
Motherhood and HCI

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Abstract

Motherhood and mothering are fundamental aspects of life, and as a consequence, every culture has knowledge, values, practices and expectations related to the role. Technologies now have an increasing role in motherhood, altering many women's experiences of pregnancy, birth, and mothering. For HCI, such a transition opens a whole host of questions relating to areas of participatory design, social connection, data sharing, identity, memory-making, emotion work, as well as offering a new lens through which to understand notions of care and wellbeing. This workshop will bring together researchers, designers, and practitioners interested in the role of motherhood, the act of mothering, and its relation to HCI and technology. We will identify a collective research agenda related to motherhood and HCI and forge connections amongst a community of researchers to support the sharing of knowledge, resources and design approaches.

Keywords

Motherhood, HCI, Care, Family

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

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Motivation

Becoming a mother changes a woman's life in a whole manner of ways, often even before a woman is pregnant or has given birth. Physically, the demands of getting and being pregnant change a woman's body as do the demands that are placed on that body as it becomes a resource for two lives. Additionally, the reality of day-to-day life changes radically in the early days and years of motherhood. Women report feeling lonely, physically drained, emotionally fatigued, as well as sometimes grieving the lives and relationships perceived as lost, and at times resenting the role and responsibility of having become a mother [1].

These experiences, overlap with, but are distinct from the experiences of fathers [12]. Beyond the initial experiences of pregnancy and childbirth and raising very young children, mothers often perform more domestic duties and household management tasks in the home and accordingly have less free time than fathers [10]. Previous CHI work has investigated how to support family members, particularly mothers, in organising and scheduling family appointments [12,13]. Technology increasingly plays a role in the experience of pregnancy and motherhood. Hugely popular and influential sites such as mumsnet.com have become a core resource for many mothers, enabling peer-to-peer support and advice throughout the experience of motherhood, as well as being a core community which lobbies for parents' rights. Medically, technology has enabled women to have a wider set of choices around when they have a child and enabled the pregnancy and growth of the baby to be tracked to a far greater extent than previously possible.

Recently, research within HCI has begun to explore the role of motherhood, and how technologies might support mothers. Such research has spanned a range of agendas within HCI, including healthcare, life disruption, social connection and ICT4D. Early investigations have researched and designed support tools for homeless mothers [3], women in rural Kenya [13], support for the collection and sharing of information relating to pregnancy [5], through to technologies that allow women to share the experience of being pregnant with intimate others [8], or even simulate the experience of pregnancy in others [11]. The role of fathers, and the role other caregivers play in the lives of their children are obviously important, and HCI has also begun to support this wider set of caring roles. Prototypes have been designed and developed to support memory-making, record-keeping and communication around a child's development [10], the care-giving transition from the hospital to home for premature babies [7], and continuing connection between a parent and a child when at a distance [9,14]. Nevertheless whilst we value the crucial role that fathers and other carers play role in the raising of a child, this proposed workshop will focus specifically on the needs and values of motherhood, and how these might be better understood through and by HCI. As such, our workshop builds directly on the CHI 2012 workshop "Technology for Today's Family" [6] and the 2005 SIG on "Designs for Home Life" [2], whilst specifically focusing the participants on the needs, values and opportunities for HCI around mothering and motherhood. This workshop intends to break new ground by bringing together researchers and practitioners interested in the relationship between motherhood and technology. Because these issues cut

across the entire span of work in human-computer interaction, practitioners and researchers in all areas of HCI can benefit from considering the issues at the heart of this workshop.

Themes

Conceptualising the design and research space surrounding motherhood and HCI requires significant contribution from a wide range of disciplines. This research will bring together researchers and practitioners to address the following themes.

- *The Experience of Motherhood:* This theme will explore accounts of motherhood, the impact that motherhood has on ongoing social and family relationships, a sense of identity, work-life balance, physical and emotional experiences related to pregnancy, birth and motherhood. Accounts may be autoethnographic or ethnographic by nature, as well as inspired by empirical qualitative research exploring the experience of motherhood.
- *Technologies for Supporting Mothers:* Digital interactions and technologies might support mothers in a range of different ways and at different times of life. This theme will explore how technology can facilitate or subvert the role of motherhood. For example, we will focus on how technology can support expectant or new mothers or indeed those seeking fertility treatment, in managing biological, medical and / or emotional needs. It will also explore how the changing identity of the mother throughout life might be managed by women, as well as the practicalities of the additional organisational and domestic work which is typically associated with motherhood.
- *The Role of the Mother:* The social role of motherhood, and the experience of being a mother are well discussed within a broad range of disciplines outside of HCI. This theme will explore accounts relating to the social and cultural role of mothering and motherhood from perspectives such as midwifery, social work, sociology, cultural studies and feminism. It will also critically engage with the role of technology and technocratic perspectives on the body as well as cultural and social understandings of roles and values around motherhood [4].
- *Participating in and Evaluating Design:* Designing for motherhood brings new challenges for participatory and user-centred design methods as well as the evaluation of interventions and designs. Topics for discussion will include (but are not limited to) sensitive methods for engaging new mothers in participatory design that take account of the cognitive, emotional and physical limitations of the new role, as well as methods for overcoming the societal pressures of what being a mother means. This theme will also explore the development of new evaluation methods, and the adaptation of existing evaluation practices, that better account for the context of motherhood and mothering.
- *Everyday Practices:* Mothers increasingly use technology to support the day-to-day experience of mothering. This theme will describe how technologies and digital interactions are already embedded into the social role and lives of mothers. Topics here may include observations, ethnographies, questionnaires and interview studies which have explored the adoption of technology into the everyday lives of mothers and the impact that such technologies have had on the experience of motherhood.

Workshop Goals

1. To build a collective research agenda to facilitate collaboration and uncover unexplored or underexplored areas in the intersection between motherhood and HCI.
2. To draw attention to the intersection of motherhood and HCI as an emergent and underexplored area, where digital interactions play a vital role in the experience of motherhood.

Conclusion

Digital technologies facilitate and change the experiences of motherhood. We aim to consolidate early CHI work in understanding how to design with and for mothers, and plan a systematic approach to developing this area further. This requires the sharing of experience and expertise from a range fields, and a CHI 2013 workshop is an ideal starting point.

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