken on the role at the hot-desking environment on the understanding that this would encompass direct work with families, an understandable assumption for a FSW. However, we learned through the course of the interview that the limited movement documented in Fig. 3 was largely representative of his working days, and he experienced the role as deeply frustrating and demoralising, limited to purely administrative tasks. Before the end of the study, FSW 1 - HDO left this job and explained in his exit interview that he did not feel valued, citing his experiences of being

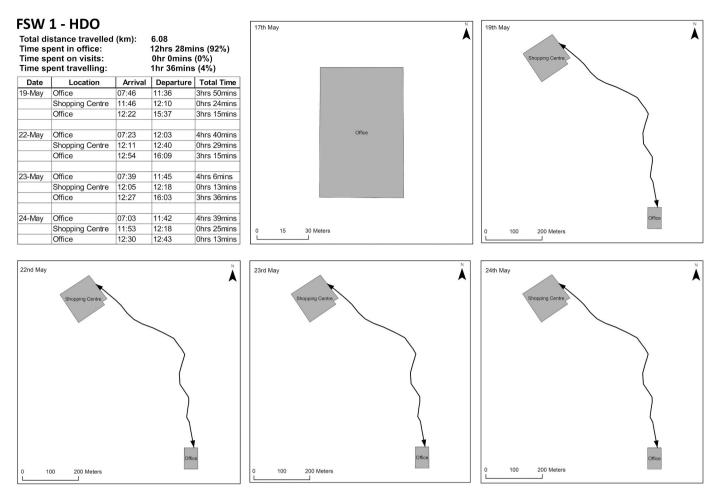


Fig. 3. FSW 1 - HDO.

limited to the office as symptomatic of this. During the course of the wider research project it was clear that the hot-desking office was experiencing extremely poor retention across various roles (team managers, social workers and family support workers). Indeed, a total 45 members of staff left the hot-desking office in the course the 15-month study. Among the FSW group specifically each worker mentioned their disappointment at the rigidity of their role and their dissatisfaction with the contrast between the job specification and the actualities of the post. Ultimately, three out of the eight FSWs left the team, directly citing this discrepancy as the reason for this. There is a temptation to read this as a form of immobility, but in reality FSW 1 - HDO was relatively mobile within the office, and indeed, was able to articulate how he moved around the building, and obviously travelled to a local shopping centre. The feelings generated by his movements and journeys were qualitatively different from that of FSW 1 - STO however. It eroded his sense of worth and belonging to the organisation. This problematises wider discourses of mobility in social work that uncritically conceptualise mobility as necessarily positive.

This finding is powerfully represented by the ways in which we found mobilities could generate corrosive atmospheres and feelings that impeded practice.

One social worker told us in detail about the way in which the expansion of the area covered by their teams impacted upon their ability to practice effectively (see Fig. 5).

In particular, the expanded geographical remit of the team meant that he frequently experienced a chaotic journey and thus felt emotionally disengaged from meetings:

"That's about half an hour in busy traffic, [but] the ... thing can take an hour, you know, because you've just got to cross so many major kind of roads, down through [this area] and that. And it's not often easy to, to put the time aside, although I'd think, OK, I have got to be in [this area] so I should give myself an hour, how many times I've not been able to leave until half an hour, floored it, get stressed, got there late, everybody's looking at [me] ... And they're, where have you been? And I'm, trying to cross the fucking city is where I've been, you know, I, so it's had, the, the new structure's had quite an impact I think on trying to get planning, trying to get organised better but failing because the work is difficult to organise. It's bound to have an impact, isn't it, if, if we were still out on weekly visits, which is what I always used to try to do, I'd never try and leave a family more than seven to ten days without seeing them. Now, I'm thinking, god my 31 days is up soon, I'd better get out there, it's awful."

(SW 3 - STO)

It is interesting to reflect that case recordings do not currently capture the nuances and feelings of movement and distance. The journeys to families or meetings are not homogenous, and understanding this is even more important when we note that movement is intertwined with emotion, as these movements may generate feelings that then have an impact on practice. This was powerfully illustrated during another interview, where a social worker expressed surprise when reflecting on how they 'hated' one particular journey to visit a child (see Fig. 6, 17th May), explaining:

"Yeah, that, I've got one case, [child] who lives in [town], and I absolutely hate that journey [...] hate it. You've got to go right across town. The roads are horrendous, it is so busy, and it's all, like, different lanes and massive roundabouts. I hate that. Yeah. I hate

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FSW 1 - STO

Total distance travelled (km):	102.13
Time spent in office:	10hrs 22mins (57
Time spent on visits:	5hrs 1min (27%)
Time spent travelling:	2hrs 57mins (16%

	-	-		
Date	Location	Arrival	Departure	Total Time
17-May	Office	08:30	15:22	6hrs 52mins
	Visit	15:28	15:53	0hrs 25mins
18-May	Visit	07:56	08:39	0hrs 43mins
	Office	08:53	10:23	1hr 30mins
	Visit	10:40	11:04	0hrs 24mins
	Visit	11:17	12:31	1hr 14mins
19-May	Office	13:59	15:33	1hr 34mins
24-Mav	Office	08:10	08:13	Ohrs 3mins
	Visit	08:42	10:33	1hr 51mins
	Visit	11:31	11:55	0hrs 24mins
	Office	12:35	12:58	0hrs 23mins

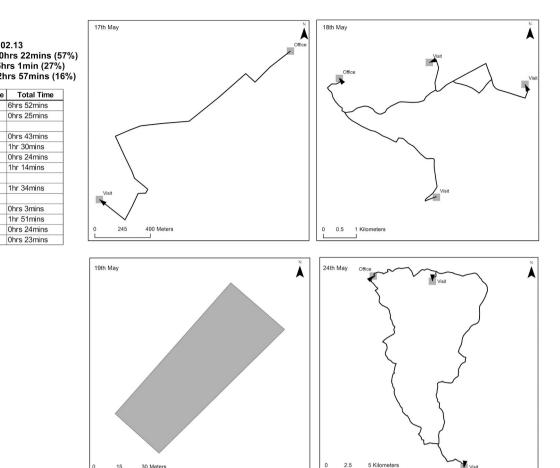


Fig. 4. FSW 1 - STO.

that journey. And I suppose it does impact on your visiting, because I do my stat visits for that case. Yeah. I did speak about it with [my colleague]. I, I can remember saying to [her] this morning, I've got to visit [this child]. And I can remember saying, isn't it funny the children that are further away we don't think about as much? [...] Poor old [child]. Neglecting him because he's in a different part of the city".

(SW 1 - STO)

Following this interview, the social worker began to reflect on the extent to which they were allowing the physical distance of this particular child to engender a sense of emotional distance from the case. Notably, far from being positive and intertwined with progress, the 'horrendous' roads and 'massive' roundabouts produced affects that led this social worker to hate this journey and distance herself from the case. Realising that while they would typically conduct more than just the mandatory one statutory visit every 31 days to their other families, for this child the distance and journey meant they had conducted statutory visits only. The experience of being interviewed raised the social worker's awareness of this distancing and they responded by increasing visits to this child and the outcome of the case significantly changed with her implementing a number of changes to the family's plan. Such findings suggest spatial data generated by GPS technology may have an important role to play in reflection and thus improving practice, mirroring Teixeira's (2018) call to consider the use of spatial data to improve practice.

7. Ethical issues

The use of this novel technology presented a number of ethical

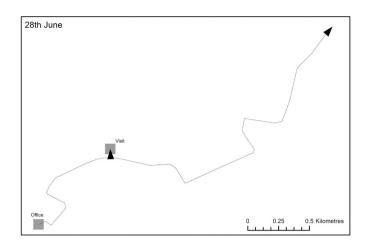
issues that require detailed consideration. The first issue pertains to anonymity and confidentiality. As the maps above demonstrate, the GPS technology generates spatial data which could reveal the location of both social workers' and service users' homes, such data is incredibly sensitive and must be used and stored in the most secure way. We addressed this as follows: each time the data was extracted from the Holux we stored it on a secure, encrypted drive that only team members could access. Maps were only used for interviewing purposes, and only the worker who generated this spatial data was able to see this. Following interviews, maps were 'de-contextualised' to remove any identifiable features, such as service users' and social workers' home addresses, leaving only distances travelled and amount of time spent at anonymised locations. Finally, we selected the Holux device specifically because it did not need to store data collected online or on an external drive, therefore no third party company could access or potentially lose this data.

Second, in the contemporary neoliberal global north, workers in all industries find themselves increasingly surveilled by managers, peers and the systems within which they are embedded in order to maximise productivity (Ajunwa, Crawford, & Schultz, 2017). GPS technology potentially constitutes a powerful tool to be abused by management to assess workers, by, for instance, monitoring the amount of time spent on a visit. Indeed, we note with concern it is apparent that industries such as Amazon (see Solon, 2018) are attempting to introduce such technology to monitor worker productivity. We strongly argue against any such use of GPS technology in social work in order to quantify practice. Indeed, we note that the data produced in this instance would be a very crude, inaccurate metric of work. The length of time spent visiting a family does not necessarily correlate with the quality of work done. We guaranteed participants that none of the data would be made

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SW 3 - STO

Date	Location	Arrival	Departure	Total Time
28-Jun	Office	08:00	15:09	7hrs 09mins
	Visit	15:11	16:10	1hr 01min
29-Jun	Office	08:10	12:31	4hrs 21mins
6-Jul	Office	07:26	08:29	1hr 03mins
	Visit	08:36	09:53	1hr 17mins
	Visit	10:02	10:03	Ohrs 1min
	Visit	?	11:00	?
	Visit	11:12	13:17	2hrs 05mins
	Visit	13:28	14:04	Ohrs 36mins



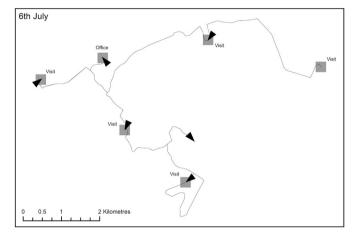


Fig. 5. SW 3 - STO.

available to management. In addition, we see this as an opportunity to highlight concerns around the problematic use of such tools, in doing so providing workers the opportunity to consider how to respond to any attempted future implementation.

As we have demonstrated above, much of the utility of this technology for social work research lies in its qualitative functions that explain and contextualise its quantitative application. Additionally, it is important to note that in discussion with workers from both field sites this tool did not appear to represent any great increase in their experiences of surveillance technology more broadly; they informed us that their activities on computer systems, such as writing case records or accessing case files were logged and recorded with each moment, noting the time accessed and the amount of time spent reading such files. This was also true of workers accessing the systems from the office and remotely. Finally, in discussions with workers about the role of this technology, many were eager to take part in order to indicate to the wider world the extent of the work, both mobile and sedentary, that they were undertaking in contemporary child protection practice.

8. Discussion

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Our aim in this paper was to understand the meanings and experiences attributed to mobilities within contemporary child protection practice. Mobility is often a prized facet of social work (Ferguson, 2010), and there are increasing concerns around the ways in which bureaucratic systems are effectively immobilising practitioners (Broadhurst et al., 2009). It is clear however that there is a paucity of understanding around how mobilities are actually experienced and what implications there might be from these for social worker wellbeing and practice.

This paper makes three major contributions to the extant literature; firstly in drawing upon literatures of mobility and affect it notes the complexity and nuance characterising mobilities inherent in child protection practice. Recent studies have pointed to the ways in which agile working policies and increased worker mobility may increase the diversity of spaces of work, and encompass elements of comfort and intimacy (Jeyasingham, 2018), highlighting the porosity of working spaces for social workers. In contrast to this, we note that participants often experienced the seeping of work into their home environments as at the very least unwelcome, and at worst deeply distressing. Mobile workers found that work was able to permeate their domestic spaces, generating uncomfortable affects. This occurs in relation to the contamination of the home and has implications for how we understand wider working practices. However, corrosive feelings may also arise in and be transferred to other spaces; a social worker having experienced a distressing visit may feed this into the office space. Conversely, a toxic working environment may see the social worker transfer this to a home visit and see their interactions with a child or family shaped negatively. In the light of recent calls for attention to the wellbeing of health and social care practitioners (British Association of Social Workers, 2018) this is particularly pertinent. More should be done to protect the domestic worlds' of social care practitioners in order to support their wellbeing.

Secondly, whilst discourses within social work present mobility as a desirable and necessary facet of contemporary child protection practice, such characterisations are simplistic and problematic. Not only do such

SW 1 - STO 17th May 18th May Total distance travelled (km): 61.13 Time spent in office: 27hrs 25mins (78%) Time spent on visits: 5hrs 28mins (16%) 2hrs 18mins (7%) Time spent travelling: Date Location Arrival Departure 17-May Office 08:16 14:34 Total Time 14:34 15:14 8:16 18mins Visit 14:38 Ohrs 36mins 15:54 16:06 Visit Ohrs 12mir 18-May 07.50 00.23 Vicit 1hr 33mine 09:40 15:09 Ohrs 15mins 09:25 Visit Office 09.58 5hrs 11mins Visit 15.22 15.4 0hrs 16:10 Visit 15:48 Ohrs 22mins 22-May Office 08:4 13:3 4hrs 52mins 13.43 14.36 Ohrs 53mins Visit Office 14.45 1hr 35mins Visit 16:32 16:55 Ohrs 23mins 08:18 08:25 23-May Visit Ohrs 7mins 08:35 Visit 09.23 Ohrs 48mins 09:36 14:49 1.5 Kilometers 5hrs 13mins 0.75 1.5 Kilomete 24-May Office 07:58 12:14 4hrs 16mins 23rd May 22nd May 24th May ٨ 30 Meters

Fig. 6. SW 1 - STO.

discourses risk exacerbating problematic elements of agile and hotdesking work environments, they also misrepresent activities taking place while 'sedentary'. Many of the participants within this study were able to articulate that being 'still' did not equate to inactivity. Instead such periods of time were characterised as important periods of work that could be experienced as relief. It is important to consider the implications of such findings; these are not an indication that the bureaucratisation of social work has been welcomed by practitioners, or should be. Rather, our findings reflect that participants were keen to stress that just because they were not mobile, in the sense of travelling to families, they were not inactive while sedentary at their desks but indeed completing vital work. However, it is important to note that while they understood this 'sedentary' time as vital, they could also experience this as exhausting or if they could not obtain it, it could be anxiety provoking. Again this highlights the importance of further attention to social care practitioner wellbeing. Similarly, in exploring the meanings and experiences of mobilities it is clear that some participants did not experience movement as positive. In the most severe instance this led to a social worker who found the affective qualities of her journey to visit one child led her to feel a concerning emotional distance from the case.

Thirdly, this paper introduces an innovative methodological technique from geography: GPS-enabled interviews. While there has been a general acknowledgement of the mobile nature of social work (Ferguson, 2009, 2010; Jeyasingham, 2018), how to actually represent and capture this has remained methodologically perplexing. This article however has uniquely demonstrated the utility of GPS-enabled technology for capturing spatial data about participants' mobilities. The maps and quantitative data generated can be used for enhanced qualitative techniques to learn how mobilities are felt and experienced. We would argue that this technology, with the proper safeguards, could be used effectively to learn more about other areas of practice.

9. Conclusion and implications for practice

Child protection practice is both mobile and deeply spatial; social workers often find their practice necessitates travelling to and from diverse locations. Similarly, changes in working practices and increasing managerialism have been shaping the working practices of social workers. In this paper we have presented GPS technology as an innovative tool for research in social work. We have illustrated the diversity of scholarship that draws upon GPS for social research in allied disciplines such as geography and health studies, and suggest that similar techniques might be applied in social work. Clearly the use of such technology does involve navigating some complex ethical issues, and we have been explicit in arguing that the GPS technology as a quantitative tool to measure workers' performance is problematic. As we have noted, such an approach would be a crude and poor metric of practice with families. Rather, we emphasise the qualitative functions of GPS as a potentially powerful tool for social work research, but also reflection in practice, thus echoing Teixeira's (2018) work. Our findings, tracing the spatial complexity of the office and worker mobilities highlight how GPS can reveal the nuances of practice where other methods cannot. Further research would also help to illustrate the extent of this across the social care workforce, not only in child protection practice. Accounting for mobilities and affect captures facets of the deeply problematic implications of porous working spaces in terms of practitioner wellbeing, but also fascinating insights into children

becoming 'out of mind' when geographically distant from office spaces. Accounting for mobilities and affect therefore, particularly within supervisory contexts, has the capacity to generate unique insights into practice spaces that can aid practitioner and child wellbeing.

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References

- Adey, P. (2008). Airports, mobility and the calculative architecture of affective control. *Geoforum*, 39, 438–451.
- Ajunwa, I., Crawford, K., & Schultz, J. (2017). Limitless worker surveillance. California Law Review, 105(3), 735–776.
- Anderson, B. (2006). Becoming and being hopeful: Towards a theory of affect. Environment and Planning D: Society and Space, 6, 733–752.
- Anderson, B. (2008). Doreen Massey 'For Space' (2005). In P. Hubbard, G. Valentine, & R. Kitchin (Eds.). Key texts in human geography (pp. 227–235). London: Sage.
- Ferguson, H., Leigh, J.T., Cooner, T.S., Beddoe, L., Disney, T., Warwick, L. and Plumridge, G. (forthcoming) From snapshots of practice to a movie: Researching long-term social work and child protection by getting as close as possible to practice and organisational life.
- Arpagian, J., & Aitken, S. (2018). Qualitative GIS. Oxford Bibliographies Online: Geography. https://doi.org/10.1093/OBO/9780199874002-0192.
- Bell, S. L., Phoenix, C., Lovell, R., & Wheeler, B. (2015). Using GPS and geo-narratives: A methodological approach for understanding and situating everyday green space encounters. Area, 47(1), 88–96.
- Bissell, D. (2008). Comfortable bodies: Sedentary affects. Environment and Planning A: Economy and Space, 40, 1697–1712.
- Bissell, D., & Fuller, G. (2011). Stillness unbound. In D. Bissell, & G. Fuller (Eds.). Stillness in a Mobile World (pp. 1–17). Abingdon: Routledge.
- British Association of Social Workers (2018). Health and social care unit to launch action for Care-Workers Wellbeing. Available at: https://www.basw.co.uk/media/news/ 2018/oct/health-and-social-care-unite-launch-action-care-workers-wellbeing, Accessed date: 12 November 2018.
- Broadhurst, K., Wastell, D., White, S., Hall, C., Peckover, S., Thompson, K., ... Davey, D. (2009). Performing "initial assessment": Identifying the latent conditions for error at the front-door in local authority children's services. *British Journal of Social Work*, 40(2), 352–370.
- Brown, B., & O'Hara, K. (2003). Place as a practical concern of mobile workers. Environment and Planning A, 35, 1565–1587.
- Bryman, A. (2004). Social Research Methods (fourth edition). Oxford: Oxford University Press
- Cresswell, T. (2012). Mobilities II: Still. Progress in Human Geography, 36(5), 645–653. Disney, T. (2017). The orphanage as an institution of coercive mobility. Environment and Planning A: Economy and Space, 49(8), 1905–1921.
- Dwolatzky, B., Trengove, E., Struthers, H., McIntyre, J., & Martinson, N. (2006). Linking the global positioning system (GPS) to a personal digital assistant (PDA) to support tuberculosis control in South Africa: A pilot study. *International Journal of Health Geographies*, 5, 34.
- Elwood, S., & Cope, M. (2009). Introduction: Qualitative GIS: Forging mixed methods through representations, analytical innovations, and conceptual engagements. In S. Elwood, & M. Cope (Eds.). *Qualitative GIS: A Mixed-methods Approach* (pp. 1–12). Los Angeles, CA: Sage.
- Ferguson, H. (2009). Driven to care: The Car, automobility and social work. *Mobilities*, 4(2), 275–293.
- Ferguson, H. (2010). Walks, home visits and atmospheres: Risk and the everyday practices and Mobilities of social work and child protection. *British Journal of Social Work*, 40(4), 1100–1117.
- Ferguson, H. (2016a). Making home visits: Creativity and the embodied practices of home visiting in social work and child protection. *Qualitative Social Work*, 17(1), 65–80.
- Ferguson, Harry (2016b). Professional helping as negotiation in motion: social work as work on the move. Applied Mobilities, 1(2), 193–206. https://doi.org/10.1080/ 23800127.2016.1247523.

Foucault, M. (1979). Discipline and punish. New York: Vintage.

- Gillies, D. (2011). Agile bodies: A new imperative in neoliberal governance. Journal of Education Policy, 26(2), 207–223.
- Halford, S. (2004). Towards a sociology of organisational space. Sociological Research Online, 9(1)http://www.socresonline.org.uk/9/1/halford.html.
- Hanna, S. (2010). Call centres as sites of professional practice: "Where old social workers go to die"? Australian Social Work, 63(3), 266–280.
- Hirst, A. (2011). Settlers, vagrants and mutual indifference: Unintended consequences of hot-desking. Journal of Organisational Change Management, 24(6), 767–788.
- Horton, J., Christensen, P., Kraftl, P., & Hadfield-Hill, S. (2014). Walking ... just walking': How children and young people's everyday pedestrian practices matter. *Social & Cultural Geography*, 15(1), 94–115.
- Jeyasingham, D. (2014). The production of space in children's social work: Insights from Henri Lefebvre's spatial dialectics. *British Journal of Social Work*, 44(7), 1879–1894. Jeyasingham, D. (2016). Open space, supple bodies? Considering the impact of agile
- working on social work office practice. *Child & Family Social Work*, 21(2), 209–217.
- Jeyasingham, D. (2018). 'Seeking solitude and distance from others: Children's social workers' agile working practices and experiences beyond the office'. British Journal of Social Work available online early at: https://doi.org/10.1093/bjsw/bcy077/ 5094989 (Accessed 30/10/18).
- Jones, P., Drury, R., & McBeath, J. (2011). Using GPS-enabled mobile computing to augment qualitative interviewing: Two case studies. *Field Methods*, 23(2), 173–187.
- Jones, P., & Evans, J. (2012). The spatial transcript: Analysing mobilities through qualitative GIS. Area, 44(1), 92–99.
- Leigh, J. T. (2017). Blame, culture and child protection. Basingstoke: Palgrave Macmillan. Lorne, C. (2015). The multiple trajectories of coworking: Reimagining space, work and ar-
- chitecture. Unpublished PhD thesisUniversity of Birmingham.
- Massey, D. (2005). For space. London: Sage.
- McDowell, L. (2008). Thinking through class and gender in the context of working class studies. Antipode, 40(1), 20–24.
- Mikkelsen, M., & Christensen, P. (2009). Is children's independent mobility really independent? A study of children's mobility combining ethnography and GPS/mobile phone technologies. *Mobilities*, 4, 37–58.
- Milward, L., Haslam, S. A., & Postmes, T. (2007). Putting employees in their place: The impact of hot desking on organisational and team identification. Organisational Science, 18(4), 547–747.
- Moran, D., Piacentini, L., & Pallot, J. (2012). Disciplined mobility and carceral geography: Prisoner transport in Russia. *Transactions of the Institute of British Geographers*, 37(3), 446–460.
- Munro, E. (2005). A systems approach to investigating child abuse deaths. British Journal of Social Work, 35(4), 531–546.
- Munro, E. (2011). The Munro review of child protection: Final report, a child-centred system CM, the stationery office, London, UK.
- Muzicant, A., & Peled, E. (2017). Home visits in social work: From disembodiment to embodied presence. *The British Journal of Social Work*, 48(3), 826–842.

Ravalier, J. (2018). UK social workers: Working conditions and wellbeing. London: BASW. Rodriguez, D., Brown, A., & Troped, P. (2005). Portable global positioning units to

- Rodriguez, D., Brown, A., & Troped, P. (2005). Portable global positioning units to complement accelerometry-based physical activity monitors. *Medicine and Science in Sports and Exercise*, 37(11), 572–581.
- Rogowski, S. (2011). Managers, Managerialism and social work with children and families: The deformation of a profession? *Practice: Social Work in Action*, 23(3), 157–167
- Sager, T. (2006). Freedom as mobility: Implications of the distinction between actual and potential travelling. *Mobilities*, 1, 465–488.
- Schuurman, N. (2013). Geographic information systems. Oxford Bibliographies Online: Geography. https://doi.org/10.1093/OBO/9780199874002-0023.
- Sheller, M., & Urry, J. (2006). The new mobilities paradigm. Environment and Planning A: Economy and Space, 38(2), 207–226.
- Solon, O. (2018). Amazon wristband that tracks warehouse workers' movement. https:// www.theguardian.com/technology/2018/jan/31/amazon-warehouse-wristbandtracking/, Accessed date: 1 November 2018.
- Spolander, G., Engelbrecht, L., Martin, L., Strydom, M., Pervova, I., Marjanen, P., ... Adaikalam, F. (2014). The implications of neoliberalism for social work: Reflections from a six-country international research collaboration. *International Social Work*, 57(4), 301–312.
- Teixeira, S. (2018). Qualitative geographic information systems (GIS): An untapped research approach for social work. *Qualitative Social Work*, 17(1), 9–23.
- Unison UK (2017). A day in the life of Social Work, research by Unison and Community Care. https://www.unison.org.uk/content/uploads/2017/03/CC-SocialWorkWatch_ report_web.pdf/, Accessed date: 17 October 2018.
- Uteng, T. (2009). Gender, ethnicity, and constrained mobility: Insights into the resultant social exclusion. *Environment and Planning A: Economy and Space*, 41, 1055–1071.