

COMMENTARY

## Changing times, changing resources: Starting a family as a graduate student

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Over the past few decades, women have increasingly attained educational and employment opportunities that were previously unavailable to them (Van de Kaa, 1987). Gabriel and colleagues (2022) demonstrate that there is insufficient support for pregnancy, motherhood, and child caregiving despite the growing number of female faculty in academia. Although we applaud and agree with the many points raised by Gabriel et al. (2022), one overlooked perspective is how female graduate students experience starting a family while pursuing their academic careers. Depending on individual career trajectory, graduate education often coincides with the ideal time for starting a family. The graduate student population forms the backbone of higher education as instructors and researchers. Therefore, to understand the systemic disadvantages faced by women in academia, graduate students must be included in the discussion. In our commentary, we discuss how perspectives on career pursuit and family planning have evolved, including changes in culture and societal expectations, increased access to higher education for women, and technological advances in family planning. Following that, we discuss the challenges female graduate students may face when starting a family, such as limited financial resources and support. After examining how these challenges can negatively impact academic and professional performance, we suggest some accommodations and resources that may help address the concerns raised.

### Career pursuit and family planning: then and now

To gain a deeper understanding of how graduate students view pursuing parenthood and their careers, it is essential to understand how the social context has changed over the past half-century.

#### **Cultural shift and societal expectations**

In the 1970s, extended families and religious organizations that once strongly shaped family behavior became less influential (Bianchi, 2014). The second demographic transition theory posits that the departure from traditional values, norms, and ideologies toward individuality and self-actualization resulted in increased autonomy in decision-making (Van de Kaa, 1987, 2001; Mills et al., 2011), leading to a shift in fertility attitudes. As a result, American society underwent extensive changes in gender roles, where women entered the workforce at a higher rate, married less frequently, and had children later in life (Goldin, 2004). As women's contributions to the labor force and education increased, their traditional, solely domestic roles became less viable (Bianchi, 2014). In 2010, one-in-seven US babies were born to mothers 35 years or older, compared to one-in-eleven in 1990 (Livingston & Cohn, 2010). The shift from patriarchal values to gender equity-oriented values likely influenced women's decision to start families later in life.

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### **Increased access to education**

Between the 1970s and 2000s, a dramatic increase in women pursuing higher education prevailed (Goldin, 2004). In 1966, women earned 12% of all doctorates (Mason et al., 2013); however, in 2019, they earned 53% of all doctorates awarded in the U.S., marking the ninth consecutive year in which they earned more doctorates than men (Zhou & Okahana, 2019). Studies have shown a link between education and later childbearing, even when accounting for family environment and parental characteristics (Neels et al., 2017). Women pursuing tertiary education tend to delay their first child's birth by nine months each year (Gerster et al., 2014; Rindfuss et al., 1980). Despite no evidence that education *causes* women to delay childbearing, professional aspirations related to higher education attainment may delay parenthood. Women may postpone starting families until they are well established in their careers since juggling professional and maternal roles is time consuming and labor intensive (Becker, 1991).

### **Medical and technological innovations**

During the 1960s, the Food and Drug Administration (FDA) approved synthetic progesterone as an oral contraceptive, giving women greater control over their reproductive systems (Bailey, 2006). With technological advances like contraceptives, in vitro fertilization (IVF), freezing eggs, and surrogacy, women can now plan their lives around academic and career goals (Kneale & Joshi, 2008). Despite declining abortion rates nationwide, the proportion of abortion patients who are students has increased (Jerman et al., 2016). In 2014, 24% of abortion patients in the U.S. attended school, with 66% having college experience or a degree. Abortion may become more popular as a family planning method among female graduate students. Altogether, cultural shifts in fertility attitudes and gender roles, along with increased access to education and medical advances, have contributed to women's later childbearing.

### **Starting a family: Challenges faced by graduate student mothers**

Despite social and technological advances that offer women greater control over attaining their career/academic and family goals, financial hardships and limited support and resources prevent graduate student mothers from successfully balancing different domains of their lives.

### **Financial challenges**

One of the most imposing challenges for graduate students starting a family is their relative financial disadvantages in academia. Having a family is extremely costly in the U.S., with simple child-birth costing \$3,296 to \$37,227 and a cesarean section costing \$8,312 to \$71,000 (Hsia et al., 2014). Alternative pregnancy methods, such as IVF or surrogacy, are even more expensive, costing \$12,531 per treatment (Teoh & Maheshwari, 2014). Afterward, it costs an average of \$16,800 annually to raise a child from birth to age 17 (USDA, 2017). Such a prohibitive cost is problematic because the average graduate school stipend is only \$41,170, with some as low as \$20,000 (Bove, 2022). Although the low wages of graduate students affect both genders, women are at a particular disadvantage due to gender segregation between academic fields. In particular, liberal arts programs, which tend to be more female dominated, typically offer the lowest stipends, ultimately highlighting the income gap (Perry, 2020). Similarly, adjunct teaching jobs do not offer graduate students sufficient financial security due to the low salary they receive (Halcrow & Olson, 2011). This is concerning as approximately 45% of graduate students consider dropping out because of inadequate funding (Woolston, 2022). Therefore, female graduate students may have difficulty building the financial safety net they need to raise a family.

### **Limited support/resources**

Managing coursework, assistantship responsibilities, and degree requirements while raising a child can be challenging (Gerber, 2005; Jirón-King, 2005). Graduate students with children spend 102 hours a week on their work and nonwork responsibilities, compared to graduate students without children, who spend 75 hours (Mason, 2006). With insufficient work–family policies offered by universities, this work overload can be particularly stressful for graduate students who are parents. Academic success and raising a family seem incompatible, so graduate students are often forced to choose between the two (Grummell *et al.*, 2009). Although many academics manage to juggle both domains, it is still an additional challenge to academic and career success that nonparents do not face.

The lack of available family-friendly policies also poses challenges for graduate students (Ahmad, 2017). Unfortunately, few official policies support parents who are graduate students (Springer *et al.*, 2009). Most graduate programs do not offer paid maternity leaves, childcare support, health insurance, or flexible spending accounts for dependents. Graduate students often perceive university policies as only designed to help faculty parents (Kennelly & Spatler-Roth, 2006). As a result, the primary advisor may be the only source of support for graduate students, which is problematic since a lack of consistent advisor support is one of the biggest obstacles graduate students face (Ehrenberg *et al.*, 2007). The only option graduate students have is to request a leave of absence since most do not qualify for the Family Medical Leave Act (FMLA; Springer *et al.*, 2009). Taking a leave of absence, however, can impede graduate students' progress, as well as jeopardize their already precarious financial situation due to its unpaid nature. Therefore, the different completion rates between parent and nonparent graduate students may be explained by a lack of family-friendly academic environments (Lovik, 2004). Graduate directors and faculty may also not understand the demands of graduate students who are parents (Springer *et al.*, 2009) and, therefore, offer less flexibility. Female graduate students may feel that their university does not foster a supportive environment for parents, preventing them from having children (Maxwell *et al.*, 2019). In the next section, we will discuss the impact of these challenges on academic and professional performance.

### **Impact of challenges on academic/professional performance**

Career initiation and advancement occur during women's most fertile years (20s–30s). Although state and federal laws prohibit employment discrimination based on pregnancy, it persists, sometimes due to biases such as incompetence, the need for accommodations, or a lack of commitment (Kohl *et al.*, 2005; Hebl *et al.*, 2007; Ellemers, 2014). Title IX of the Education Amendments Act of 1972 prohibits gender discrimination in higher education, including pregnancy and parental status (Mason & Younger, 2014). Despite the passage of Title IX nearly 60 years ago, discrimination against pregnant students remains common (McNee, 2013). California is the only state in the U.S. that provides added protections for pregnant students, requiring colleges and universities to provide written policies on pregnancy discrimination and how to file complaints (California State Assembly, 2014).

Graduate students who are parents, regardless of pregnancy status, may have greater difficulty earning career achievements, such as publications, conference presentations, and fellowships, compared to their nonparent peers (Kulp, 2020). Those planning to start families, pregnant, or with children may be concerned about negative perceptions and mistreatment from faculty and their peers. For instance, doctoral students have reported facing microaggressions while pregnant (Yalango, 2019). In light of the aforementioned challenges outlined, it is not surprising that graduate students with and without children attain different professional outcomes. Compared to students without children, graduate students with children are significantly less likely to enter research universities and receive doctorates (Thomas-Long, 2001; Lovik, 2004). Postgraduate students are shifting away from careers as professors with a strong research emphasis as they seek a better work-life balance (Mason, 2006). The National Center for Education Statistics (NCES) reports that graduate students who are also mothers are at a higher risk of attrition than nearly any other group in the American

Academy (Gardner, 2008; Lynch, 2008). The challenges faced by women at every stage of their careers severely impact their performance and satisfaction, and it is up to the institution to offer support and address these concerns. The next section highlights potential solutions educational institutions can use to create a nurturing and supportive environment.

### Suggested policies and accommodations

Pursuing a graduate degree and starting a family pose numerous challenges for female graduate students. As previously mentioned, financial obstacles can prove to be a major barrier for graduate students contemplating or in the process of starting a family. By providing childcare support for graduate students, universities can reduce parents' workload and stress. In addition, graduate students can benefit from flexible spending accounts for dependent care costs, a common benefit among faculty and staff in academia.

Universities can also consider implementing environmental accommodations for pregnant women, such as providing handicapped and assistive care restrooms, accessible parking spaces, private breastfeeding, pumping, and diaper-changing areas. For graduate students who are in the process of becoming or are already parents, increased flexibility and time for assignments, examinations, and other graduate school milestones can reduce temporal stressors. In addition, graduate students can benefit from class times sensitive to childcare schedules, taking leave without repercussions, and flexible deadlines.

Taking maternity leave is crucial for maternal and children's physical and psychological health outcomes (Gault et al., 2014). Only 26% of U.S. universities offered maternity leave policies in 2007, with only 10% offering financial compensation during the leave (Mason, 2006). Because graduate students are not eligible for unpaid maternity leave under FMLA, academic institutions may consider implementing paid maternity leave policies that allow female graduate students to take maternity leave without responsibilities so they can recover and spend valuable time with their newborns.

Additionally, policy changes can be implemented. Women often face backlash when they request resources (Wade, 2001; Tinsley et al., 2009); however, this can be avoided if requesting resources becomes normalized. Rather than requiring graduate students to request accommodations or "opt-in" to them, accommodations can be automatically provided and declined if they wish. Furthermore, pregnant women often experience higher rates of harassment (Reuter, 2005). In academia, graduate students often have less autonomy than their faculty counterparts; thus, pregnant graduate students may be subjected to greater negative mistreatment by their advisors or administrators. It is, therefore, essential that universities enforce a strict policy against the harassment of pregnant women.

Mentorship and support structures can also help ease the transition to parenthood. Potential parents may be allowed to ask confidential questions to a third party without fear of repercussions. Additionally, female graduate students may benefit from a safe person or support group for disclosing their pregnancy status, learning about resources, and understanding Title IX and federal policies. Furthermore, formal policies do not always prevent stigma or harassment, despite being a step in the right direction. Bias training programs can incorporate training on pregnancy, motherhood, and family formation to combat these stigmas. Instead of assuming a woman's partner is present or their gender, universities can adopt policies inclusive of all identities. Policies can incorporate adoption, surrogacy, and fertility treatments but also consider disparities associated with race and income (Braveman, 2012). To achieve gender equity, administrators must pay attention to women's concerns at all career stages and be intentional in policy and practice.

### Conclusion

Extending the ideas proposed by Gabriel et al. (2022), we argued that addressing systemic disadvantages faced by women in academia must begin with graduate students, who often begin their

academic careers during their prime time to start a family. Although recent social and technological shifts have better enabled women to pursue academic careers and motherhood simultaneously, female graduate students face especially daunting challenges juggling demands from both domains due to limited resources. Only when the beginning of the academic pipeline is adequately supported can we achieve gender parity within academia.

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