

Trial by Diaper: A Panel and Activity Session on Motherhood in Computing

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1. INTRODUCTION

Motherhood is a crosscutting concern for women spanning economic, religious, and cultural groups. A known problem is the “motherhood penalty:” mothers are rated as less competent and committed to paid work than non-mothers, are given less slack about being late, and may be offered a lower salary [2]. In fact, within particular demographics the pay gap between mothers and non-mothers is larger than the pay gap between women and men [3].

These challenges are particularly discouraging due to their inequity: children provide a benefit for men and a penalty for women. Fathers are rated as more committed than non-fathers, are given more slack about being late, and may be offered a higher starting salary [2]. In academia, men with young babies are 38% more likely than women with young babies to achieve tenure [9]. Perhaps a partial reason for this difference is the social expectations about who will care for children. A survey of more than 440 faculty in the University of California system found that women with children spend almost twice as many hours per week acting as caregivers than men [9].

Taken together, all of these statistics present a daunting picture for a woman thinking about, or starting to venture into, motherhood. Recognizing the problem and educating co-workers is the first step to combating these biases against mothers. Furthermore, research has demonstrated that a mother’s ability to do science does not disappear after having a child. A 2004 survey of German post-docs found that there was not a difference in scientific productivity between scientist mothers and female scientist non-mothers [6]. A similar study looking at working mothers across disciplines in the Netherlands also did not find a productivity difference between mothers and non-mothers [13]. Additionally, working mothers have been shown to have better physical and mental health, higher self-esteem, and financial stability [1].

Recently, awareness has increased of the challenges of combining motherhood with a career in academia as a whole and science in particular [4, 5, 10]. Universities and organizations are taking some steps to improve the position of women who want to combine motherhood with a career in science. Part-time and “stop-the-clock” tenure-track

options, which provide additional time before tenure reviews, are becoming more popular [6]. Progress is being made to change the landscape of women in academia.

However, the question remains for what can be done for women in computer science who face unique problems like the extreme gender ratio disparity, and then the increased disparity between those who have children and those who do not. These problems can lead to a lack of confidence and isolation, causing women to drop out of the pipeline. It is with these facts in mind that we present our panel and activity session on motherhood in computing, with a specific focus on early motherhood. Early motherhood presents unique experiences because of this phase in a mother’s life can be singular and isolating, requiring validation, consistency, and emotional aid [11].

To address the concerns of early motherhood in computer science fields, we present a Birds of a Feather session with a positive spin – much like our recent ACM-W article on making motherhood in graduate school a fruitful experience. We build on past Birds of a Feather sessions offered in 2009 and 2010 at the Grace Hopper Conference on motherhood and computing [8, 12] but offer more of a collaborative experience: In this session, we propose to make the experience interactive. This will increase audience participation, and enable networking towards the establishment of a community of women with similar concerns. In the remainder of this abstract we present our audience, our plan of action, and the expected outcomes.

2. AUDIENCE

The audience for this panel is the general audience for the Grace Hopper Conference given that motherhood is a cross cutting issue. However, we specifically focus on issues related to early motherhood where women may have to take time off from school or work, and where women can have particularly isolating experiences. Last year, one attendee was moved to tears at our session by the experience of meeting and interacting with other computing mothers, thus stressing the importance for sessions like the one presented.

3. PLAN OF ACTION

For the past two years we have organized panel-based sessions on mothers in computing. This year we would like to learn more about the background and experiences of the audience, and facilitate building connections between audience members. The session will be broken down as follows:

10 minutes: The first ten minutes will serve as introduction to the session. First the moderators will introduce themselves and explain unique circumstances that they have endured (e.g., one panelists attending a networking session the same night as her child had surgery). A moderator will give a very short presentation on the scientific evidence that was presented in the introduction of this abstract – stressing that motherhood is a joyful time but one that is unique and filled with unpredictable challenges.

20 minutes: Audience members will break up into small groups of three to five members. This will enable participants to communicate and discuss more private matters along with creating small communities at the session. The groups will be given the following set of instructions:

- (1) Introduce yourself. Do you have any children? Do you plan on having children? When, or why not?
- (2) Each member provides one “trial by diaper” worst-case scenario idea of what could happen during pregnancy or motherhood (examples provided below). Think about issues involving schoolwork, research, publication, housework, childcare, schedule, and physical ability. Write one scenario on the provided card.
- (3) Each member provides one “pro-mom” idea about how to make motherhood easier. Think about time saving tips, social networks, mom’s groups, and relying on family. Write one response on the provided card.

Moderators will roam, sitting in on these small-group sessions. Afterwards, the moderators will collect the cards. This part of the session is meant to be intimate and encourage sharing of personal “war stories.”

Example scenarios that may be provided verbally to the group:

- You have a test, but your child had a fever all night;
- You find that you are ill when pregnant so you need time off but still want to keep your health insurance;
- You find you are the only mom in your program and have no one to talk to.

20 minutes: The moderators will then pull from one of the two hat’s discussion points, alternating the worst-case scenarios with the positive “pro-mom” contributions so as to keep the mood positive and balanced. The alternation will proceed as follows.

- The moderators will pull a “trial by diaper” scenario from the hat, posing the scenario to the audience. The

aim is to elicit ideas about the multitude of strategies to deal with difficult problems, while also highlighting that no matter how difficult a situation appears that there are reasonable solutions. We hope to demonstrate persistence and encourage women to stay in computing even with enduring and critical problems.

- The moderators will then pull “pro-mom” tips from the hat and raise them as discussion points to the audience. For example, if one tip suggests having a date night once a week with a partner, we will ask who has done something similar and how to make it work.

10 minutes: The moderators will open the floor for any open discussion points. If no discussion points are raised by the audience members themselves, we propose asking the audience: (1) What gives you the most joy out of being a mom?, (2) If you have ever thought about dropping out of the program after having a child, what made you stay?, or (3) How does having a child enrich your life? These questions are purposefully positively framed to reduce the chances of the session having a negative effect on the decision to have (more) children.

4. OUTCOMES

The outcomes from this panel are two fold. First, we hope that this session will increase and induce a sense of community through interaction. Second, all responses will be placed on the Anita Borg Grace Hopper Wiki and are proposed to be turned into an additional publication for the ACM-W, as a follow-up piece to our recently published article [7]. These two outcomes will have an enduring impact on women throughout the computing field.

5. MODERATORS

Caitlin Sadowski is a Ph.D. student in Software Engineering at the University of California, Santa Cruz. Her research focuses on making it easier for people to write parallel code and trying to figure out how to get more women interested in computing. After discovering how many women and how few men drop out of the STEM pipeline due to trouble with balancing a career and family, she developed a research interest in mothers in computing, and has moderated several panels on this topic.

Alexandra Holloway is a Ph.D. candidate in Human-Computer Interaction at the University of California, Santa Cruz and the mother of Leon (2 years). Her dedication to childbirth, as a mother and birth doula, and computing, as a student of serious games, extends to her research: she is currently developing a birth simulator to prepare birth partners for childbirth.

Laurian Vega is a Ph.D. candidate in Human-Computer Interaction at Virginia Tech and mummy of semi-planned Cameron (2 1/2 years). She researches usable security in childcare centers and physicians’ offices and is a member of the Association for Women in Computing and Systems. She is currently defending her dissertation, and will be working in industry at the time of the BoF session.

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