

Kristen A. Lindquist, Eliza Bliss-Moreau, June Gruber,
& Jane Mendle

The goal of this chapter is to offer a candid snapshot of what it's like to be a woman in modern academic Psychology and Neuroscience. We also hope to generate conversation around shared experiences and provide a vision into a more equitable path forward for women in our field. By academic Psychology, we mean careers focused on research and teaching in the fields of psychological science or Neuroscience. We are most directly speaking to careers that are housed in universities, colleges, or research institutes, but of course the issues we discuss are not unique to those places (or even Psychology or academia, more specifically).

We are four mid-career psychologists who identify as women, have held appointments and worked in Departments of Psychology and Neuroscience, Human Development at major universities, research centers housed within universities, and have also worked in clinical and academic-oriented medical schools. Our research collectively spans areas of Psychology that include questions in social, affective, clinical, developmental, Neuroscience, and comparative perspectives in the field. Oh, and we're writing to you in the midst of a pandemic that has caused seismic shifts to health and well-being, financial stability, and work–family dynamics that intersect with gender and other identities in important, and unprecedented, ways (Guy & Arthur, 2020; Minello, 2020; Minello et al., 2021).

We've each been interested in women's issues for many years; those interests have piqued as we've moved through different phases of our lives and careers, through the BA, PhD, clinical internship (where applicable), postdoc, junior faculty, and mid-career years. During these different phases of academic Psychology, we have experienced first-hand how this process might (and might not) be different for women. One would imagine that fields now dominated by women such as Psychology would have overcome the longstanding gender disparities that affect many workplaces. Yet our own personal experiences suggested that women continue to face disparities in the field, and this led us to take stock of and synthesize the literature on different academic outcomes and productivity for women. Specifically, we decided to systematically investigate the science on gender parity in science, more broadly, and Psychology, in particular. Our paper united 59 women

psychologists across major universities and the business sector spanning the US, Canada, and Australia. Authors are former Presidents of major scientific societies, Department Chairs, “Genius Award” winners, public intellectuals and TED speakers, best-selling book authors, and highly respected scientists. Yet our analysis revealed that many gender disparities are still alive and well in Psychology, despite the success of this set of female authors (Gruber et al., 2021). We’ll be drawing from those data here with a sprinkling of personal anecdotes where applicable.

Our task in this chapter is to share with you what it’s like to identify as a woman in (academic) Psychology. So we decided to walk you through the good, the bad, and the really bad, and with hope for a better future for women in our field. Why is identifying as a woman even meaningful for your psychological career, you might ask? Oh, but we wish that it wasn’t! Psychology (and to some extent, Neuroscience) has seen a *huge* influx of women since the 1970s and 1980s. In fact, so many women have entered the field in the past few decades that one might assume that Psychology is immune to the gender-related problems faced by other Science, Technology, Engineering, and Math (STEM) fields. That is, as relative minorities in STEM, women’s career outcomes and sense of belonging significantly lags behind that of men. Yet as we recently revealed in Gruber et al. (2021), the relative representation of women in Psychology does not make it immune to gender-based disparities in career outcomes.

Throughout this chapter, we take an evidence-based approach by using the tools of our own science to evaluate questions about whether women do (or do not) face gender-related challenges in academic careers in Psychology. Overall, the good news is that women are entering careers in academic Psychology at record rates. They are becoming assistant professors and associate professors at unprecedented rates. The not-so-good news is that they still trail behind men in terms of numbers of papers published, grants held, impact, and financial compensation. As we discuss below, the reasons for these differences stem from a host of systemic, and interpersonal factors (some of which we, as women, can control and effect change on!). The really bad news is that both blatant and subtle sexual harassment and other forms of bias (racism, classism, homophobia, etc.) that intersect with gender still exist, and still impact people’s careers and well-being. We’ll close by discussing what we think we can do about it and how you can make decisions that optimize both your career outcomes and your well-being.

1. An Introduction and Some Caveats

Before we discuss the evidence, we want to begin by introducing ourselves.

Kristen Lindquist: I’m an associate professor at the University of North Carolina at Chapel Hill. I am in the Department of Psychology and Neuroscience and am also a faculty member at the Biomedical Research Imaging Center in the School of Medicine. I direct the Carolina Affective Science Lab and teach courses on Neuroscience and Social Psychology. I got my PhD in Psychology from Boston College

and did a joint postdoc in Neurology and Psychology at Harvard Medical School/Harvard University. I focus on how the brain, body, and culture alter emotional experiences and perceptions. I'm married to an academic psychologist (i.e., have a "two-body problem") and we are parents of a preschooler and a toddler.

Eliza Bliss-Moreau: I'm an associate professor of psychology and a core scientist at the California National Primate Research Center, both located at the University of California, Davis. I train graduate students in our Psychology and Neuroscience graduate programs, but also in our Animal Behavior and Animal Biology graduate programs. I did my PhD in Psychology (social, affective science) before transitioning to a postdoc in neuroanatomy working with animals. My group studies the evolution and neurobiology of emotions and social behavior, using a comparative approach – somewhere in the ballpark of 85 percent of our work is with rhesus monkeys, although we work with other species as well (humans, agricultural animals, and other animal models).

June Gruber: I'm an associate professor and licensed Clinical Psychologist in the Department of Psychology and Neuroscience at the University of Colorado Boulder. I was previously an assistant professor at Yale University after completing graduate school. I got my BA in Psychology and PhD in Clinical Psychology at the University of California Berkeley. I am interested in understanding the connection between emotions and severe mental illness, as well as the science of happiness and positive emotions, more generally. I run a laboratory and teach classes to undergraduate and graduate students focused on positive emotions and mental health. I grew up in California in a working-class family (my mother was a travel agent and my father was a salesman) and was the first member of my family to attend graduate school and experience what life in academia was like. I'm also married to an academic; we met as undergraduates in a philosophy class together and endured several years of long-distance to secure careers together. Much of my own understanding of gender biases first became palpable while I was pregnant and on maternity leave (with my now two young boys: 6 and 4 years old).

Jane Mendle: I'm an associate professor in the Department of Human Development at Cornell University. I got my PhD in Clinical Psychology at the University of Virginia. I study psychopathology during the transition from childhood to adolescence. This is a pivotal time for mental health risk and vulnerability, and I'm interested in why that's the case.

One of the many caveats we should note is that we bring our own identities to the table here. We are white, cis-gendered women who chose to pursue careers in academic Psychology. That already means that our experiences are not going to be the same as all women's experiences in this field. We are also talking about academic Psychology specifically, so we don't discuss primarily clinical careers (such as being a psychotherapist, social worker, or counselor) or primarily education careers (such as teaching classes full-time or serving as full-time administrators overseeing a campus-wide curriculum), and we don't discuss industry or government careers that are increasingly available to Psychology PhDs. It's also important to underscore that although we have a range of scholarly and personal backgrounds, our experiences are by no means representative and universal. Our perspectives are simply that – personal viewpoints that might not be shared by others even with similar experiences. Moreover, we certainly cannot speak personally to the experiences of

women with other intersectional identities such as Black, Indigenous, Women of Color (BIWOC) and women of the LGBTQIA community. We know through both personal connections and the empirical evidence that BIWOC scholars and scholars who identify as LGBTQIA face additional challenges that we do not (see Carter-Sowell et al., 2016; Gruber et al., 2021; Zimmerman et al., 2016). We reached out to several women scholars who identify as having other under-represented identities in academia, and they all graciously declined to join in on this effort because their workload right now was already too large. We know from the literature that women with other intersectional identities are especially likely to be burdened with service as the token representative of their identity in a department or even a school (see Gruber et al., 2021). This fact is likely *especially* exacerbated right now, due to the diversity, equity, and inclusion movements that are happening in Psychology departments and universities around the US following the racial equity protests that happened in summer 2020 and the disproportionate effect of the COVID-19 pandemic on communities of color.

Another caveat is that we are mid-career and tenured academics, meaning that we no longer face the same pressures as more untenured and more junior women (although they're not so far in the distant past for us, especially for Bliss-Moreau who due to her longer training in Neuroscience and Neurosurgery has only been a tenure track faculty member for about four years). Given that we are also not yet senior faculty or full professors, we also lack the longer view of what it was like to be a woman in this field when women were in the extreme minority, because the data show that things have steadily changed for the better with regard to gender representation in Psychology departments since roughly the 1980s (Gruber et al., 2021). That being said, being mid-career offers us the unique advantage of "being in the thick of things" – we all balance research, teaching, and increasing service loads amidst all of the challenges of mid-life, including, but not limited to, caregiving.

A final caveat lies in how we use the term "women" throughout this chapter. Neither sex nor gender are binary and we use the term "woman" here to refer to anyone who identifies as a woman. We acknowledge that the disparities we discuss are compounded for those who identify as non-binary, trans, or otherwise embody other marginalized gender or sexual identities, and we note that there is not a lot of empirical evidence out there about how aspects of gender identity impact career success and progression in Psychological Science. These caveats aside, we will speak to a host of experiences in academia that we think other women will relate to and may benefit from reading more about.

2. A Preface

Before we really begin laying out the good, bad, and the really bad data, we want to set the stage with our own personal experiences. We have in many ways had really positive experiences as we have moved up the career ladder. We authors are all a testament to the fact that women can and do succeed in academic Psychology (and yes, we recognize that there is inherent survivorship bias in our narrative as a result).

We all ascended through PhDs, postdocs/internships, and got competitive tenure-track jobs. We all have tenure at our respective schools, which span well-resourced, large, research universities. We all hold government and/or private institute grants and direct labs that do well-cited research. We've all been the recipients of early career awards. We should underscore that another piece of good news is that we LOVE our careers – we get to ask and answer big questions through our science. We get to teach and inspire the next generation of psychological scientists and the next generation of citizens, more broadly. We get to be among the thought leaders who use scientific research to weigh in on important societal issues. We have incredible flexibility in often deciding when (e.g., 9–5 or off hours?) and where (e.g., lab or coffee shop?) we want to work and which topics we want to work on. We get to travel to speak with interesting people and work in all corners of the world (at least pre-pandemic). We have meaningful, productive, and largely respectful relationships with our colleagues in our departments and universities, and our colleagues all over the globe. We have found our scientific and personal niches and eventually made our careers what we want them to be. There is a lot to like about this gig.

That said, we have also had many experiences our male colleagues likely have not. We have had other academics comment on our clothes, breasts, legs, hair, the size of pregnant bellies and our weight. In some cases, they've touched those things. We've been offered positions because a male PI stated he was interested in hiring an “enthusiastic female postdoc.” There's been weird unwanted kissing, where you think “is he just a little drunk and is trying to be avuncular?” before you reminded yourself that no one should EVER kiss anyone they work with without consent. During faculty interviews, we have had a Dean highlight the existence of local “high-end women's clothing stores” as one of the major pros of accepting a position at that school. When seeking serious career pre-tenure advice with university administrators we have been told not to “wear dangly earrings” and to “dress like other women” in order to succeed. There must just be something about our wardrobes, because our student evaluations throughout the years have often addressed our fashion sense and niceness as much as our course content. We've been asked about our marital status and childbearing plans, in interviews, as “jokes.” We've been given formal feedback that we were “too moody” while pregnant. We've been bullied while on parental leave, including the day we literally gave birth.

Our demeanor has also come into scrutiny. We've had concerns raised when we were not “smiling” in meetings with students and colleagues. During meetings with administrators discussing promotion timelines, we've been asked if we wanted “our hands held.” During job interviews, senior male professors have closed the door and patted the chair next to them and said “come on, sit a little closer to me.” Once we had jobs, we've been told we should be “thankful” for them and “act happy” in dulcet undertones that clearly imply we didn't deserve them (and to be clear, we are thankful for our jobs, but we also earned them). We have had “equity” adjustments to our salaries, to bring them in line with those of male colleagues, including male colleagues at earlier career stages. Sometimes this has happened after we have directly asked for a raise and been told that our

perception of our worth was not accurate. At the time of hiring, we were not offered as much in terms of lab space, start up, or other financial resources as our same-cohort male colleagues. When we asked for more space, however, we tainted relationships with colleagues because women shouldn't ask for more. We have been mistaken for undergraduates, graduate students, and administrative assistants because no one assumed that a woman could also be the principal investigator of a lab. We have been censored for speaking up and called "bitches" or "difficult" or "personality disordered" for doing so. We've brought babies to campus during daycare snafus and have gotten sideways stares while our male colleagues have been considered "dad of the year!" for the same behavior. Many people who are under-represented in academia have had some combination of these experiences, but talk to most academic women (we certainly have over drinks at conferences or late-night texts with friends) and most have had at least some of these experiences.

Let's look at the data and talk about what you can do to navigate this, and maybe change things for the better for yourself and the women who will follow in your footsteps.

3. The Good News

Despite the harrowing experiences shared above, we have also had many positive experiences and outcomes. Indeed, our own positive experiences in academic Psychology are echoed in the data. Women are now the majority (>70 percent) in undergraduate Psychology classrooms and many Psychology PhD programs (APA, 2017). This semester, in fact, there are *only* women students enrolled in Mendle's advanced psychopathology seminar. If you are a woman who chooses to pursue a tenure-track job, the data suggest that you are just as likely (if not more so) than a man to get that job (we will discuss the "if you are a woman who *chooses to pursue a tenure track job*" in the next section, because this is key). Other good news abounds. As a woman in today's academic Psychology, you are also as likely as a man to get tenure and to receive the grants that you apply for (again, caveat being, you get *the grants you apply for*). In our computations of major Association for Psychological Science (APS) and American Psychological Association (APA) awards, we also found that women are roughly as likely as men to be recognized for their early career research (but not their later career research; see Gruber et al., 2021 for all these statistics).

This news is great, and certainly represents a shift from a time in the not-so-distant past (e.g., the 1970s and 1980s) when women were less likely to enter PhD programs, get hired into tenure-track positions, and to become tenured as their male counterparts. Yet, the good news can obscure the bad, which is that gender disparities *do* still exist in Psychology. A quick look at rates of gender representation in the field at large – or even a glance through some faculty line-ups – might give the false impression that women's careers are on par with men's in academic Psychology. We're sorry to say this is not (yet) the case.

4. The Bad News

The bad news is that women still face systemic, interpersonal, and intrapersonal barriers that contribute to disparities in success in academic Psychology. In fact, for almost every piece of good news there is a “yeah, but . . .” qualification. Let’s start unpacking those “yeah but . . .” As we review in Gruber et al. (2021), although women are getting hired and tenured at equal rates as men, they still, on average, lag behind men in almost every other metric of career success. For example, women in psychology apply for fewer tenure-track jobs, they hold more low-status academic jobs (e.g., as adjunct professors, university administrators), they publish less, they are cited less, they submit fewer grants, they are invited for fewer talks, they are seen as less “eminent,” they are financially compensated to a lesser extent (even when controlling for productivity), and they likely do more unpaid service than men.

But why? We know that these gender disparities don’t exist because women are less intelligent than men. That hypothesis has been laid to rest (see Ceci et al., 2014 for a discussion of, e.g., the lack of evidence for strong gender differences in math). It’s also the case that women and men’s academic products tend to be considered of comparable quality when compared head-to-head (e.g., women’s grants are rated as good, if not better, than men’s; Hechtman et al., 2018), meaning that women’s lesser productivity is not a product of lesser scientific capacity. As we conclude in Gruber et al. (2021), a mix of systems-level factors, interpersonal processes, and intrapersonal processes likely contribute to the differences observed in women’s versus men’s career success. Let’s unpack some of the ways that these factors might play a role in women’s career success.

4.1 Academic Pipeline

First and foremost, let’s address the fact that fewer women than men apply for tenure-track academic positions. This is almost surely a product of a “leaky pipeline.” A “leaky pipeline” describes a systematic exit of certain people from the career path. Gender-related pipeline leaks are well-known in science (Alper, 1993), and it is possible that Psychology is “leakier” or worse than other fields when it comes to our pipeline because we start with so many women interested in our undergraduate major. Yet at each stage from undergraduate, to PhD, to postdoc, to faculty positions, women drop out of the field at rates disproportionate to men (Ceci et al., 2014; Gruber et al., 2021). Meanwhile, women are over-represented in adjunct professor positions, university administration, and in fields outside of research such as education and healthcare (APA, 2017; NCES, 2013), suggesting that women are systematically “opting-out” of tenure-track academic Psychology. As we note above, when women do apply for tenure-track jobs, they are more likely to get them than men (both in large observational studies and in experiments; see Gruber et al., 2021), so that’s good news. As we mention above, another source of good news is the fact that women who go up for tenure are now as likely as men to get it. Yet, women lag behind men in the rate of being named full professor, which is the highest

(non-administrative) academic rank post-tenure. It's not clear based on the data whether this is just a time lag, and we'll see more women fill the ranks of full professor in the years to come, or whether women are getting "stuck" at the mid-career associate level rank and are not moving to more senior level positions and recognition (Gruber et al., 2021).

Why is it that women leak from the pipeline at a greater rate than men, and why are there not more women in full professor roles if women have been filling the pipeline in large numbers since the 1980s? One possibility is that women do not want academic Psychology jobs and never did – in this scenario, women are leaving the field at each juncture because they are choosing careers that they prefer more. That is of course a reasonable interpretation, especially at the undergraduate level, where many may see Psychology as a great generalist major that will prepare them for other careers. Alternatively, you could argue that this means that we're missing out on the opportunity to convince more women that they might like to go on to become scientists in our field. Either way, this doesn't address why the pipeline leaks following a PhD, or especially a postdoc, when trainees have gotten further along the career path toward becoming professors. Don't get us wrong: it would be great if women were actively choosing careers that they most prefer. But we suspect that women are, at least in some proportion, being forced to "opt out" of the pipeline due to a combination of factors at various levels. We review these pressures in full in Gruber et al. (2021) and point to a couple of especially important ones here.

Let's start with the systemic factors that might be at play in the pipeline. Systemic factors are those related to the values, norms, and institutions that our society creates that in turn impact interpersonal and intrapersonal behavior. One major systemic set of values and norms – that in turn shape our institutions – are gender role expectations. Gender roles are prevalent cultural stereotypes about the behaviors, personalities, and occupations that women and men should engage in and hold (e.g., Wood & Eagly, 2012). Gender role stereotypes have a major impact on the institutions in which we work and live. The fact of the matter is, our academic institutions (and work institutions, and political systems, more generally) were not created with caregiving in mind. Yet due to gender-based stereotypes related to caregiving and the biological practicalities of childbirth and early child rearing, women are expected to be – and frequently are – the primary caregivers of others in our society. Childcare, eldercare, and care for extended family and community members in need often falls to women. Our society expects, and frankly, benefits from, the largely free caregiving labor expended by women. For instance, when it comes to childcare, American mothers spend roughly 75 percent more hours per week on childcare than fathers (14.0 vs. 8.0 hours; Geiger et al., 2019). Women are likely aware of these realities – in fact, they have been implicitly or explicitly faced with them since early childhood and *both* women and men see academia as relatively incompatible with raising children (Mason et al., 2013). The difference may be that (some) men expect that they will have a spouse who can pick up the slack with regards to childcare while they focus on their academic career. As most academic women are part of dual-career partnerships, they are much less likely to have this

luxury than their male counterparts (Gruber et al., 2021). What seems key to women opting into academic careers is seeing other women navigate both a career and kids. When women PhD students interact with women faculty who have children, they are more likely to pursue academic careers (Mason et al., 2013), underscoring the importance of representation in science and having access to women mentors (see Lindquist et al., 2020).

These realities are not unfamiliar to us at all. We have all struggled in some way with trying to combine our career trajectory with our preferred geographical location, dual careers, having children, and/or taking care of elderly parents. These are realities that at least some of our male colleagues don't face in the same magnitude.

Mendle: When I was younger, I was either unusually lucky or unusually oblivious. I didn't think much about being female in high school. In college, I loved my women's and gender studies classes, but I didn't perceive barriers related to my own gender. Ditto for graduate school, where I had a wonderful (male) advisor and cohort of friends, with whom I would occasionally discuss practicalities and observations about being a woman in academia – but again, rarely perceived substantial barriers. Then I became a faculty member and, boom, the fact that I was female was suddenly an enduring part of daily life. People noticed my gender more than I had ever assumed and I, consequently, began to react and respond in turn.

There have been various inflection points in my career, when I've thought more or less about gender. I hate to be trite, but becoming pregnant was one of those points. I study puberty, and one of the important aspects of puberty is that it places a big life transition – full of dramatic physical changes – on public display, where people comment on and observe it. Pregnancy made me fundamentally rethink my academic research. I wasn't ready to discuss it with my colleagues – and yet there it was.

Biological sex differences are not typically talked about in discussions of gender and careers. I understand and generally support the reasons for this, but my take is that they do matter. Women's fertility clocks coincide with the most important years of career building. This places many – not all, of course, but many – women in an impossible position that men don't have to grapple with in the same way. And, of course, while both male and female academics have babies, it's generally only the female academic who has to schlep to the weekly doctor appointments throughout pregnancy and the weekly postpartum physical therapy appointments after. Even setting aside the physical tolls of pregnancy and childbirth, the time those appointments take adds up. For every woman caught in traffic on the way to the OB, there is a man who was able to continue his workday. Talking about these facts is complicated, and there can be a competitiveness or an exclusivity to motherhood culture. It can leave out the experiences of women who aren't mothers and even hint that the biases they've encountered might be somehow lessened because they don't have or don't want to have children. I take this as a reflection that we still haven't solved the real issue of how to make careers and life choices happen in a way that feels right or manageable for a lot of people.

Lindquist: I echo Mendle's comments that I didn't *really* think about my gender until after I received my PhD. I had a really inspiring female mentor with a really successful career and we of course talked about how gender had impacted her career throughout my training, but I hadn't experienced the effect of gender in my career first hand until I was a postdoc in a Med School and it suddenly felt *blatantly* obvious that I was female.

I remember a prominent neuroscientist running into me in the hallway – I was in awe of his research and was so excited to get to talk to him about mine – and instead of asking me about my research, he looked at my finger and said “oh, so you’re engaged!” To this day, I am so disappointed by that conversation.

It was around this time that I really began to stress about whether I would find jobs for both myself and my academic partner – especially ones that we were both happy with, where we were equally valued and where our careers would be equally fruitful. We were super lucky to land positions at the same university. Our motto was always to take short-term costs for long-term gain (we lived apart for years to both pursue opportunities that best fit our careers) and we worked really hard for our positions but we both still feel like we won the lottery to solve the “two-body problem.” Of course, then we had to deal with trying to figure out how to get our careers in a place where we felt we could have kids, and to try to rear children in a way that was equitable across both our careers. I recall calling up my graduate advisor (another woman) and asking advice about when during my tenure clock I should try to get pregnant. Should I stop my tenure clock? How many grants should I submit before I have the baby? How much time should I expect to *really* be able to take off? Will my lab fall to pieces if I suddenly cannot spend 100 percent of my waking hours thinking about it? It felt like there were no resources to navigate this next stage. And despite the fact that my husband was experiencing the same thing, it felt especially fraught for me as a woman.

Ultimately, my advice is that these things are going to be challenges in most high-stress careers and are not unique to academia. I have friends who are lawyers, or work in large corporations, and they are no less hindered by their gender or childbearing decisions. Ultimately, neither workplaces nor governmental policies have done enough to support working families since women have entered the workforce in large numbers – it is still largely assumed that workers have an extensive support system to pick up the familial slack while they work on their careers. For academic women in particular, their child-rearing years coincide with the PhD or Assistant-to-Associate Professor years, which is a key time for establishing one’s career (see Gruber et al., 2021). And as much as we want to assume that men are hindered by childrearing in the same way, they just aren’t. As Mendle suggests, even starting with the process of conceiving a pregnancy (if you are able to and choose to give birth to a child), there are undue costs on the person carrying that baby. The many hours that I spent between two pregnancies and infancies vomiting, lying exhausted on the couch in my office in between meetings, going to doctor appointments, and breastfeeding and pumping breastmilk were all hours that my male spouse was able to do his work (and he is a great dad who otherwise does 50 percent of the childcare. He just couldn’t really help with the whole gestation/lactation part of it). My best advice is to be aware of the hurdles that come with your biological sex/gender and to make sure to choose to surround yourself with people who will *fully* support you in the child-rearing process, whether that is a partner, grandparents, or hired help. Be aware of the gender stereotypes that will put most of the caregiving responsibilities on you as a woman, and have frank and open conversations with your caregiving partner(s) about how to equally divide up tasks and time. Don’t go into it blind – you should be aware before you commit to a relationship whether your partner actually has equalitarian views on splitting work and family.

Gruber: I echo comments above by Lindquist and Mendle about early life experiences being distinct from, and seemingly absent of, gender biases that emerged later on in my

career. I was perhaps naive in a Pollyanna way as a teenager. In high school, I firmly believed that accolades were awarded based on merit and women would and could achieve the same level of respect and recognition as their male peers. I read with great passion about women writers and poets, and idolized my high school calculus, physics, and English teachers who were all brilliant and women. It seemed as if women could do anything.

I held tightly onto these idealized visions of women's roles in the professional world during graduate school, where many of my peers in clinical psychology were also women. I was also very lucky to have incredible women mentors as well. In the blink of an eye, however, when I became pregnant later on in my career, things began to shift. My status as a woman became more visible (literally so while pregnant), but not usually in positive ways. I was questioned about my decision to take parental leave and to pause pursuing full-time academic work so I could be present with and raise my babies. I was criticized for being unavailable during my FMLA (i.e., legally granted) parental leave. When I asked an organizer of an invitation-only conference if I could bring my nursing baby with me, I was told that it was not a baby-friendly event and was uninvited (this led my colleague and I to organize a small conference for mothers of young children to address barriers women with young children face when participating in professional activities). These experiences, however, catalyzed a decision that one of my professional and personal roles thereafter would be to try to shed light and help change the landscape for other women.

Bliss-Moreau: I delayed partnering and childrearing and I'm here to tell you that there are major challenges associated with balancing working life with life-life even if you do not have a partner and children at the moment. In many places there are assumptions that women without families (particularly women without children) should be more flexible in terms of time on call or the times we teach, etc.; and striking the delicate balance of being supportive of colleagues (particularly women colleagues who are often doing a disproportionate amount of caregiving) and taking care of self can be tough. There's a lot of talk about how "partner hire" or "partner opportunity" programs can be used to bolster women in the academy by ensuring that their partners are able to be placed for jobs (academic or otherwise), but these systems are only really built to work when people are initially hired. My experience was that navigating the dual-academic-career couple trying to secure jobs in the same place where I could do my work (more on this below), once I already had my tenure-track job, was a nightmare. While it was mostly a structural challenge (the systems aren't built to accomplish what we were trying to accomplish), it was a psychological challenge as well. Being told things like "this would have been easier if you'd been partnered when you were hired" is just a tough blow any way you slice it.

While navigating the system with a partner can be a challenge, not being partnered has a whole other set of challenges that are rarely discussed. Like many of my partnered colleagues, I own a house and have pets – and 100 percent of the efforts required to run the household fall to me. Pursuing a tenure-track job and career ladder often means you have to go where the job is, even if that place is far away from your support network. If you're making a move like that with a partner, you have support in the form of the primary relationship. The constraints of geographical location were exacerbated for me because I work with monkeys (and big groups of monkeys at that!) and there are very few places in the world where I can do that; I honestly hadn't given that constraint enough thought when making the decision to retrain in neuroscience after my PhD in social/affective Psychology and would encourage trainees to think

through the balance of what one needs to do the science one loves and what that means in terms of where one must live. So, I live in California, while most of my family and friends are on the east coast and abroad. In good times, this was primarily an issue of cost and time and that got easier as my career progressed – I could easily book a flight to connect with loved ones and learned to use that flying time to write papers and grants. But it has been exceptionally difficult during the pandemic, underscoring the importance of having a strong community locally.

Of course, the gender stereotypes that influence systems also impact interpersonal behavior and a person's own beliefs. These in turn influence who sees themselves in certain types of careers and can impact whether women opt into academic careers. In America, gender stereotypes include ideas that women are warm caregivers who focus on communal goals whereas men are assertive breadwinners who focus on self-achievement (e.g., Wood & Eagly, 2012). Women may thus initially be drawn to Psychology majors in unequal numbers because it is a field that – at least stereotypically – is seen as high on stereotypically female qualities, such as caregiving and communion. Psychology is also low on stereotypically male qualities, such as requiring “brilliance” to succeed (Leslie et al., 2015). Yet, academic Psychology may prove to have qualities that run against these stereotypes – it can be competitive, requires self-promotion and assertiveness, and does not always have immediate application to communal goals. Gender role congruity theory suggests that these systemic, societal norms interact with others' and a person's own view of themselves to predict how interpersonal processes unfold for women as they climb the career ladder.

For instance, gender role congruity shapes how others behave toward women. As women ascend the career ladder, they can get pushback from others for embodying behaviors that are necessary for a scientific career (e.g., being agentic, being a leader, promoting one's work) but are seen as male-typed. As we review in Gruber et al. (2021) there is indeed evidence that women get pushback for engaging in gender-incongruent behaviour – women who try to hold positions of power and who assert themselves often receive blowback from others. Women who identify with other under-represented identities can experience the additive effect of multiple stereotypes (e.g., the angry black woman, the overly emotional Latina; see Gruber et al., 2021).

Again, we have collectively experienced our fair share of this, ranging from microaggressions to full on aggression.

Bliss-Moreau: The list is long. I've had senior men aggress and belittle me publicly in an effort to keep me quiet about important issues. I've had senior women attribute mental states to me that I'm not experiencing – typically mental states with gendered content. I am regularly asked whose lab I'm “in.” I've been assumed to be the vet anesthetist when I was the neurosurgeon and then had my qualifications questioned because the questioner didn't believe me (“Too young!” “Clearly inexperienced!”). I've been asked about my marital status and childbearing plans during interviews. I am constantly reminded/told/informed that my direct communication style is aggressive, abrasive, and/or angry, when I watch men communicate similarly and be rewarded for being direct.

Mendle: A few years ago, I was editing a special series for a journal, ironically about women's reproductive transitions. One of our authors requested an extension. She had recently given birth and disclosed that she had some unexpected health complications. The journal had a tight time frame for publication and wasn't able to extend extra time for her to complete her manuscript. On the one hand, we all understand the realities of publishing and I respect the journal's decision. On the other, it was a bit bruising to have the author pull out of a series on reproductive transitions because she was, in fact, *recovering from childbirth*.

Gruber: I can recall several times where attempts to pursue projects or a career in academic Psychology was met with backlash. I recall co-leading the Gruber et al. (2021) paper on the future of women in Psychology, along with Bliss-Moreau, Lindquist, and Mendle (and over 50 other top women academics) and one of our reviewers mentioned that the paper lacked true "leadership" and couldn't be accomplished by a team of women-only authors. When we responded with detailed descriptions of the unique and authoritative contributions of our author team, we were met by skepticism as to whether our co-authors deserved authorship and scrutiny of our scientific integrity. At a personal level, I've been told my mind and my work was "superficial" while simultaneously warned by male colleagues that I was "too ambitious." I worked hard once leading a project for members of my field and one colleague responded by saying "who do you think you are?" I understood that loving what you do and wanting to work hard while being a woman was not a satisfactory answer.

Lindquist: Honestly, there are so many examples, it's hard to choose. I think it is better now that I'm a bit older. But early on, when I was a *young woman* it felt like no one could ever possibly imagine that I could be in a position of power, never mind know what I was talking about (although maybe when I'm an *old woman* no one will be able to believe that I could still be contributing meaningfully to society . . . we'll find out!). One microaggression stands out when I first started as a faculty member. I attended a meeting for users of our research computing clusters on behalf of some of my other neuroscience colleagues. So here was a young woman asking a question to a tech person about computing. The guy who worked for research computing kept asking me "so whose lab do you work in?" Every time I responded that I didn't work in anyone's lab and that I was a member of the faculty, he kept saying "Oh, do you work for [senior male colleague?]" In a bout of frustration, I eventually burst out "I work in my own lab! I have my own lab! I am a FACULTY MEMBER!" Now, I had become "the angry woman" – a stereotype with its own baggage.

Gender role congruity also shapes how women see themselves and what roles they are comfortable embodying. Women who have spent their whole life being implicitly or explicitly taught to be submissive, communal, and not overly assertive may feel personally uncomfortable embodying these counter-normative behaviors. Thus, as women ascend the career ladder, these systemic factors may increasingly make them feel like academic Psychology is not for them. This fact is almost certainly exacerbated by the very visible demographic shift that occurs as women go from being surrounded by predominantly women to being the only woman in the room.

Mendle: There are some folks who have always wanted to be Psychology professors. That's not my story. My first major in college was Medieval and Renaissance Studies

(yes, really) and I held a lot of checkered, artsy jobs on my way to graduate school. Even today, I'd rather read a novel than a journal article. In my case, I think having all these other, non-Psychology interests contributed to questions of belonging and sometimes made me wonder if the field was the right one for me. I wish I had known earlier on how normal these doubts are.

Lindquist: I distinctly remember the point in my career as an assistant professor when I looked at my graduate cohort and realized it was mostly me and the men left as assistant professors. I felt like “Where did all the women go? Why am I one of the last ones standing?” In fact, I've since become friends with other women in the field just by nature of the fact that we are all women of around the same age “who've made it.” I now work in a department where almost all the junior(ish) faculty are women neuroscientists (Bliss-Moreau once called my department a “unicorn” for this fact) and that has been a game-changer for me.

Bliss-Moreau: There are few women at my level or above in non-human primate neuroscience, and even fewer in my subfield (social and affective science). I often have had the same experience as Lindquist – looking around the room and being the only woman present. It's challenging, particularly in the context of sexist jokes, assumptions about “wives at home” to keep the household running, and other male-oriented comments. On the flip side, because there are so few women in my field, I've gotten to know many of them, and often the initial conversation is predicated only on the fact that we're both female neuroscientists working with monkeys. We are fiercely supportive of each other. I've also learned to explicitly ask my male colleagues to be allies and developed deep, rewarding collegial connections with men who are willing and able to serve in that role.

Gruber: I often say to my friends that I love what I study, but often feel that I never quite belonged in academia as a person. This became more difficult when part of who I was involved balancing personal-life choices. I was once planning a visit to my partner who was doing a fellowship internationally on the other side of the globe. I was told by a senior colleague that if I visited them for more than a week or two, even while on fellowship leave, that I would be “destroying” my career. I wondered whether I could continue to pursue this career in academia that would allow me to also be myself.

4.2 Productivity

It's clear from these data that women are likely opting out of academic Psychology at greater rates than men. But, in cases where women opt into academic Psychology, what accounts for their lesser productivity? We suspect that a similar confluence of systemic, interpersonal, and intrapersonal factors play a role. Take publishing and grant submission, for instance. Across all of academia, women publish fewer papers and submit fewer grants than men (see Gruber et al., 2021). At the systems level, this may be because women are spending their time elsewhere. Childcare is likely one big factor, as we discussed above. However, women also report spending more time on other things besides research when at work, perhaps as a product of systems-level pressures. For instance, in Gruber et al. (2021) we review the fact that women are likely spending more time on unpaid service within their departments, insofar as

service is seen as a “communal” activity that is more expected from women. Women also report that they spend far more time on unquantified sorts of service activities such as mentoring undergraduates, discussing careers with graduate students, and generally “taking care of the academic family” (Guarino & Borden, 2017). These stereotypes are exacerbated for BIWOC, who may be the “token” member of their under-represented group and seen as the one in charge of diversity efforts in the department. BIWOC and other under-represented scholars may also be expected to, or feel compelled to, mentor students who are under-represented in academia (see Gruber et al., 2021 for a discussion).

Lindquist: As the most junior female faculty member on my hallway at work for some time, I have spent a lot of time having graduate students pop in to ask advice about their research and careers, share their personal and mental health concerns, and even ask for advice about how to navigate issues with their mentors. Don’t get me wrong, I am happy to serve this role for students – and indeed, these roles are really necessary and undervalued by academia and our society more broadly – but it’s not lost on me that my male colleagues are writing papers while I’m offering a teary student a pack of tissues.

Bliss-Moreau: Separate from my formal service commitments (that are pretty easily tracked on a CV), a lot of the service that I do and that I see my female colleagues doing is sort of behind the scenes and hard to document. Like Lindquist refers to above, I spend a lot of time with people who would just pop into my office looking for a conversation on mentoring, career issues, or navigating the politics of our research center. Sometimes those are folks from my own group, but often they are other trainees and staff people at the center. I like those conversations and find them rewarding, and I am certain I would not be where I am today had I not had the opportunity to pop into other people’s offices and have similar exchanges, so I recognize their importance and value. But they take time, and often require emotional energy. A senior female colleague told me that she actually tracks the number of hours she spends in these conversations and reports them at her regular merit reviews because around a quarter of a 40-hour work week is devoted to such interactions. When discussing the number of hours I devote to these sorts of interactions, a male colleague recently told me that I “should care less.” My response: “I could care less if you would care more.” It’s a standing joke among my female science friends that we should make that into a bumper sticker.

One thing to be aware of in thinking through job offers and plans for career trajectories is that universities recognize service work in different ways – the sort of informal work like that described above and/or formal service work. In this vein, I do think that the University of California is really exceptional at least with regards to recognizing formal service work. At Davis, we have a very clear career ladder with steps and regular reviews during which our records are evaluated, and we are promoted anywhere from 1 step (normal advancement) to 2 steps (extraordinary advancement). Evaluating service is part of regular merit reviews and we can be rewarded for exceptional service work with additional steps. In 4.5 years, I have had two reviews (one merit within the assistant professor rank and one to promote from assistant to associate) and in both cases, I was promoted more than 1 step, in large part because of the formal service that I do.

It is possible that interpersonal processes such as bias also contribute to differences in publishing. There is some evidence that editors serve as biased gatekeepers

of the science that gets published in their journals. For instance, evidence shows that from 1974 to 2018, male editors at top social, cognitive, and developmental journals were significantly less likely to accept papers that were authored by women versus men; female editors at this time did not show any bias (Bareket-Shavit et al., in preparation). This effect mirrors evidence that white editors are less likely to accept the papers of BIPOC scholars in Psychology (Roberts et al., 2020) and suggests that BIWOC may experience an additive effect when it comes to publishing. An unpublished paper in economics suggests that women authors may face a much longer review process than men, during which their papers are held to higher standards (Hengle, 2020).

Fortunately, the data on grant review do not seem to show the same degree of bias. Although men hold more grants overall, this appears to be because they submit more grants overall (see Gruber et al., 2021). Studies do not find that women's grants are reviewed more poorly and, in some cases, women's grants may even fare better than men's in review (Gruber et al., 2021). In many grant review processes, there is an evaluation process for the person carrying out the science ("the researcher") in addition to a review process for the science itself. There is some evidence for bias when the decision architecture encourages reviewers to focus on or foreground the "researcher" versus the "science" (Wittman et al., 2019). Women's grants are rated as worse when the ratings of the "researcher" are more heavily weighted than the ratings of the proposed science itself, consistent with other evidence showing that women are less likely to be described as "leaders" and "pioneers" in reviews (Magua et al., 2017).

Intrapersonal processes also play a role in women's productivity. The biggest take-away from the data is that women submit fewer products (be they publications or grants) than men and this may be a product of their own beliefs or preferences. Women may believe that they should spend more time on communal tasks such as service and doing so may take away precious research time (note that this might happen because they feel pressure or because they truly get reward in engaging in these other tasks). Women may also have internalized bias and expect to get more pushback on their work. This can create a cycle of perfectionism in which women take much longer to produce publications or grants. The evidence is perhaps consistent with this interpretation insofar as women's grants are (at least in some data sets) rated as *stronger* than men's but men consistently submit more grants over all (see Gruber et al., 2021). This suggests that women may be taking a different approach to men by placing all their metaphorical eggs in a single, perfectly crafted basket, whereas men are placing eggs in multiple . . . er . . . less well-constructed baskets. Finally, as we review in Gruber et al. (2021), there are small but consistent differences in assertiveness and self-assuredness, which may mean that women are just less comfortable than men in "getting their ideas out there," an internalized gender stereotype that could ultimately hurt women's productivity.

Again, we certainly have personal experiences of what has seemed like bias in the publication and grant-receipt sphere.

Mendle: I've had to become less "precious" about my work over the years. I'm a slow writer. But as much as I love language, pondering each and every word for its lyrical value doesn't work in the current academic climate. The simple truth is that the field – at this time – is demanding *both* high quality and high quantity. The best solution I've found has been collaborators. When you have the right group of collaborators, their feedback can push your ideas in new directions – and, in the best of scenarios, their skills are opposite your own. I love working with June, for example, because she is a rapid writer and balances my own tendencies in that area.

Lindquist: I do try to reflect a lot on my own productivity and how I ultimately want to – and do – spend my time. For instance, a few of us were recently involved in writing a comment on a paper that had been published in a top-tier journal. This paper drew a lot of criticism across science because it wrongly drew the conclusion that PhD students shouldn't work with women if they want to have impactful careers. We busted our butts (during a pandemic when we already had limited time) to get this comment out there to correct the published record (see Lindquist et al., 2020 and a subsequent popular press article about it and the now-retracted original paper at www.wired.com/story/as-more-women-enter-science-its-time-to-redefine-mentorship/). Although it was important to write a formal comment on this paper – and the original paper was eventually retracted – it was definitely not lost on us that as women scientists, we were spending our time responding to someone else's biased scholarship rather than writing our own papers.

My broader take on publishing and productivity is this: I do think that quality is more important than quantity, and I strive for quality above all else in my lab. That said, I do urge women to recognize that publishing is one of the clearest metrics of success in this field and the easiest to quantify metric. So I urge students and junior women to be especially mindful of how to achieve their idealized productivity while also focusing on ways to shift norms surrounding what is most valued in academia. For instance, former APS President, Lisa Feldman Barrett recently discussed the downsides of the "publications arms race" (www.psychologicalscience.org/observer/the-publications-arms-race) and argued that we had gone too far in expecting junior faculty to have dozens of papers by the time they are applying for their first job.

This said, socialized gender differences in self-esteem and comfort with self-promotion almost certainly contribute to some of the differences in publication rates, impact, and grant receipt observed in the literature insofar as (at least statistically) men submit more papers, may submit to higher impact journals and submit more grants. Women should aim big when thinking about where to submit their work or when submitting grants. Remember cheesy old adages such as "perfection is the enemy of the good" and "100 percent of the shots not taken don't go in." I do think that women, in particular, hold themselves to impossible standards (probably in large part because they are expected of us by the rest of society). This might also mean sometimes having to shirk more "female" roles such as being the one to organize a meeting, worrying about the well-being of every student in your department, or trying to take on impossible societal roles such as "the perfect mother." Another academic friend and I have a running joke about how we refuse to personally handcraft Valentine's Day Gift bags for our kids' classes and just really don't care if that makes us "less perfect" parents.

Bliss-Moreau: I think the quality/quantity issue discussed by others is really important. But another related issue is figuring out how to divvy up one's time across tasks for "optimal" productivity and which ideas to pursue. I'm still in the process of figuring out

how I want to spend my time in terms of what work I do, both with regard to types of work (papers, grants, advocacy documents) and also what questions I ask. I think striking the right balance is hard, likely changes across career stages (at least that's been true for me so far), and also shifts as the norms of the academy shift. I try to balance work in my group in terms of core questions that we have a good sense we'll be able to answer and the high-risk/high-reward work that we all love, but ultimately can be risky in terms of not turning into papers and grants. I've struggled with this balance a lot and we have just recently begun to pursue the high-risk work – work that I've been explicitly told is “crazy” or “too far out there” or “unlikely to pay off.” The story that I have about this is that I waited until I was tenured and had multiple big grants to fund the group, so the risk of failure was somehow less. But, I see men in similar positions to where I was pre-tenure and pre-R01, chasing ideas on which they are getting similar feedback; this makes me wonder if the difference between me and them might be related to gendered stereotypes about brilliance (discussed above)? Regardless, pursuing some of the “out there” ideas has led my group to a burst of productivity, even with regards to advancing some of our more incremental and “less sexy” work. It hadn't occurred to me until we dove in that the risk of pursuing the high-risk work might be mitigated by productivity on low-risk work and that overall productivity would increase (and we'd have a lot more fun) if we were doing more high-risk work. The important thing for me as a mentor in this vein is to make sure that the high- and low-risk work is distributed across trainees so that no one runs the risk of not having success during their training phase.

4.3 Impact and Financial Remuneration

Finally, let's deal with scientific impact and financial remuneration. Even controlling for productivity, women have less impact in Psychology in terms of citations and are paid less (Gruber et al., 2021). As we review in Gruber et al. (2021) and Lindquist et al. (2020), there are longstanding and consistent biases in citation rates that cause men's papers to be more highly cited than women's. Some of this is driven by men's relative greater tendency to self-cite (King et al., 2017). Other recent evidence finds that in neuroscience, not only do men self-cite more, but they also cite other men more than they do women (meanwhile, women cite both men and women equally; Dworkin et al., 2020).

Other evidence again points to systemic, interpersonal, and intrapersonal processes that impact both women's and men's behaviors around publishing in the journals most likely to be impactful. In Psychology, as the impact of a journal increases, the prevalence of women authors on the papers published there decreases linearly (Odic & Wojcik, 2020). This may be due to systemic factors: for instance, if women are spending relatively more of their time on other tasks like service, teaching, or childcare at home, they might have less time to take a risk and “aim high” by submitting first to a top-tier journal and then revising their manuscript afresh for each new submission if it doesn't get in.

Women might also be less likely to submit to high-impact journals because they might have had bad experiences there in the past. The findings showing that editor gender is predictive of the gender of published authors (Bareket-Shavit

et al., in preparation) is suggestive that women might have systematic difficulty publishing at certain journals. Note that to our knowledge, research has not addressed how journal impact, editorial gender, and women's publication rates interact. That said, stereotypes that women are less "brilliant" than men (Leslie et al., 2015) could contribute to implicit bias against women's findings at top journals. At least in Psychology, many editors are not blind to author names (and presumed gender), even if reviewers are. Finally, women may not publish in the top-tier journals that are most impactful because of small but stable gender differences in intrapersonal processes such as self-esteem or self-promotion (see Gruber et al., 2021). Women may simply feel that their work is not important enough to be considered at top-tier journals due to internalized stereotypes that women are less "brilliant" than men or that women should not self-promote.

While the findings on impact are disconcerting, what is particularly concerning is that women are also less recognized *financially* for their work. As we review in Gruber et al. (2021), women receive on average, 68–99 percent of what men receive in salary as professors. These discrepancies are starkest for full professors, where women at R1 universities make 81 percent of what men make. It is possible to argue that women make less because they are less productive on average – and salaries and raises are based at least in part on merit – but a recent study of New Zealand academics found gender disparities in financial compensation even when comparing equally productive men and women scholars (Brower & James, 2020). For women on 9-month salaries (typical of US tenure-track jobs), differences in base pay may become exacerbated by differences in grant funding success when grant funds are used to pay 3 months of "summer salary."

The gender pay gap, as it's called, is certainly not unique to academia and its mechanisms are hotly debated. Some of the gender pay gap may be linked to systemic factors, such as women's mobility when applying for and accepting jobs in a wide range of geographical locations. As we discuss above, being in a dual-career partnership may influence women's desire to apply for tenure-track jobs; even if they do apply for those jobs, it may limit women's ability to apply broadly/accept any job because heterosexual women are more likely than heterosexual men to put their spouse's career first in the case of a "two-body problem" (Mason et al., 2013). This fact alone could hinder women's negotiation abilities and ability to seek out the best-paying position.

In addition to systemic factors, there are well-known interpersonal and intrapersonal factors that contribute to the gender pay gap, such as women's ability to successfully negotiate for themselves during initial offers and to attain retention offers. Again, due to stereotypes of women as communal, negotiation partners such as chairs and deans may be less likely to expect women to negotiate for pay raises either during hiring or retention and may be biased against them if they do engage in negotiation (Amanatullah & Morris, 2010). Meta-analyses show that women negotiate less than men do (Kugler et al., 2018), either because they are aware of the potential backlash associated with doing so (an interpersonal explanation) or because they are not comfortable advocating for themselves

(an intrapersonal explanation). Other studies find that women negotiate just as much as men, but are less likely to have their requests granted (Artz et al., 2018), suggesting that women may receive feedback over time that negotiation efforts are not worth it. Women are also less likely to receive outside job offers than men, which can result in fewer “retention offers” from their home university that increase salaries over time. This may be because other schools are less likely to seek out women to “poach,” because women are less likely to apply for these jobs, or because their home universities are less likely to put up the money to retain them. It’s worth noting that women are also granted less financial support outside of salaries when compared to men. In the biomedical sciences, men receive 2.5 times more in start-up funds than do women (Sege et al., 2015), which could alone lead to the discrepancies in productivity and grant receipt that may exacerbate the gender pay gap over time.

Our personal experiences of gender differences in impact and finances are varied. On the one hand, we feel lucky to be well-remunerated for the work that we love doing. On the other hand, we are aware of ways in which there has not been gender equality in our pay and we have experienced “equity adjustments” to our salaries.

Lindquist: As we reviewed above, men self-cite more than women and their impact is increased for doing so. I happen to self-cite a fair amount because I cite my own theoretical approach (which rightfully, is driving my empirical work). Yet I have been told by reviewers that I self-cite too much. I often wonder, do men ever get this comment during review given that we know empirically that they cite themselves more?! I somehow doubt it . . .

Gruber: Similar to Lindquist, my work falls within a subfield where only a small number of authors do similar work to our lab. In these cases, you’re penalized if you cite your own work. But the alternative – not citing one’s own work to support a claim or next-step study – is inappropriate and even intellectually dishonest. Yet we are encouraged to cite others’ work disproportionately to our own as women. I have wondered what the proposed alternative is – wait for other (male) colleagues to publish their work first for us to cite in place of our own work?

Bliss-Moreau: One of the major challenges that women face is the lack of transparency around salary and remuneration and social norms that suggest that asking others directly about those things is a major faux pas. At least for me, it has been hard to know what to ask for without knowing what is reasonable (perhaps this is a particularly female concern?) and it is here that working for a public university has major benefits. Our salaries are public (although the numbers in the public database are often not perfectly accurate), which provides a solid starting place for negotiation and also provides data by which the institution is held accountable for equity. When I was first hired, I looked up men and women with similar CVs and argued that my starting salary should be increased based on how much those other people were making. I was told no, that I wouldn’t be compensated more, and ultimately signed my offer. A few months later, I got an email indicating that my record had been reviewed as part of an equity review (an internal process that we have to ensure equity in pay and ladder step across faculty) and my salary had been increased – to basically the value for which I’d asked. Had I not

had access to data about other people's salaries, I probably would not have asked. And, had there not been a system in place for accountability, I probably would not have received the salary bump.

Mendle: I've had some complicated dialogues over how to spend my start-up or other research funds, even for the most mundane or necessary of purchases. Again, as Lindquist says, it's easy to find an alternative, non-gendered explanation, yet I've sometimes wondered if my male colleagues have had as much pushback over similar issues or if the pushback is phrased in the same way. I've repeatedly been asked "are you sure that's a wise choice?" about everything from participant compensation to the number of computers in my research lab.

5. The Really Bad News

You thought it couldn't get worse, right? Well, here's the really bad news: Overt sexual harassment, sexual assault, and racism still exist in academic Psychology (and really everywhere, #MeToo, but there is the sense that psychologists should be better about this given what we study). Recent high-profile lawsuits and resignations (e.g., www.nytimes.com/2019/08/06/us/dartmouth-sexual-abuse-settlement.html; www.sciencemag.org/news/2020/03/university-rochester-and-plaintiffs-settle-sexual-harassment-lawsuit-94-million; www.phillyvoice.com/penn-professor-kurzban-resigns-sexual-misconduct-allegations-relationships-students/) have made clear that gendered power dynamics still exist in some Psychology departments. In most of these alleged cases, men were senior professors and women were junior professors or students, suggesting that gender and power may interact to create an environment that is psychologically manipulative, or even dangerous for women. The problem with these behaviors is that many go unseen by others. As we reviewed in Gruber et al. (2021), climate surveys suggest that anywhere from 28 percent to 60 percent of women ranging from undergraduates to faculty have experienced some form of sexual harassment in an academic setting.

In the same vein, there is increasing acknowledgment that Psychology departments – and the field at large – remains racist and non-inclusive towards BIPOC scholars and others from identities under-represented in STEM (e.g., <https://news.stanford.edu/2020/06/24/psychological-research-racism-problem-stanford-scholar-says/>). For instance, the majority of Psychology journals fail to report on topics related to race, are not performed by diverse scholars, and do not study diverse populations (Roberts et al., 2020). Taken together, sexism and racism make BIWOC especially likely to face hurdles in Psychology.

We outlined some of our anonymized experiences of sexual harassment at the outset of this chapter and a few of us have been willing to bring up certain experiences in our non-anonymized comments. In reality, this advice is best given in person, so please catch us some time and we'll tell you how we dealt with our various experiences. The long and the short of it is that we hope you do not ever experience sexual harassment, racism, or some other form of discrimination as part of your job. But you may, and so know what your options are for legal

recourse (if you decide to go that route), for making sure that your workplace is safe and productive for you, and for how to engage in self-care.

6. What To Do About It?

Lest we leave you feeling demoralized about our field, it is important to note that the problems that women in Psychology face are not unique to Psychology (yes, that was an attempt to make you feel better . . .!). That is to say, there are certainly fields where it is just as fraught to be a woman, and fields where women are still in the large minority. As the #MeToo movement showed in 2017 and beyond, gender disparities and sexual harassment and violence are still rampant in many places (including workplaces). The backdrop of the recent race protests, Black Lives Matter movements, and #blackintheivory movement should highlight that gender disparities interact with the racism that still persists in the US and the world; the academy is not free of this racism. We believe that the only reason that Psychology's problems are interesting is because – well, as a field, we should really know better than say, Physics. As a field, we study human behavior and these disparities are a human behavior problem. Some in this field even study topics particularly relevant to these issues such as gender, stereotypes, productivity, family planning, etc. Many of us joined this field because we were interested in increasing people's well-being or understanding rampant social issues. We know, at least academically, what the issues are and thus should be well positioned to either develop or have the tools to fix these problems.

We suggest a number of evidence-based paths forward in Gruber et al. (2021). They include (1) ways that universities and departments can raise awareness and take stock of these disparities among their faculty and students, (2) ways to ensure that women are equally considered for jobs and other career opportunities such as colloquium invitations, (3) ways to increase transparency about finances that predict gender parity, (4) addressing work–family conflict, (5) equalizing service, (6) becoming aware of and confronting gender bias when it occurs, (7) allowing under-represented women to succeed, (8) increasing mentoring opportunities and a sense of belonging for women, and (9) addressing harassment in the workplace. We suggest you have a look at these and think about how you might implement them with your own mentors, collaborators, and department. As you move forward in your career, we hope you will take these with you and help shape the departments that you eventually join as faculty.

We'll close with our most targeted piece of advice – the thing that you can do to help carry these ideas forward. And that is *persist*. Survive. And when you can, thrive. Don't get us wrong, if at some point during your training, you think “this is not for me,” that is OK. Everyone feels that at some point. And if in your heart of hearts, you don't want to pursue this career, you shouldn't. Many people (women and men alike) decide that an academic career is not for them and go on to have fulfilling, productive careers elsewhere. But when you feel that way (and you will at some points), take a step back and question why. Reach out to a trusted mentor (heck, reach out to one of us) and we will tell you that this too shall pass.

We know that it can be extremely difficult to be a woman in this field; it may be especially difficult to be a woman who identifies with another under-represented identity in Psychology. But think about it this way – the more diverse our field is, the more people coming up through the ranks will see people like them doing this, and the more likely they will feel that they can do it too. And that diversity will ultimately contribute to better science.

REFERENCES

- Alper, J. (1993). The pipeline is leaking women all the way along. *Science*, *260*, 409–411. doi:10.1126/science.260.5106.409
- American Psychological Association, Committee on Women in Psychology. (2017). The changing gender composition of psychology: Update and expansion of the 1995 task force report. Retrieved from www.apa.org/pi/women/programs/gender-composition/task-force-report.pdf
- Amanatullah, E. T., & Morris, M. W. (2010). Negotiating gender roles: Gender differences in assertive negotiating are mediated by women's fear of backlash and attenuated when negotiating on behalf of others. *Journal of Personality and Social Psychology*, *98*, 256–267. doi:10.1037/a0017094
- Artz, B., Goodall, A. H., & Oswald, A. J. (2018). Do women ask? *Industrial Relations: A Journal of Economy and Society*, *57*, 611–636. doi:10.1111/irel.12214
- Bareket-Shavit, C., Goldie, P. D., Mortenson, E., & Roberts, S. O. (in preparation). Gender Inequality in Psychological Research. Manuscript in preparation.
- Brower, A., & James, A. (2020). Research performance and age explain less than half of the gender pay gap in New Zealand universities. *PLoS One*, *15*(1), Article e0226392. doi:10.1371/journal.pone.0226392
- Carter-Sowell, A. R., Dickens, D. D., Miller, G., & Zimmerman, C. A. (2016). Present but not accounted for: Examining how marginalized intersectional identities create a double bind for women of color in the academy. In J. Ballenger, B. Polnick, & B. Irby (Eds.), *Research on Women and Education Series. Women of color in STEM: Navigating the workforce* (pp. 181–200). Charlotte, NC: Information Age Publishing.
- Ceci, S. J., Ginther, D. K., Kahn, S., & Williams, W. M. (2014). Women in academic science: A changing landscape. *Psychological Science in the Public Interest*, *15*, 75–141. doi:10.1177/1529100614541236
- Dworkin, J. D., Linn, K. A., Teich, E. G., Zurn, P., Shinohara, R. T., & Bassett, D. S. (2020). The extent and drivers of gender imbalance in neuroscience reference lists. *Nature Neuroscience*, *23*, 918–926. <https://doi.org/10.1038/s41593-020-0658-y>
- Geiger, A. W., Livingston, G., Bialik, K. (2019, May 6). Six facts about U.S. moms (Analysis of American Time Use Survey Data). Pew Research Center. Retrieved from www.pewresearch.org/fact-tank/2019/05/08/facts-about-u-s-mothers/
- Guarino, C. M., & Borden, V. M. H. (2017). Faculty service loads and gender: Are women taking care of the academic family? *Research in Higher Education*, *58*, 672–694. doi:10.1007/s11162-017-9454-2
- Guy, B., & Arthur, B. (2020). Academic motherhood during COVID-19: Navigating our dual roles as educators and mothers. *Gender, Work and Organization*, *27*, 887–899. doi.org/10.1111/gwao.12493
- Gruber, J., Mendle, J., Lindquist, K. A., Schmader, T., Clark, L. A., Bliss-Moreau, E., Akinola, M., Atlas, L., Barch, D. M., Barrett, L. F., Borelli, J. L., Brannon, T. N., Bunge, S. A., Campos, B., Cantlon, J., Carter, R., Carter-Sowell, A. R., Chen, S., Craske, M. G., ... Williams, L. A. (2021). The future of women in psychological science. *Perspectives in Psychological Science*, *16*, 483–516. doi: 10.1177/1745691620952789

- Hechtman, L. A., Moore, N. P., Schulkey, C. E., Miklos, A. C., Calcagno, A. M., Aragon, R., & Greenberg, J. H. (2018). NIH funding longevity by gender. *Proceedings of the National Academy of Sciences*, *115*, 7943–7948. doi:10.1073/pnas.1800615115
- Hengle, E. (2020). Publishing while female. Are women held to higher standards? Evidence from peer review. Retrieved from: www.erinhengel.com/research/publishing_female.pdf
- King, M. M., Bergstrom, C. T., Correll, S. J., Jacquet, J., & West, J. D. (2017). Men set their own cites high: Gender and self-citation across fields and over time. *Socius: Sociological Research for a Dynamic World*, *3*, 1–22. doi:10.1177/2378023117738903
- Kugler, K. G., Reif, J. A. M., Kaschner, T., & Brodbeck, F. C. (2018). Gender differences in the initiation of negotiations: A meta-analysis. *Psychological Bulletin*, *144*, 198–222. doi:10.1037/bul0000135
- Leslie, S. J., Cimpian, A., Meyer, M., & Freeland, E. (2015). Expectations of brilliance underlie gender distributions across academic disciplines. *Science*, *347*, 262–265. doi:10.1126/science.1261375
- Lindquist, K. A., Gruber, J., Schleider, J. L., Beer, J. S., Bliss-Moreau, E., & Weinstock, L. (2020, November 25). Flawed data and unjustified conclusions cannot elevate the status of women in science. <https://doi.org/10.31234/osf.io/qn3ae>
- Magua, W., Zhu, X., Bhattacharya, A., Filut, A., Potvien, A., Leatherberry, R., Lee, Y.-G., Jens, M., Malikireddy, D., Carnes, M., & Kaatz, A. (2017). Are female applicants disadvantaged in National Institutes of Health peer review? Combining algorithmic text mining and qualitative methods to detect evaluative differences in R01 reviewers' critiques. *Journal of Women's Health*, *26*, 560–570. doi:10.1089/jwh.2016.6021
- Mason, M. A., Wolfinger, N. H., & Goulden, M. (2013). *Do babies matter? Gender and family in the ivory tower*. Piscataway, NJ: Rutgers University Press.
- Minello, A. (2020). The pandemic and the female academic. *Nature*. doi.org/10.1038/d41586-020-01135-9
- Minello, A., Martucci, S., & Manzo, L. K. (2021). The pandemic and the academic mothers: Present hardships and future perspectives. *European Societies*, *23*(Suppl. 1), S82–S94. doi.org/10.1080/14616696.2020.1809690
- National Science Foundation, National Center for Science and Engineering Statistics. (2014). Survey of doctorate recipients, 2013. Retrieved from <http://ncesdata.nsf.gov/doctorate-work/2013/>
- Odic, D., & Wojcik, E. H. (2020). The publication gender gap in psychology. *American Psychologist*, *75*, 92–103. doi:10.1037/amp0000480
- Roberts, S. O., Bareket-Shavit, C., Dollins, F. A., Goldie, P. D., & Mortenson, E. (2020). Racial inequality in psychological research: Trends of the past and recommendations for the future. *Perspectives on Psychological Science*, *15*(6), 1295–1309. doi:10.1177/1745691620927709
- Sege, R., Nykiel-Bub, L., & Selk, S. (2015). Sex differences in institutional support for junior biomedical researchers. *Journal of the American Medical Association*, *314*, 1175–1177. doi:10.1001/jama.2015.8517
- Witteman, H. O., Hendricks, M., Straus, S., & Tannenbaum, C. (2019). Are gender gaps due to evaluation of the applicant or the science? A natural experiment at a national funding agency. *The Lancet*, *10171*, 531–540. doi:10.1016/S0140-6736(18)32611-4
- Wood, W., & Eagly, A. H. (2012). Biosocial construction of sex differences and similarities in behavior. In J. M. Olson & M. P. Zanna (Eds.), *Advances in experimental social psychology* (Vol. 46, pp. 55–123). New York: Academic Press. doi:10.1016/B978-0-12-394281-4.00002-7
- Zimmerman, C. A., Carter-Sowell, A. R., & Xu, X. (2016). Examining workplace ostracism experiences in academia: Understanding how gender differences in the faculty ranks influence inclusive climates on campus. *Frontiers in Psychology*, *7*, Article 753. doi:10.3389/fpsyg.2016.00753