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RESEARCH ARTICLE





Gender and the lived body experience of academic work during COVID-19

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ABSTRACT

The rapid transition to online teaching in response to Covid-19 presented unprecedented challenges for academic communities. Staff had vastly different experiences of engaging with technology, and these experiences are shaped by factors including gender, (dis)ability, socioeconomic resources and caring responsibilities. We report findings from an intersectional interview examination of how 412 staff in a large London-based university adapted to teaching and researching from home at the beginning of lockdown during the COVID-19 pandemic. In this article, we construct grounded theory around the divisibility of the body, and the conflicts arising from the need to span home and worklife, our findings illustrate how patterns of inequity for women academics converge to construct ways of managing the boundary work of home and work with different degrees of successes. We document how management support and/ or existing expertise were vital to enable women academics to overcome obstacles to equitable work.)

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Higher education; gender; boundary work; disability; feminist theory

Introduction

The body is largely absent in education and technology research, taken-for-granted and considered unremarkable. Online teaching and learning often are considered disembodied because physical bodies are not present to each other. However, the crisis caused by the pandemic and the unexpected consequences for academics who found themselves working in inadequate and uncomfortable circumstances made the body dys-appear (Leder 1990) becoming more visible as it was less well accommodated. The spaces inhabited by academic bodies changed radically, and any prior segmentation of workspace and home space became impossible to uphold. The challenges caused by the inability to separate home from work, along with the responsibilities associated with each, are exacerbated for those with caring responsibilities, limited space and pre-existing mental and physical health concerns. Moreover, the traditionally gendered nature of domestic work means that responsibilities for balancing the demands of work and home are more likely to impact women academics (Santos and Cabral-Cardoso 2008). A feminist engagement with education and technology requires the acknowledgement of the lived experience of women academics, as well as carers, disabled and/or low-socioeconomic status (SES) individuals, for whom time for work and home life is increasingly fraught due to the pressures of COVID-19.

The research presented here aligns with the aims and scope of Learning, Media and Technology within this special issue through our critical perspective on staff experiences of using digital technologies in higher education. Our unique contribution is paying attention to what it feels like, from the perspective of researchers and teachers in Higher Education, to shift academic work online using digital technologies from home.

By focusing on academic work and staff experiences, we are able to highlight inequities and theorise these through debates at the intersection of technology, home working and gender. Here, we interpret the data constructing grounded theory using Young's (2002) lived body experience, Nippert-Eng's theorisation of the 'separation' and 'integration' strategies for home and work (2008), and Gregg's (2011) conceptualisation of 'presence bleed' and changing intimacy surrounding homework to explore the impact on minority academics in our data set. We will define each of these theories later as we apply them. Our primary contribution lies in addressing 'The ways in which digital media in education interact with issues of democracy and equity, social justice and public good', by focusing on the lived body experience of academics working at home with technology during the COVID-19 pandemic.

Gender, technology and academic work during the pandemic

Within academia, the history of inequities experienced by women was well documented even before the pandemic (Blithe and Elliott 2020; Early et al. 2018). The move to online teaching and home working in response to COVID-19 has exacerbated challenges for women as illustrated by opinion pages of global newspapers (Senior 2020; Walker 2020). Early academic studies of COVID-19 have again shown women were disadvantaged (Littlejohn et al. 2021; Littlejohn and Kennedy 2020; Myers et al. 2020; Andersen et al. 2020; Cui, Ding, and Zhu 2020; Blaskó, Papadimitriou, and Manca 2020). Our research builds on these studies and on the prior work of several scholars who have analysed gender, domestic work and academic work both before and during the pandemic.

Within Computer Science, the Computer Supported Cooperative Work community has examined the effects of technologies and working from home since the late 1980s (Olson 1989; Christensen 1987), exploring the introduction of new technologies such as tablets and smartphones for office work and how the use of these technologies impacts family life (Kawsar and Brush 2013; Stawarz et al. 2013; Bjørn et al. 2014). This rich domain has covered all aspects of homework from the technical to the social. On the more technical side, research has examined the infrastructure required to support homework for families, including setting up home networks (Shehan Poole 2012; Bowers 1994); support roles within the family to ensure privacy and security (Rode 2010); and supporting email overload (Cecchinato 2014; Whittaker and Sidner 1996). On the social side, research has examined how Computer-Mediated Communication via video calls has been used to facilitate closeness (Kirk, Sellen, and Cao 2010); technology use for work and non-work in the bedroom (Salmela, Colley, and Häkkilä 2019); temporal patterns of technology's use on home life (Widdicks et al. 2017); coping with the emotional and trust impact of working remotely from one's team (Koehne, Shih, and Olson 2012); and dealing with persuasion and deception in remote collaborations (Bradner and Mark 2002). Spark (2017) highlighted the benefits of working at home for disabled employees and their employers. Home working had the potential to improve equity; however, this was dependent on management demonstrating the requite trust and flexibility. Strengers et al. (2019) as well as Rode and Poole (2018) have explored the gender dimension of working from home from a feminist perspective, highlighting the additional gender identity work required for women with technical skills applied in a domestic context.

Of particular relevance is Salazar's (2001) examination of 'boundary work' carried out by people working from home, using Nippert-Eng's conception of integration and separation strategies for managing work and personal life. Boundary work is an analytical concept which initially looked at how scientists manage the perception of what is and is not scientific (Gieryn 1983), and Salazar applies it to managing the divisions between personal and work life. Salazar's (2001) interviews with university faculty identified six categories of boundary work: psychological, electronic, space, time, roles and tasks (see Figure 1). While Salazar's study focuses on older technology, predating modern cloud computing and availability of feature-rich video calling across all segments of society, we argue their theoretical contributions regarding boundary work when working at home remain relevant.

The COVID-19 pandemic caused a dramatic disruption in normal work routines, and newer technologies such as Zoom and Teams became common place. Studying technological disruption in the home is not new, research has previously examined the impact of illness and death on technology use at home (Dimond, Poole, and Yardi 2010; Martin 2007). More recent research on COVID-19's impact on home technology use has covered a range of topics, ranging from the examination of domestic violence while living under lockdown conditions during the pandemic (Paim, García, and Pereira 2020) to observing families engaging in remote schooling (Häkkilä et al. 2020). Häkkilä et al. (2020) examined how homeschooling in Finland impacted parental work routines and scheduling school time and pointed to pragmatic issues such as sharing devices, managing space and dealing with the need for quiet for video calls. This research all speaks to the highly gendered nature of this work.

The aim of this paper is to examine academics' rapid transition to online teaching and working from home in response to COVID-19, highlighting the gendered nature of the work entailed in negotiating home/work boundaries in an embodied spatial context. An example of this rapid transition is illustrated in Figure 2 which shows a workspace on a bed with a portable table holding up a cell phone with a camera, laptop and camera. This image illustrates the (often-invisible) work conditions of academics as they create improvised solutions using technology to work at home. The

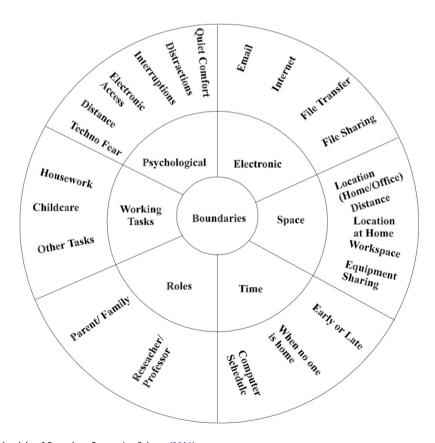


Figure 1. Mandala of Boundary Categories Salazar (2001).

context of this study is the first weeks of lockdown during the COVID-19 pandemic in 2020, which led to a major disruption of usual academic work routines.

The lived body experience of working from home

In this paper, we adopt a perspective on the move to home working and online teaching that foregrounds two intersecting aspects of academics' experience: space and embodiment. The boundary work described above indicates the labour involved in negotiating the forced intermingling of home and workspaces under lockdown conditions during the pandemic. In the first few months of the COVID-19 pandemic, many governments around the world required employees to work from home in order to reduce the spread of the infection. Gregg (2011) argued that integrating knowledge work that relies on technology into the home expands paid work at the expense of private life and results in a 'presence bleed' whereby '[c]ommunication platforms and devices allow work to invade spaces and times that were once less susceptible to its presence' (2). During COVID-19, it was necessary for academics to engage in boundary work to make a home-work division viable, using integration and separation strategies used to make this occur.

Prior to the pandemic, Nippert-Eng (2008) had classified workers into those who integrated and those who segmented the home and work boundary. 'Integrationalists' were those who removed boundaries between home and work, for instance, by socialising with colleagues outside of work, or by having pictures of family on their desk. Here boundary work focused on ensuring home and work flowed together comfortably, managing competing demands, and maintaining a professional identity in the context of colleagues knowing each other's domestic situation. For these individuals, 'presence bleed', the inability to create sharp divisions between work and home life (Gregg 2011), was a non-issue. Meanwhile, 'segmentationalists' would maintain a strict division

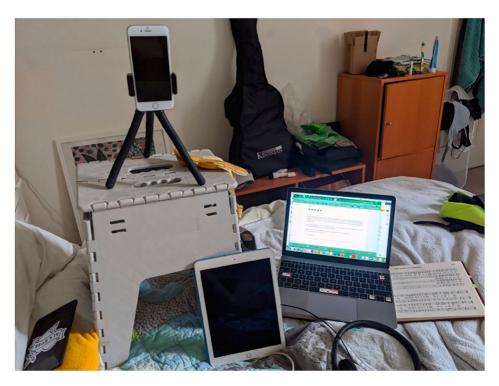


Figure 2. Photograph of a workspace on a bed with a laptop, tablet and phone in stand on stool.

between home and work, keeping family photographs in drawers, or wallets, not discussing personal life at work or work at home, and engaging in substantial boundary work to manage the division of separate spheres. For these workers, 'presence bleed' was an ongoing problem.

In this study, we use these concepts of integration, separation and presence bleed to highlight the strategies academics used as they worked from home during COVID-19. The analysis foregrounds the physical and psychological costs of this boundary work. We also draw attention to the centrality of the 'Lived Body' (the lived experience of one's body) in negotiating ways of managing technology-supported working from home. Minority experiences of race, disability and gender all contribute to how academics experienced working from home. Therefore, we use Young's theory of lived body experience which extends beyond intersectionality (Collins 1990) in that lived body experiences also considers the physical experience of one's body including its size and shape in the context of space. Young observes that the 'lived body is a unified idea of a physical body acting and experiencing in a specific socio-cultural situation, it is body-in-situation' (Young 2002, 16). The situation of the body for academics in our study during lockdown was the home. Adequate space, or lack thereof, for both work and home life was fundamental to the pandemic experience. Therefore, the dual focus in this paper on space and the body illuminates the 'lived experience' of working with technology in an educational context that was rarely explored prior to the pandemic. We will show how the neglect of these important facets of education and technology work risks reproducing and exacerbating inequalities in the academy.

Method

The research was conducted at a large, research-intensive London-based, UK university between March and August 2020, following the move to home working and teaching online as a result of COVID-19. Our method drew on Gourlay and Oliver's (2018) exploration of the digital university. An online survey, focused on the experiences of academic and professional staff during the initial lockdown period, was distributed to staff through the faculty Deans. The survey gathered demographic data about gender identity, age, role, faculty, the number of adults and children at home and the number of rooms available in the home to work in. Participants were asked to rate their mood about working from home, the rapid move to online teaching and their experience of remote research on a 5-point scale. Open text, narrative responses were invited to explain these ratings, describing any challenges or opportunities they had encountered and how they felt about them. As part of this participants were also invited optionally to upload a photograph or create an image depicting their responses. Between 26 March and 1 August 2020, 412 responses had been received. Although the response rate is small compared with the total number of staff working within the university (circa 13,000), the survey provided in-depth accounts illustrating the experiences of a substantial number of staff.

The study was conducted following British Educational Research Association guidelines (BERA 2018) and was approved by UCL IOE Research Ethics committee with approval number Z6364106/ 2020/03/127. Participants were assured that anonymity would be preserved to maintain confidentiality, were informed of their right to withdraw at any time and were invited to opt into each part of the study. Pseudonyms are used throughout the paper.

Data analysis

Our analytical approach was that of digital ethnography (Hine 2000; Miller and Horst 2012). The survey asked respondents how they felt about online teaching, remote research and working from home, giving participants the option to upload images that represented how they felt, including photographs, stock photos, cartoons, and hand-drawn sketches, informed by approaches taken by Gourlay and Oliver's (2018) and Rose (2012). Of our 412 total participants, 114 supplied images which were coded in NVivo starting with broad, salient, descriptive features such as 'Image type',

bringing in location, as well as of overtly positive and negative affect, for example: 'Health and wellbeing', 'Home related artefacts', 'Space'.

In this paper, we used image coding to focus our analysis on four vignettes which were selected because they used similar images to represent the challenges participants experienced in balancing their work and home lives. These participants wrote long paragraph answers to contextual the image choice provided for the survey. As our focus was on imagery around embodiment and space, this represented a cohesive sample from our larger data set.

We choose to focus on images and present vignettes in keeping with Geertz's call for Thick Description (1973), and Van Maanen's (1998) call for 'impressionist tales' which we felt was especially important to contextualise the lived body experience of working from home. Rode (2011) discusses the importance of reflexivity and value of the 'impressionist tales' as particularly important in exploring human-computer interaction, and as a starting point for generating theory around technologically mediated work, thus we found this approach particularly appropriate here.

The lived body experience of women academics' digital work

The following vignettes, taken from the narrative descriptions in the survey data, show the multiple roles balanced by women academics under lockdown conditions. These vignettes illustrate in vivid detail the challenges they experienced in constructing boundaries when working from home.

Sylvia: the balancing act

Sylvia is an academic with two children at home. When asked to submit an image illustrating her feelings about working from home, she shared a meme balancing a range of activities (see Figure 3).

This image shows that, on the one hand, Sylvia has to work, support colleagues and manage expectations from organisations that fund her research while, on the other hand, she has to support her children with home schooling, her husband working from home, her elderly parents who are vulnerable to infection during the pandemic and take responsibility for homecare duties, such as cleaning the house and cooking. Her diagram illustrates that she is grounded by friendships and support from neighbours, but also had to fulfil additional responsibilities, such as being a school governor. Her left- and right-hand maps entirely independently as home and work, and the image appears to convey the idea that she is struggling as these different priorities appear to pull her in different directions. This image is a visual depiction of Nippert-Eng's (2008) segmentation strategy as the figure holds conflicting responsibilities at a distance from each other.

Sylvia (participant 107) is an academic living in a four-room house with her partner and two children. In her survey response, Sylvia was undecided about working from home and teaching online. She complemented the online meeting tech, 'Generally, I've found it easier than expected, and I do feel very fortunate that I can work from home', and she commented 'spending more time with my family' is a 'positive'. At the same time, Sylvia found her research work especially challenging as she had to stop fieldwork, negotiate new deliverables with funders, and manage her research staff with regard to these changes. Sylvia commented about her workspace:

Mostly working from home is OK but there are four of us in the house and sometimes the overlaps of noise is hard for concentration. But we're doing the best we can! The amount of time I'm now sat at a computer is physically a bit challenging.

Things that are negative: ... Challenges of managing time and space at home with 2 adults and 2 children all needing to get work done.

For Sylvia, her lived body experience (Young 2002) is in a shared space with two small children. This was depicted visually as being overstretched between worklife and homelife demands. Prior

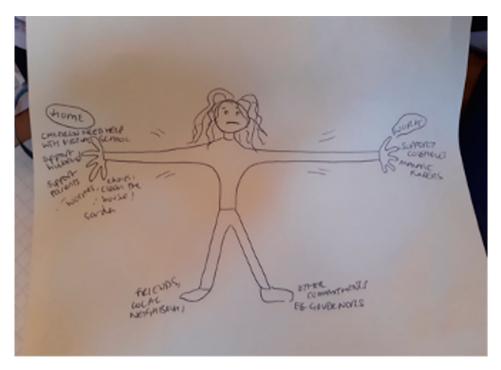


Figure 3. Sylvia's illustration of balancing tasks.

work evidencing how academic women have been disadvantaged during the pandemic (Littlejohn and Kennedy 2020; Myers et al. 2020; Andersen et al. 2020; Cui, Ding, and Zhu 2020; Blaskó, Papadimitriou, and Manca 2020) raise important questions around the consequences of Sylvia's being overstretched, a theme to which we will return in the discussion.

Lara: the body torn in two

Lara (participant 17) is an academic who, like Sylvia, had a child being homeschooled under lockdown conditions. Lara submitted a hand-drawn image that illustrated how she felt pulled in two directions as a parent who was home schooling while working from home, indicative of a struggle to integrate work and home life. Not only was her body pulled in two directions, but her illustration depicted herself as having two separate heads - one for work and one for home (Figure 4):

Lara's response to teaching online was negative, because she found it:

Highly demanding, doubling at least the time that would be allocated in a non-online context, not to mention extra preparation.

Lara described online teaching as extremely difficult in the context of having to home-school her child and being the primary carer:

I am currently working at 30% capacity because of childcare duties. I am only prioritising urgent tasks (teaching, students' supervision and urgent small research duties). Any additional research activities, especially publications writing, have been put on hold, which is highly frustrating and demoralising.

Lara was negative about carrying out research while working from home because balancing home and work priorities during lockdown destabilised boundaries they had previously constructed that allocated working at home as research time. In Nippert-Eng's (2008) terms, her segmentation

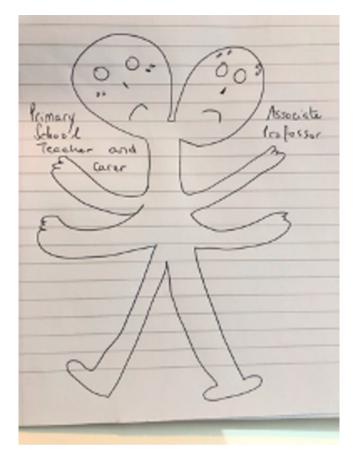


Figure 4. Lara's hand drawing illustrating the feeling of being torn.

strategy was failing. This meant that research tasks, including analysis, writing and submitting research proposals, were delayed by the embodied reality of being a parent faced with the needs of a child:

I do work from home a lot but home-working is my writing time. This is when and where I can think, write my papers and develop my new research ideas. As it stands I cannot do any of this really. It is highly difficult to focus as my 6y old keeps interrupting. I am trying to do my job while also being a newly appointed primary school teacher (!).

Lara described strategies she adopted to try to segment work and home responsibilities. One way was to spend time working while her child was asleep:

I work extra hours early morning (6.30-8) and late evenings in order to have some quiet time. This situation is not sustainable as there is no work/life balance anymore. All this wouldn't be problematic if schools were not closed of course.

Lara recognises that her 'solution' of working early in the morning and late at night and carrying out childcare and homeschooling during the day is demanding and not sustainable long term. This resonates with Salazar's (2001, 168) finding: 'it is not possible to take care of children, especially small children, and to do concentrated work at the same time'. Lara's experience shows, despite it being 20 years after Salazar's study, the challenges of childcare and working from home have not changed, and for Lara, having a small child meant neither segmentation or integration was possible.

Anna: the professional performer

Anna is a senior member of Professional Services. She shares her home with her partner and two small children and has one room available for work. For Anna, there were benefits of working from home associated with spending more time with her family and engaging in activities together:

Our mornings are so much more relaxed; no one is yelling at children to get dressed, brush teeth, put on shoes, etc. We are not worried that we'll be late for school or work and it'd be amazing not having to commute. We are doing daily exercise sessions with the kids for PE and also going into the park everyday to ride bikes or take a walk, which is not something we usually had the time or opportunity to do as a family except for weekends.

On the surface, Anna appears to have achieved a home-work integration in ways that were described by Nippert-Eng (2008) as supporting her physical and emotional needs. However, Anna the image Anna uploaded to the survey was a meme that had been circulating on social media (Figure 5) illustrating the difficulties felt by women like her to balance work and domestic responsibilities in the same environment: https://twitter.com/momics2/status/ 1247164004918681600/photo/1

Anna reported that she previously chose not to work from home because, with two small children, she always found it too distracting to work from home. With only one room available to work from home, Anna was not able to segment household responsibilities from work activities:



Figure 5. Anna's image of professional performance under lockdown.

I am finding the move to home working almost impossible ... My partner is also [at home and] trying to work and do research, and also finding it impossible. When we can isolate and get onto a Teams call we are often interrupted by one or both children as the novelty of seeing our colleagues on screen hasn't worn off yet. Hopefully it will.

As a senior manager, Anna's work involved being present online in meetings for planning and mitigation around the university's response to COVID-19. At the same time, she had to monitor both children who are home schooling and having lessons emailed to them daily by their teachers. Anna felt conflicted about the expectations placed on her in terms of running a home, home schooling children and the additional responsibilities of work.

In the uploaded image, Anna holds her computer up high so that colleagues she is meeting online can see only her face. This illustration indicates her preference for a separation strategy. Framing shots in film used to be the work of cinematographers, not university management, but Anna had to learn to do this to adapt to working at home. Thus, this example illustrates how some academics are forced to engage in boundary work, as they use technologies in new ways to carry out academic work from home. Anna explains that this gives the impression of performing as a 'professional', hiding the 'chaos' of the family life illustrated below and out of view of the camera. In the survey narrative, she describes why she chose this image to depict her experience:

It is not uncommon for me to be taking a call and sitting next to a child trying to get them to focus on a worksheet while contribute to the online meeting.

In between lessons I am preparing meals and cleaning them up, and also trying to read emails and papers, schedule meetings, be online for teams calls, manage my direct reports, support the Dean, ensure information flows, etc.

This absence of a boundary between home and work responsibilities led to anxiety:

There is absolutely zero work-life balance and I'm constantly moving between tasks and feeling guilty that I'm not adding value at work or not fostering my children's education at home.

Anna was unable to maintain her preference of separation which impacted her physical and psychological wellbeing, vividly illustrating the lived body experience of working from home:

We are drinking more than normal due to the stress and anxiety, and comfort eating more frequently. It feels as if we are putting in an enormous effort just to do the bare minimum for the children and work, and no one has any alone time for themselves as there is always someone else in the house.

Katarina: the juggler

Katarina has a senior professional services role. She had one child who was being homeschooled under lockdown conditions, similar to the situations of Sylvia, Lara and Anna. When asked to provide an image that portrayed how she felt working under lockdown conditions, Katarina submitted an image of a woman 'juggling many tasks' (Figure 6), and she commented:

[It's] a fine balancing act as the family still needs to eat at regular times, etc. Luckily, my daughter is 10 years old now so my biggest challenge is ensuring she does at least some school work.

Despite having to balance working from home with caring for children, Katarina was positive about working from home, because it allowed her to balance work and home activities:

I feel a lot less stressed as I now do not have to worry about the time so much. I used to 'run around the clock' with school run, catching the tube, avoiding line closures, rushing in and out the office. The possibility to work from home brought a sense of peace to our home, much needed in this, otherwise stressful, time.

For Katarina, 'presence bleed' did not appear to engender specific problems, because the temporal and physical challenges of the daily commute she had prior to the pandemic were WFH Juggling act @



Figure 6. Katrina's clip art illustration of juggling tasks while working from home.

eased during lockdown, ameliorating her embodied experience by reducing her stress. One of the reasons Katarina was able to negotiate the boundary work entailed in working from home effectively was because she had advance warning, allowing time to set up the hardware and software needed:

It was good to get advanced warning that WFH was coming for all as this allowed us to prepare. Since we did not have a laptop for each of us in the team, some of us brought our own laptops to work and made sure we are well set up for WFH.

A number of factors contributed to Katarina positive experience of home working:

I am lucky to have a very supportive manager who is always only a call away if I need any advice ... All members of our little team get on really well and we manage to have a good laugh in Teams chats. Our regular video catch ups helps feeling the team is working together towards our goals.

The daily updates and emails we receive from Management at [faculty] help to keep in touch and feel connected to the workplace and one another, even if we are not physically present at the building and do not interact much with members of different teams. I also deeply appreciate the re-assurance about salaries being paid to us and the financial support now offered to students.

Katrina was positive about teaching online, partly because she had previously worked as a learning technologist. She taught on an Initial Teacher Education programme supporting students who were training to become teachers. Katrina recognised some limitations of online learning for trainee teachers who needed opportunities to practice face-to-face classroom teaching; however, she also identified a number of advantages:

[Online teaching provides] opportunities for our tutors to update their materials, align their teaching with the 21st century trend of 24/7 access to materials and recorded sessions and it also encourages students to engage in discussion, many of whom would otherwise opted out from online discussions. It is important to look at what positive changes this may bring. Even primary school children are now communicating with their friends via games, FaceTime, etc. Incorporating an element of teaching and learning in the virtual environment would be a good step forward regardless of the current situation. This is not to say the virtual can fully replace face-to-face sessions but I see this push to re-thinking teaching as positive.

Katrina used her expertise in online teaching to support less experienced colleagues in changing the way they delivered their lessons, by demonstrating how to set up discussion boards and record online lectures.

Another caring role that Katrina took responsibility for was pastoral support for students who were facing significant challenges at home and in their studies. Some students were not able to complete their assignments because of school closures; others had to care for relatives or had health conditions that required them to stay in isolation. Katrina viewed online teaching as a way to support students in overcoming these problems:

We all understand the stress the students are under. Allowing for discussions, moving one-to-one sessions online, offering phone calls and moving the submission dates by 4 weeks was definitely a good step forward. In all the emails and enquiries, we receive students' enquiries are of a high priority so that their anxiety level is not necessarily increased.

Katrina's planning and prior experience as a learning technologist helped her to be better prepared than some of the other survey respondents to teach online. For Katrina, the flexibility of teaching online while working at home allowed her to pursue Nippert-Eng's (2008) integrationalist approach to boundary work, and in doing so she appeared to thrive. This may have contributed to her capacity to support students experiencing challenges in their lived body experience of the pandemic.

Discussion

The four vignettes presented above show that during the pandemic, the body forced to 'dys-appear' (Leder 1990) as the exhaustion of multiple competing demands caused stresses on the mental and physical health of academics. As Young (2002, 22) observed, the 'core of a gendered division of labor in modern societies is the division between "private" and "public" work'. As reviewed in the introduction, the literature (Senior 2020; Walker 2020; Littlejohn and Kennedy 2020; Myers et al. 2020; Andersen et al. 2020; Cui, Ding, and Zhu 2020; Blaskó, Papadimitriou, and Manca 2020) has shown that when all work was carried out remotely from home during lockdown, traditionally gendered tasks - such as caring for family - had to be carried out alongside work tasks. This was challenging for some women workers who were used to a separation of work and home activities as they worked outside of the home. Each of the women academics whose stories are presented here provide evidence of how combining home and work necessitated juggling and balancing tasks. On occasion, they felt like they were being physically torn in half. Such is the lived body experience of some women academics working at home via communications technology. Particularly those who do not have the capacity to segment their space into work and home and were required to perform the additional labour of improvising their own solutions in order to cope with the multiple demands on their limited time, space and bodies.

Part of what impacted the varied lived body experiences of Sylvia, Lara, Anna and Katrina was the differences in their home environments in terms of a number of rooms, and person density which, in turn, leads to inequities. Home size and person density are often secondary indicators of social class (wealth to spend on a home), or race (cultural norms regarding family size). However, in London, where the property is at a premium, even those in middle social classes may live in small homes and there were survey responses from two academics teaching in a 72 m² apartment (participant 260) – an arrangement that is common for Londoners. Inadequate space can contribute to poor mental health which the literature shows can become a permanent disability (Cadliff 2020; CIEHF 2020) and this may be the case for Lara and Anna. The lack of space resulting in health issues was reflected in our larger survey data set as well, where 7.7% of our first round of survey respondents reported physical health concerns due to working from home, and 20% of our participants reported low morale, emotional exhaustion or an increase in their own stress, anxiety, loneliness or depression during the lockdown period. All of this is indicative of Young's (2002) lived body experience in that unique combinations of gender, race, class, disability in conjunction with physical space led women in our study to experience the pandemic differently. Participants in the study highlighted issues that arose around indistinct physical and temporal boundaries between work and home as the home became a workspace, and the data provide evidence that they had to devise various strategies of separation and integration.

One vignette is notable, however, in that it presents a more successful integration of home and work. Katarina also juggled many responsibilities but enjoyed the opportunity to work at home. She attributed to this to her having developed high levels of skill in learning technology, and felt supported by management such that she was able to support colleagues and students. Perhaps then, this responsive support is of particular importance since it enabled Katarina not only to do her job, but to enable others to do theirs and in doing so perform the difficult work of supporting students. These preliminary findings suggest that management's provision of support is important and is a strategy that should be emulated across universities.

These findings also illuminate the kind of resources and support that are required of institutions. When work is conducted at the university, the institution is required to specify the equipment that should be used in its standardised spaces. The quotes and vignettes presented here show that when working remotely, staff do not inhabit standardised spaces, and therefore their experiences are not consistent. The complex survey responses to the idiosyncrasies of space reveal these inconsistencies, as well as differences in the amount of work that is required in such circumstances to perform academic work. The challenges of maintaining a 'professional' appearance while working from home, while there are difficulties segmenting home and work responsibilities, are also pertinent for professional staff working at universities, illustrated by Anna's vignette.

Limitations

While ethnic minority employees from Black, Asian or other ethnic groups represent 18% of the university's staff, in our study, we had almost no respondents in these groups and we are unable to report on the specificity of their experiences. Similarly, transgender and other third gender identities were not well represented in our data set. Finally, while in this article, we report on the lived body experiences of four academics who identified as women, we do not claim them to be representative of white women academics, rather we use them as evocative examples which demonstrate the different ways individuals struggle with boundaries, presence and the limitations of time and space, in the context of their lived body experience.

Conclusion

Evidence presented here shows that working from home under lockdown conditions for academics during the pandemic was varied and influenced by lived body experience. Factors including the range of spaces available to academics, their caring responsibilities both at home and at work, and their mental and physical health have resulted in a diversity of experiences, which have underlined the need for flexible and responsive institutional support. Moreover, the existing gendered nature of academic and domestic work when combined with working at home during the pandemic, increased gender-based inequalities between academics making it difficult for female academics to balance competing needs.

While institutions routinely make assumptions about the needs of staff in terms of equipment and support, creating standardised solutions (e.g., recommended office furniture and software tools), the experiences of staff working away from the office show that often these are not a good fit because their needs and circumstances are diverse. The result is to increase an often-invisible workload as academics create improvised solutions (as seen in Figure 2) to what should be institutional problems, employing a range of strategies to accommodate for lived body experiences. Institutional policy needs to accommodate for these situationally specific adaptations, which will continue to evolve in response to changes in family size, household space and technological change.

By giving voice to the experiences of women academics, we have demonstrated a need for a sustained feminist critique of academic work with technology. The accounts presented here persuasively illuminate the multiple roles that women academics were required to balance during the pandemic. This made it impossible for many women academics to either segment their work



and home spaces or to find a way to integrate them, leading to the feeling that they were being torn apart. Unless these lived body experiences of working with technology in an educational context are taken into account in all decision making - from policy and procurement to support and professional development - the inequalities will not be addressed.

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Data availability statement

Given the sensitive nature of the interviews, these data are not available to members outside the research team.

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References

Andersen, J. P., M. W. Nielsen, N. L. Simone, R. E. Lewiss, and R. Jagsi. 2020. "COVID-19 Medical Papers Have Fewer Women First Authors Than Expected." ELife 9: 1-7. doi:10.7554/eLife.58807.

BERA: British Educational Research Association. 2018. Ethical Guidelines for Educational Research. 4th ed. London. https://www.bera.ac.uk/wp-content/uploads/2018/06/BERA-Ethical-Guidelines-for-Educational-Research_ 4thEdn_2018.pdf?noredirect=1 . Accessed July 29, 2019.

Bjørn, Pernille, Morten Esbensen, Rasmus Eskild Jensen, and Stina Matthiesen. 2014. "Does Distance Still Matter? Revisiting the CSCW Fundamentals on Distributed Collaboration." ACM Transactions on Computer-Human Interaction 21 (5), Article 27. doi:10.1145/2670534.

Blaskó, Z., E. Papadimitriou, and A. R. Manca. 2020. How Will the COVID-19 Crisis Affect Existing Gender Divides in Europe? Publications Office of the European Union, 1-22.

Blithe, Sarah Jane, and Marta Elliott. 2020. "Gender Inequality in the Academy: Microaggressions, Work-life Conflict, and Academic Rank." Journal of Gender Studies 29 (7): 751-764. doi:10.1080/09589236.2019.1657004.

Bowers, John. 1994. "The Work to Make a Network Work: Studying CSCW in Action." In Proceedings of the 1994 ACM Conference on Computer Supported Cooperative Work, 287-298. Chapel Hill, NC: Association for Computing Machinery.

Bradner, Erin, and Gloria Mark. 2002. "Why Distance Matters: Effects on Cooperation, Persuasion and Deception." In Proceedings of the 2002 ACM Conference on Computer Supported Cooperative Work, 226–235. New Orleans, LA: Association for Computing Machinery.

Cadliff, Emily Baron. 2020. "'Allostatic Load' Is How Unrelenting Stress Damages Your Body." Vice.

Cecchinato, Marta E. 2014. "Email Management and Work-home Boundaries." In Proceedings of the 16th International Conference on Human-computer Interaction with Mobile Devices Services, 403-404. Toronto, ON: Association for Computing Machinery.

Chartered Institute of Ergonomics, and Human Factors (CIEHF). 2020. "Creating a Safe Workplace during COVID-19." Version 1. https://www.ergonomics.org.uk/common/Uploaded%20files/Publications/CIEHF-Creating-a-Safe-Workplace.pdf . Accessed July 29, 2021.

Christensen, Kathleen, E. 1987. "Impacts of Computer-Mediated Home-Based Work on Women and Their Families." Office Technology and People 3 (3): 211-230. doi:10.1108/eb022649.



Collins, Patricia Hill. 1990. "Black Feminist Thought in the Matrix of Domination." In Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment, 221-238. Boston: Unwin Hyman.

Cui, Ruomeng, Hao Ding, and Feng Zhu. 2020. Gender Inequality in Research Productivity During the COVID-19 Pandemic. Manufacturing & Service Operations Management.

Dimond, Jill P., Erika Shehan Poole, and Sarita Yardi. 2010. "The Effects of Life Disruptions on Home Technology Routines." In Proceedings of the 16th ACM International Conference on Supporting Group Work, 85-88. Sanibel Island, FL: Association for Computing Machinery.

Early, Kirstin, Jessica Hammer, Megan Kelly Hofmann, Jennifer A. Rode, Anna Wong, and Jennifer Mankoff. 2018. "Understanding Gender Equity in Author Order Assignment." Proceedings of the ACM on Human-Computer Interaction 2 (CSCW), Article 46. doi:10.1145/3274315.

Geertz, Clifford. 1973. The Interpretation of Culture. Basic Books.

Gieryn, Thomas. 1983. "Boundary-work and the Demarcation of Science from non-Science: Strains and Interests in Professional Ideologies of Scientists." American Sociological Review 48 (6): 781-795. doi:10.2307/2095325.

Gourlay, L., and M. Oliver. 2018. Student Engagement in the Digital University: Sociomaterial Assemblages. New York: Routledge.

Gregg, Melissa. 2011. Work's Intimacy. Cambridge: Polity.

Häkkilä, Jonna, Mari Karhu, Matilda Kalving, and Ashley Colley. 2020. "Practical Family Challenges of Remote Schooling during COVID-19 Pandemic in Finland." In Proceedings of the 11th Nordic Conference on Human-Computer Interaction: Shaping Experiences, Shaping Society, Article 64. Tallinn, Estonia: Association for Computing Machinery.

Hine, C. 2000. Virtual Ethnography. London: Sage.

Kawsar, Fahim, and A. J. Bernheim Brush. 2013. "Home Computing Unplugged: Why, Where and When People Use Different Connected Devices at Home." In Proceedings of the 2013 ACM International Joint Conference on Pervasive and Ubiquitous Computing, 627-636. Zurich, Switzerland: Association for Computing Machinery.

Kirk, David S., Abigail Sellen, and Xiang Cao. 2010. "Home Video Communication: Mediating 'Closeness'." In Proceedings of the 2010 ACM Conference on Computer Supported Cooperative Work, 135-144. Savannah, GA: Association for Computing Machinery.

Koehne, Benjamin, Patrick C. Shih, and Judith S. Olson. 2012. "Remote and Alone: Coping with Being the Remote Member on the Team." In Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work, 1257–1266. Seattle, WA: Association for Computing Machinery.

Leder, Drew. 1990. The Absent Body. Chicago: University of Chicago Press.

Littlejohn, Allison, Lesley Gourlay, Eileen Kennedy, Kit Logan, Tim Neumann, Martin Oliver, John Potter, and Jennifer A. Rode. 2021. "Moving Teaching Online: Cultural Barriers Experienced by University Teachers During Covid-19." Journal of Interactive Media in Education. In Press.

Littlejohn, A., and E. Kennedy. 2020. "The Challenges and Opportunities of the Rapid Move to Online University Teaching in Response to Covid19." In Academic Practice with Technology Conference. https://mediacentral. ucl.ac.uk/Player/4ACE1B2 g: UCL.

Martin, Jerry. 2007. "Working and Training from Home." In Proceedings of the 35th Annual ACM SIGUCCS Fall Conference, 227–229. Orlando, FL: Association for Computing Machinery.

Miller, D., and H. Horst. 2012. "The Digital and the Human: A Prospectus for Digital Anthropology." In Digital Anthropology, edited by H. Horst, and D. Miller, 3–35. London: Berg.

Myers, Kyle R., Wei Yang Tham, Yian Yin, Nina Cohodes, Jerry G. Thursby, Marie C. Thursby, Peter Schiffer, Joseph T. Walsh, Karim R. Lakhani, and Dashun Wang. 2020. "Unequal Effects of the COVID-19 Pandemic on Scientists." Nature Human Behaviour 4 (9): 880-883. doi:10.1038/s41562-020-0921-y.

Nippert-Eng, C. E. 2008. Home and Work: Negotiating Boundaries Through Everyday Life. Chicago: University of Chicago Press.

Olson, Margrethe H. 1989. "Work at Home for Computer Professionals: Current Attitudes and Future Prospects." ACM Transactions on Information Systems 7 (4): 317–338. doi:10.1145/76158.76891.

Paim, Polianna, Laura Sánchez García, and Elissandra Gabriela Pereira. 2020. "NO to Violence Against Any Woman! Requirements for Inclusive Mobile Applications to Denounce Domestic Violence." In Proceedings of the 19th Brazilian Symposium on Human Factors in Computing Systems, Article 53. Diamantina, Brazil: Association for Computing Machinery.

Poole, Erika Shehan. 2012. "Interacting with Infrastructure: A Case for Breaching Experiments in Home Computing Research." In Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work, 759-768. Seattle, WA: Association for Computing Machinery.

Rode, Jennifer A. 2010. "The Roles That Make the Domestic Work." In Proceedings of the 2010 ACM Conference on Computer Supported Cooperative Work, 381-390. Savannah, GA: Association for Computing Machinery.

Rode, Jennifer A. 2011. "Reflexivity in Digital Anthropology." In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '11), 123-132. New York, NY: Association for Computing Machinery. doi:10. 1145/1978942.1978961.

Rode, Jennifer A., and Erika Shehan Poole. 2018. "Putting the Gender Back in Digital Housekeeping." In Proceedings of the 4th Conference on Gender & IT, 79-90. Heilbronn, Germany: Association for Computing Machinery.

Rose, G. 2012. Visual Methodologies: An Introduction to the Interpretation of Visual Methods. London: Sage.

Salazar, Christine. 2001. "Building Boundaries and Negotiating Work at Home." In Proceedings of the 2001 International ACM SIGGROUP Conference on Supporting Group Work, 162-170. Boulder, CO: Association for Computing Machinery.

Salmela, Tarja, Ashley Colley, and Jonna Häkkilä. 2019. 'Together in Bed? Couples' Mobile Technology Use in Bed.' In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems, Paper 502. Glasgow, Scotland Uk: Association for Computing Machinery.

Santos, G. G., and C. Cabral-Cardoso. 2008. "Work-Family Culture in Academia: A Gendered View of Work-Family Conflict and Coping Strategies." Gender in Management: An International Journal 23: 442-457.

Senior, Jennifer. 2020. "Mothers All Over Are Losing it." The New York Times.

Spark, Rosemary. 2017. "Accessibility to Work from Home for the Disabled: The Need for a Shift in Management Style." In Proceedings of the 14th International Web for All Conference, Article 4. Perth, WA: Association for Computing Machinery.

Stawarz, Katarzyna, Anna L. Cox, Jon Bird, and Rachel Benedyk. 2013. "'I'd Sit at Home and Do Work Emails': How Tablets Affect the Work-life Balance of Office Workers." In CHI '13 Extended Abstracts on Human Factors in Computing Systems, 1383-1388. Paris, France: Association for Computing Machinery.

Strengers, Yolande, Jenny Kennedy, Paula Arcari, Larissa Nicholls, and Melissa Gregg. 2019. "Protection, Productivity and Pleasure in the Smart Home: Emerging Expectations and Gendered Insights from Australian Early Adopters." In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems, Paper 645. Glasgow, Scotland: Association for Computing Machinery.

Van Maanen, J. 1998. Tales of the Field; On Writing Ethnography. Chicago: Chicago University Press.

Walker, Natasha. 2020. Guilt and Fury: How Covid Brought Mothers to Breaking Point. The Guardian.

Whittaker, Steve, and Candace Sidner. 1996. "Email Overload: Exploring Personal Information Management of Email." In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 276-283. Vancouver, BC: Association for Computing Machinery.

Widdicks, Kelly, Oliver Bates, Mike Hazas, Adrian Friday, and Alastair R. Beresford. 2017. "Demand Around the Clock: Time Use and Data Demand of Mobile Devices in Everyday Life." In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, 5361-5372. Denver, CO: Association for Computing Machinery.

Young, Marion Iris. 2002. On Female Body Experience. Oxford: Oxford University Press.