Technology to Mediate Role Conflict in Motherhood

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ABSTRACT

Today, new mothers are experiencing parenthood differently. Digital resources can provide a wealth of information, present opportunities for socializing, and even assist in tracking a baby's development. However, women are often juggling the role of motherhood with other commitments, such as work. The aim of this workshop is to understand the digital support needs and practices during parenthood from the perspective of employed mothers. We are interested in exploring the ways that women utilise the technologies which have been designed to support mothers, and specifically, the importance of work-life balance and the various roles that mothers play. There is a need to better understand and identify which technologies are being used to support working women through support working women through their motherhood journey, and ensure a healthy transition to support women's changing identities.

CCS CONCEPTS

Social and professional topics → Women
Human-centred computing → Social media
Applied computing → Psychology

KEYWORDS

HCI; Mothers; Role conflict; Support; Work; Digital

BACKGROUND

The transition to parenthood can be difficult. Mother wellbeing has been linked to a perceived lack of emotional and social support, rather than a lack of information or resources [12]. Whilst face-to-face services such as the National Childbirth Trust [NCT] remain an option for mothers able to pay for such a service, a shift from offline to online resources during pregnancy and after birth is evident. There is already a large literature concerning general use of digital media for parenting purposes [11, 13, 19]. A proliferation of websites and blogs including *Mumsnet*, *Netmums*, *The Unmumsy Mum*, *Pregnant then Screwed* and *Mummy Social* offer forums for anecdotes and advice, with research suggesting these kinds of digital resources are invaluable for parents [6, 16]. The vast majority have used at least one pregnancy or parenting app. and prefer digital apps or platforms that are multi-functional [11].

Social media, and in particular, Facebook, is also used to provide information and support to new mothers [14]. During this transition, they may use social media to legitimise new identities, with digital spaces taking on greater significance in order to establish or 'test' out their new role [9]. Studies have explored how social media might support reflection for individuals changing identities as they transition to becoming a parent [18] and the ways in which communication technologies build confidence and support the portrayal of multiple identities for new mothers [7]. This building of confidence and social connections is further enabled by mobile phone applications such as *Mush*, which allows mums to connect with each other and meet up face to face, being matched on criteria such as their child's age and location [see Figure 1]. Despite these advances, we should also be mindful of the potential negative outcomes of technology use. Notions of the 'perfect parent' and intensive mothering [4] can be damaging if perpetuated on these digital platforms, intensifying the feeling that one needs to be everything to everyone [ideal worker, perfect parent, etc.].

Technology is also enabling parents to curate information about their children. Even in the early weeks after birth, apps and websites exist which allow parents to track their baby's sleep, nappy changes and feeding cycles, leading some researchers to express concerns about commodification and surveillance of personal data within a family setting [3]. Once a baby is born, their digital record begins- with some areas of the UK trialling the 'eRedBook', replacing the traditional paper-based record given to a mother to track their child's developmental progress. However, research exploring the adoption of this digital service revealed socio-technical factors such as usability of the software, concerns over data protection, poor digital literacy skills and a lack of Internet connectivity which caused uptake problems [15]. Clearly, a digital approach is not the only solution to supporting new mothers.

Returning to work after having a baby is a critical period of transition for parents who have to establish a different way of working, managing the tensions that come with being a parent as well as an employee [1].
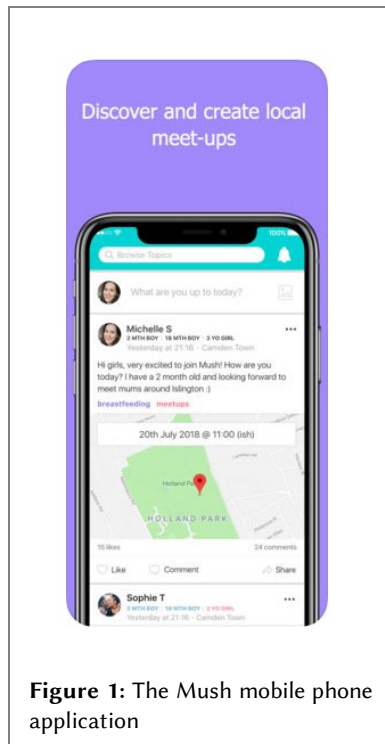
Figure 1: The Mush mobile phone application

Indeed, research has demonstrated mothers are likely to experience a 'weathering of the storm' on returning to work, in an attempt to balance work and family life [17], relying on other working mothers for support and resocialisation [10]. Academic research is not necessarily keeping pace with organizational practice, as organizations such as Deloitte and Shell are now developing programmes to support women transitioning through parenthood in the form of coaching programmes. There is little evidence to suggest that this approach will work, particularly as it does not continue beyond the 'danger period'- a time women are likely to quit employment, after returning from maternity leave [5]. Certain online resources have emerged more recently to provide private spaces for women to discuss issues about the workplace, such as *Mothers in Academia* on Facebook, *Mamacademic* on Twitter, or *She's Back*- but these are relatively small-scale and niche. It seems that whilst there are a great deal of resources available for new mothers during pregnancy and maternity leave in terms of online tools and social support on how to manage the role of mother- the same cannot be said once they return to work. Additionally, advice is often anecdotal and lacks a solid evidence base or evaluation of their success.

Whilst it might appear that we are moving forward with systems and technologies to support new mothers, adoption of these services still require access to digital devices and a level of digital literacy. Work in the US has explored the adoption of digital tools [such as accessing health information] by first time mothers, and found that eHealth literacy was correlated with increased web-based health seeking behaviours [8]. Those authors summarize by stating there is a need to design tools and interventions that enhance competencies for the management of self and child health among disadvantaged mothers and pregnant women. Most importantly, Guendelman et al. claim *'unless we address disparities in digital health tool use, benefits from their use will accrue predominantly to individuals with the resources and skills to use technology effectively'*.

Taken as a whole, there is a distinct lack of work exploring the perceived value and usefulness of these digital resources for new mothers. Previous work in this context has found that digital resources prioritise the pushed provision of generic information rather than contextualised digital requirements and behaviours. This excess of information can leave mothers feeling *'overwhelmed but underprepared'* [13]. The value and usefulness of these systems has not been assessed in any holistic way. In light of these issues, we hope this workshop will bring together a range of people interested in exploring the issue of motherhood from a perspective of identity management and role conflict/harmony, in order to progress this area of work and forge links to start conversations around work that can be done in the future.

This would not be the first workshop to consider motherhood and HCI [see 1]. However, this session in 2013 aimed to identify a collective research agenda related to motherhood and HCI. As described above, a fairly large body of work has since been conducted in this space. We will be furthering this HCI and motherhood discussion by thinking more critically about how these digital services portray mothers, and how they fit with notions of well-being, loneliness, and role conflict for working mums.

WORKSHOP GOALS

This workshop is designed for those who approach the topic of motherhood with an academic lens, as well as for those whom the topic is personally relevant [attendees may also fall into both categories]. By including both academic and non-academic contributors, we hope to gain new perspectives and insights in this area. We aim to explore three key issues surrounding motherhood and work-life balance:

1.   What is the current problem space?
We are interested in the way mothers may juggle identities, balance their own social media content with new content of their child, and how they position this in the broader context of social roles they may have [e.g. wife, employee, daughter]. We also hope to take stock of the HCI work conducted thus far in this space.
2.   What resources already exist for mothers?
As well as digital resources, we are interested in exploring wider support available to mothers, including partners as supporters, partners as co-parents, and the wider family. We also hope to consider how fathers can support mothers (and be supported themselves) as mothers' transition back to work. We will collate resources in an online portal in order to explore how these resources may aid employers to support mothers returning to work.
3.   What are the new research priorities?
There is an emerging recognition of the implications of becoming a mother. People are seeing technology as a way to manage that role - we think there is a need to take a step back and assess the value of the digital resources available, and identify gaps in this field of research.

ORGANIZERS

Dr. Lisa Thomas [Northumbria University, UK]
Lisa is a senior researcher in PaCTLab. Lisa has been the lead institutional researcher on three large collaborative EPSRC projects- IMPRINTS (Public perceptions of Future Identity Management Technologies), ReelLives, and DERC (Digital Economy Research Council). She has an interest in community in the context of e-health, identity, motherhood, and more broadly, the digital lifespan.

Dr Liz Sillence [Northumbria University, UK]
Liz is a lecturer in psychology and an eHealth researcher. Liz has worked on a number of eHealth projects focusing on the issues of trust and identity in online health information. This work has captured engagement with different stakeholders including mothers as they decide whether to vaccinate their children. Liz has published extensively within the field of online support groups examining how people share personal experiences as part of their decision-making around health and wellbeing.

Figure 1: Example scenario

"Laura is currently on maternity leave. She has received a lot of support from NHS services such as midwives and health visitors throughout her pregnancy and birth. Before she went on maternity leave she was working full time. Laura is now considering how and when to return to work, but doesn't know where to look or who to speak to."

WEBSITE

The website www.techformotherhood.com will be created prior to the workshop in order to host the call for participation, as well as details about the workshop including all accepted position papers and the schedule for the day. All materials created during the workshop and in follow-up activities will be made available here.

Dr Vicki Elsey [Northumbria University, UK]

Vicki is a Chartered Psychologist (BPS), Registered Practitioner Occupational Psychologist (HCPC) and Principal Lecturer within the Department of Psychology. Vicki's research interests centre around careers and employability, in particular she is supervising a PhD on the 'Motherhood Penalty', and has ongoing research work on diversity in the workplace and identity formation in niche careers. Vicki has extensive experience of applying psychology to the workplace in the areas of career development and employee selection.

Emma Simpson [Newcastle University, UK]

Emma is an EPSRC funded final year Digital Civics PhD candidate at Open Lab, Newcastle University. Her research is situated at the intersection of Public Health and HCI with a particular focus on women's health. Recent work and publications are centred around understanding the role of FeedFinder and the data it provides in breastfeeding practice, across both public and professional settings.

Louise Moody [Coventry University]

Louise is Professor of Health Design and Human Factors at Coventry University. She specializes in the development of products, services and systems that support health and wellbeing. She has worked on a number of projects exploring the information needs of new mothers, for example in relation to newborn screening and breastfeeding. Louise has twice negotiated the return to work and continues to try and juggle motherhood and a career!

PRE-WORKSHOP PLANS

We will send invitational emails to key distribution lists [e.g., CHI-announce, British HCI]. We will also reach out to groups working with mothers local to the CHI event [e.g. Stepping Stones for Families, Parent Network Scotland]. We will share workshop information through social media platforms and email. Prior to the workshop, all attendees will be given access to all accepted papers. We will request participants submit one proposed scenario along with their position paper [see Figure 2].

WORKSHOP SCHEDULE

9:00-9:15am: Welcome, introduction to the organisers, and overview of the schedule.

9:15-10:30am: Brief review of what each participant is bringing to the table & scenario discussion [Goal 1].

10:30-10:45am: Coffee break.

10:45-12:00pm: Identification [in groups] of existing technologies and how they can support specific activities, identity issues or stages of transition [Goal 2].

12:00-12:30pm: 5-min lightning talks based on group discussions.

12:30-2:00pm: Lunch break.

2:00-3:30pm: Small group discussion [different configurations from the morning] to discuss design issues for different home-work scenarios [Goal 2 & 3]. Feedback to the wider group.

3:30-3:45pm: Coffee break.

3:45-4.30pm: Discussion and drafting a set of key priorities regarding existing and future digital support [Goal 3].

4.30-5:00pm: Wrap up.

6:30pm-8:30pm: Informal dinner [group booking for those interested in continuing discussions].

These scenarios will be used to encourage discussions at the start of the workshop, and should at their simplest, make organisers and attendees aware of a particular experience they feel is important to this motherhood debate-allowing subjective perspectives whilst retaining anonymity. Local groups and charities will also be contacted in order to ask for their interpretation of some key issues facing their client group. These scenarios will be posted to the workshop website. In addition, the organisers will collate a repository of resources [apps, websites, services] which are aimed at supporting new mothers in any aspect of motherhood, and place this on the website. This can be added to before, during and after the workshop.

WORKSHOP STRUCTURE

At the core of the structure are the three workshop goals listed above, which will encourage a discussion of key topics and produce an action plan for future research. It will be primarily a discussion-focused workshop, not a presentation-focused one. In the morning session participant discussions will explore potential role conflict for mothers, identifying experience or knowledge of key stages in the motherhood journey. To begin, each table discussion will focus on the scenarios gathered prior to the workshop [see Figure 2], and disseminated via the workshop website in advance of the workshop. Groups will be encouraged to identify the ways in which technology meet or fail the needs of mothers in the given scenarios. Gaps in provision will be identified along with overlap among resources. Participants will then be encouraged to showcase their research through discussion and demonstration of apps [for example around breast-feeding support] and web-based services. The workshop will follow a round table discussion format, with participants able to move tables after each discussion session, in order to meet new people.

In the afternoon session, participants will be asked to assess the value of the digital resources outlined in the morning session, with a focus on identifying potential existing solutions for the issues identified. We will then create a set of key priorities regarding existing and future digital support to for designers and researchers by, for example, identifying specific working environments that emphasise barriers to digital support.

POST-WORKSHOP PLANS

The accepted position papers will be made available on the workshop's website, along with any materials from the workshop. We will produce a report based on the outcomes of the workshop, as well as an online repository of resources [on our website] curated by participants. The report will be disseminated amongst workshop participants, as well as parenting groups we plan to engage with. We intend to invite participants to submit papers to a Special Issue on Motherhood, to be published in either <u>Digital Health</u> or Interacting with Computers.

CALL FOR PARTICIPATION

The aim of this workshop is to bring together researchers, designers, and practitioners, and anyone working with or on behalf of mothers, to discuss the role of technology in motherhood, and in particular the impact of digital support on feelings of well-being, loneliness, and role conflict. We welcome anyone who feels that their experiences as a mother, academic, mother-returning-to-work, stay at home mum, to attend this workshop. This workshop is also open to those whose research or personal experience focuses on fatherhood, or the family holistically. We recognise motherhood and the return to work is an identity transition that necessarily impacts a mother's whole network.

We ask that workshop attendees join the organisers in collating an online repository of apps, resources, or specific technologies aimed at supporting mothers [details of which will be released once attendees are finalised]. We also request that attendees submit one scenario along with their position paper [see example]. These scenarios will be used to encourage discussion at the start of the workshop.

We invite interested researchers to submit a position paper in CHI ACM Extended Abstract Format relating to the topics identified above. The deadline for submissions will be 12th February 2019. Applications-to-attend should be a maximum of 2 pages in length and include a biography of the author(s), and a summary of previous work relevant to the workshop and/or an explanation of interest in this research area. For more information please visit the workshop website www.techformotherhood.com. Please direct queries and paper submissions to Lisa Thomas [lisa.thomas@northumbria.ac.uk].

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