

This one is tricky because we are still held accountable by the expectations of our positions regardless of our personal measures of success. However, since I have adopted a new attitude toward mathematics and measures of success that are fair to me as a human being, I have become more productive with my output. It has also increased the joy I feel in the doing and teaching of mathematics.

4. **Meet people:** I have been lucky enough to find delightful colleagues both near and far. But don't let luck be a factor. Go meet people. Talk to people in your department and across your campus. Talk to others at conferences. Talk to publishers in the exhibit halls. Email an author when you enjoy their work. Find good mentors who can help you grow. Your walk along the mathematical journey will be all the more enriched by your connections. The self-work I've done to this point has not been an individual endeavor, and I don't want to think about what my life would be like without the folks I've met along the way.

As mentioned earlier, in order to avoid causing unintentional harm, I have tried to avoid offering blanket advice. But, if you will indulge me, I want to offer a few general recommendations. First, think about what you want frequently and work toward a work-life balance that helps you achieve those goals. Second, be kind to yourself. This will likely translate into kindness for others. Third, don't compare yourself to others. Finally, invest your time in things which optimize your strengths.

Returning to the original question, do I think work-life balance is a myth? No, I don't. But, for those of us who want to be excellent at our jobs and live rich lives, I think it requires us to evaluate our commitments frequently and make changes that move us toward balance. The more we talk to each other about our strategies, the less lonely the journey will feel.



Matthew A. Pons

Credits

Photo of Matthew A. Pons is courtesy of North Central College.

Having Children at Critical Career Stages and Flourishing

Theresa Anderson

When I was a beginning graduate student, I thought that to become a successful mathematician I had to postpone having children until I had an established career. Not delaying starting a family is one of the best decisions I have ever made. I describe the challenges and triumphs of having children at critical career stages, with the desire to empower advocacy and to inspire the reader. This article will be almost solely about my personal experience with a (male) partner not in academia, and currently two children, neither with special needs. But whatever your family structure may be, I want to underscore, particularly to women, that with having kids you never "have to settle." Whether it is subtle coercion to not pass on your last name to your children or being denied a private office to pump milk because office space is tight, speak up and ensure you are listened to and taken seriously. Changes happen when we do these things. This article is my testament to that.

I love analysis and number theory, and despite well-meaning advice to the contrary, I spent my postdoc learning number theory to add to my analysis-based research instead of writing tons of papers. I also wanted to have a child, and instead of timing this after I got a tenure-track job, I decided to not put my life on hold for my career. Before getting an early offer from Purdue, I applied widely and had three interviews. At this point I realized I was pregnant. While the offer was a fantastic opportunity, the early deadline meant not being able to pursue other options. I accepted the offer, realizing that this acceptance did not mean closing other doors forever. Going on the market again may seem like a daunting task, especially with children, but don't let "daunting" stop you.

In a span of two weeks in 2018, I moved to a different state, bought a house, my husband graduated, I started a tenure-track job, and I had a baby. While I was offered no family leave, I asked anyway and was granted a course reduction that resulted in a semester of no teaching. I happily spent time with my beautiful baby boy, Lucian. My husband also stayed home for significant time periods, which was invaluable. While not every family has this luxury, planning in advance for childcare support jointly with your partner or support system is extremely helpful, especially to ensure that mothers are not overburdened. After a

Theresa Anderson is the Gregg Zeitlin Associate Professor of Mathematical Sciences at Carnegie Mellon University. Her email address is tanders2@andrew.cmu.edu.

DOI: <https://doi.org/10.1090/noti2969>

full month completely off, I slowly eased back into math, starting with two hours, two to three days a week, on a focused, independent research problem. With my second child I had a different approach—instead of a focused, individual project I worked on a large-scale, cross-disciplinary, group project. Here I had a very supportive group and a plan to contribute that worked with my schedule. Both times I was amazingly able to get a lot done, even with only short bits of time to focus on work, because I brought a new sense of motivation.

With large caregiving responsibilities, I didn't dwell on a problem for too long, which actually helped me prioritize. I unapologetically turned down things that I didn't think would benefit me mathematically. And I acknowledged that the first year after having a child might mean zero research progress. But the flexibility of an academic career in mathematics works well with the flexibility of being a parent. Even now, some time periods contain very little time for research for a wide variety of reasons. My previous experience with schedule flexibility prepared me to be creative with work time and to recognize the flourishing that often happens after taking breaks.

One of the biggest things I learned to do was advocate for myself—no one else can do it for you. I was told by an incredible mathematician that breastfeeding is 70 percent of the effort to care for baby, so definitely get others to help you out. I think she is right (perhaps even an underestimate!). The infrastructure in this country is not as good as it should be to support this, so it is key that you get as much support as you can and advocate for yourself. I did this to get funds for a caregiver to come to conferences with me, something also lacking in infrastructure. I breastfed both my children, and will talk about how I did this during job interviews shortly. To help, my husband would clean my pump parts and set them up for me, change diapers at night and bring baby in to feed, then wake up again (did I mention having kids is tiring!) and bring baby back to the crib. Since I was already up to feed baby, could I have taken the extra minute to bring baby to bed? Yes, but that wouldn't be very equitable considering I was doing 70 percent of the work! I mention this to underscore how these seemingly small steps can have large impact.

I found that having a child is joyful in such unexpected ways that it motivated me. I forged ahead with the number theory direction, which was perhaps risky as it was very different from my previous training and I was preparing to go on the job market yet again. In addition, there was now a pandemic and I was pregnant with my second baby. But I loved the math I was doing, so I did not let unpredictability bother me. Putting my children first made decisions easy—even with going on the job market and hoping to maximize my portfolio. In May 2021, my beautiful baby boy Jasper arrived!

Early that fall, I applied to jobs selectively, and got six interviews, some of these virtual due to COVID. Fortunately, I was vaccinated while pregnant, but I still had to factor COVID precautions along with breastfeeding while interviewing. Even for the virtual interviews, I needed breaks to feed Jasper, so when accepting the interview I immediately shared that I needed breaks at certain times. For the in-person ones, I called the host to explain exactly what I needed (fridge to store milk, timing of breaks), and asked for my schedule in advance so there would be no surprises. Unlike basically every other woman's experience, my experience in doing this was positive, in part because I was armed with stories of bad experiences and determined to not have these happen to me! My thought was that if a school could not accommodate me during the interview, why would I want to work there? I could tell that at most places I was possibly the first breastfeeding woman to interview there and they didn't want to "mess up!" I pumped milk at two of the in-person interviews and brought Jasper to the third. I had a soft cooler for storing milk, a hand pump for the airport, and requested 30 minute breaks and a private office with a plug as well as freezer space. And I made sure TSA handled the milk I was traveling with correctly so I could bring it back.

Be prepared to speak up to anyone at your interview. With one dean, I politely walked out during the discussion, after having told him several times that I needed to go feed my baby. This was not the only surprising moment. I once asked someone about campus safety—I was told that because he was a large male that it is no big deal, but he understood why I might be concerned. I responded that safety should be a concern for everyone (and couldn't help adding that I was one tough woman). I unabashedly asked about parental leave policies and used my mug with my children's names. Of course you don't need to do all this, but be yourself. If a school doesn't like who you are, why would you want to go there? Successfully navigating the pandemic, with two young kids under my care full-time, breastfeeding, and interviewing was stressful but exhilarating. I accepted a great job at Carnegie Mellon and we got ready to move to Pittsburgh!

I then moved with two children—just knowing another young woman with two children who moved across the country was so helpful. Pivotal to my success is my support network; there are so many people that helped me along the way. In particular, the advice and time my PhD advisor Jill Pipher gave was invaluable. My network was not only women—talking to men helped me with both gaining and giving perspective. Before having children, I reached out to someone recommended to me who had been a new mother on the job market (in an interesting turn of events this person interviewed me when I went on the job market again and I could thank her). So please reach out early to

build a network of support. During the pandemic a collaborator of mine started a research accountability group that functioned as a huge resource for me. Have people you can talk to in academia and outside of it; plan in advance, but be able to be spontaneous. If work is not going well, you have your kids to light up your life.

With having children, you may need to restructure and prioritize, but don't feel like you need to give everything up. While pregnant I had months of terrible morning sickness that made work essentially impossible. On the flip side, I was later able to go out running up to the day of Jasper's birth and envision some of my best mathematical ideas. Everyone's situation is different, but even if you need to put something on hold for your health, you will find a way to do it again. Children make you flexible, but strong. I sometimes multitask (edit a paper while on the exercise bike), rechannel my interests toward my children (pointing out torii and other mathematical shapes in their lives, or using my interest in art to paint clothes for them), but also make sure to carve out some time, even just a little bit, for yourself. You need to take care of yourself too. Sometimes it is very difficult to balance things, especially if you feel your research is not going anywhere and you have outside pressure, or you hear something disparaging, and you have to tackle both racism and sexism. Remember that research comes in ebbs and flows, especially when you are pursuing something new, adventurous, and difficult, that people are disparaging when they are jealous of you, and that you stand in the face of racism and sexism. Your priorities will naturally work themselves out. Don't think, "if only I could get into a schedule." Your schedule always changes, but you are a superhero, so you will do what is truly important.

I am a mother to two beautiful mixed-race boys. Navigating the challenges will always be part of my life. Racism doesn't wait until your kids are in school. There have been several days when all I can do is reach out to my most intimate support networks to share the ugly scars of racism. But there are things much stronger than all this. This resilience makes me a better mathematician and a better mother. I pass on to my children a mother who rises to meet challenges and celebrates the full richness of our community, and of them.

Advocacy, flexibility, support networks, and the ability to change and be changed in unexpected ways are not simply mechanisms for survival, they are for flourishing. If mathematics cannot work for parents, then mathematics would be limited, and I believe mathematics is limitless. I hope the challenges and triumphs presented herein empower you. Indeed, you, the reader, can take from this what you wish. I hope you take the triumphs. Parenting is a lifelong adventure. If you embark, it will be like nothing else in this world.



Theresa Anderson

Credits

Photo of Theresa Anderson is courtesy of Theresa Anderson.

Invisible Struggles: When the Mask Stays On at Work

Mikael Vejdemo-Johansson

It has taken me a long, long time to recognize my own story as one of resilience and to recognize my own experiences as a struggle. It is still at times difficult for me to fully embrace it. One core reason for this is that we in academia value work very highly—and I rarely struggled as a student, postdoc, or professor. Instead, the energy I expend masking my issues raises my stress level and brings the pent-up emotional storm to bear at home.

I grew up in Stockholm, Sweden, in the 1980s and 1990s—I'm at the very cusp of the "Millennials." We had computers at home as far back as I can remember, and my parents both worked with computers already in the late 70s and early 80s. It was a household that encouraged academic endeavor and seeded it with a lot of literature—literature that I devoured as soon as I could read.

I always dreamed of working in academia. We have a family story from when I was four and was asked by a man I was talking to what I wanted to be when I grew up. "Researcher," I lisped as precociously as I possibly could. Since that day, my plan has not changed noticeably—it has merely become more precise year by year.

I was precocious. I was odd. I was a rampant geek. Kindergarten through 9th grade was a period of constant exclusion and bullying at school. Grades 10 through 12 came with some specialization in the schooling, and with that selectivity came relief.

Mikael Vejdemo-Johansson is an associate professor of data science in the Department of Mathematics at the College of Staten Island and deputy executive officer for the Computer Science and Data Science programs at the CUNY Graduate Center. His email address is mvj@math.csi.cuny.edu.

DOI: <https://doi.org/10.1090/noti2973>