ADVANCE-PURDUE

Women Faculty Success and Work/Family Balance: An Issues Paper

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Introduction

During the decades of the 1960s and 1970s, American women entered the workforce at an unprecedented pace (Thorton and Young-DeMarco, 2001). Concomitantly, educational enrollments, especially in doctoral and professional programs, rose dramatically (Mason and Goulden, 2002). Historically, academe was exclusively male, and women entering these institutions were faced with policies that did not take into account the challenges women face with regards to traditional gender expectations. Although there have been changes in policies governing equal opportunity within the workforce, women face challenges derived from that fact that they have a distinct biological difference from men -- childbirth, making "equal to men" a difficult issue (Kessler-Harris, 2007).

According to the National Science Foundation (2007: 2):

Although women earn half of the bachelors' degrees in science and engineering, they continue to be significantly underrepresented in almost all science and engineering fields, constituting 29 percent (in 2003) of doctoral science and engineering faculty in four-year colleges and universities and only 18 percent of full professors. Women from minority groups are particularly underrepresented in science and engineering, constituting approximately 3 percent of science and engineering faculty in four-year colleges and universities.

The attrition of women from assistant professors to full professors is many times referred to as a leakage in the academic pipeline (Mason, et al., 2005). Understanding this disparity has become increasingly important as there is a need to retain the most talented scientists and engineers in order for the U.S. to remain innovative and cutting edge (American Council of Education, 2009). To rise to the challenge of attracting the pool of "brightest" academics, which includes women who make up 50% of recent doctoral recipients, institutions have begun to review their policies and practices in an attempt make academia more family-friendly.

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This paper will address the attrition of women from PhD to full professor in Science, Technology, Engineering, and Mathematics (STEM) disciplines. It draws on the balance-to-work family literature with a focus on three family-friendly policies used by many institutions: tenure clock stoppage, paid parental leave, and childcare.

Academic Pipeline

The pipeline metaphor is often used to illustrate the phenomena of the attrition of certain groups of academics. For women, they seem to "leak" through the pipeline from PhD to full professorship. There is also an earlier leakage that occurs following graduation in STEM. For more details see Lowell, Salzman, Bernstein, and Hennderson. One reason attributed to this leakage for women is due to traditional gender expectations. Mason, et al. (2005), using a national Survey of Doctorate Recipients found that married women either with and without children are the least likely of all doctorate recipients to secure a tenure-track faculty position. Having families is not necessarily conducive to academic life. This is especially true for women in the STEM disciplines.

Mary Ann Mason (2008: 40) examined the experiences of pregnant women and mothers in science. She found:

Discrimination against job candidates who are pregnant or have children is a very real part of gender discrimination. Some scientist may believe that women who have families cannot be serious scientists because academic science demands exclusive attention to research. But they do not hold the same beliefs about male scientists with kids. In fact, research shows that male scientists are far more likely to have children than female scientists; two years after their PhD's, nearly 50 percent of men, but only 30 percent of women had children.

Studies have shown that taking leave after birth of a child is detrimental to a faculty member's career (Perna, 2001; Mason and Goulden, 2004). According to Mason and Ekman (2007: 18): "Women's early departure from a university research career is dramatic, and is nearly always driven by family concerns." Significantly, their study indicated that single women are as likely as men to obtain academic careers.

A study by the Committee on Gender Differences in the Careers of Science, Engineering, and Mathematics Faculty, Committee on Women in Science, Engineering and Medicine, and in conjunction with the National Research Council (2009), found that those who stopped the tenure clock spent a longer time being an assistant professor by 17 months. The culture of the academy has not been receptive to formal family friendly policies. Even when universities enact formal policies "faculty members can suffer career penalties for using policies designed to help them balance work and family commitments" (Drago, et al., 2009: 22). The biases of deans and department heads may discourage the use of these policies, and faculty members choose more informal methods that do not allow them the advantage of formal policies (Colbeck and Drago, 2005;

Drago, et al. 2005; Ward and Wolf-Wendel, 2006). Can family friendly-policies and practices be a way to plug the leaks in the academic pipeline for women?

The Balancing Act

Balancing work life and family life continues to be a challenge discussed in the literature. The desire to "have it all" (career and family), and the time needed for a woman to fulfill both occupational and homemaker roles can often cause role conflicts. Strategy studies focus on how women and men manage this balancing act.

Reynolds (2005) found that women were more willing than men to reduce their work hours to accommodate the needs of the family. In their study of professional women's career paths, Williams and Han (2003) found that women were more likely than men to identify job changes due to family situations. Further, women who had stable careers with little change, and husbands who had many career changes, were more likely to be childless. Thus, women tend to be the partner whose careers are most likely affected by the demands of family life.

Jacobs and Gerson's (2007) study support these findings. They found that dual-earner couples from middle-class families employ specific strategies during their life course. They found three different patterns of what was considered *scaling-back*, namely: 1) placing limits on time worked, 2) one person staying home while the other worked, and 3) "trading off," involves which parent will have the job opportunities, or which parent has to make sacrifices when specific life course events occur, such as having a baby or caring for an elderly parent. Scaling back strategies not only involve career decisions but also limit the number of children that couples have, social commitments, and leisure time. The most significant gender difference the authors found was that women, more than men, had to employ these scaling-back strategies throughout all life-course stages.

Altucher and Williams (2003) found that the most profound strategies that couples use are controlling when to have children and how many children they have. The current trend is to have no or few children. Wilson (2009), using a national study of professors in Chemistry and English, found that female professors on average have 0.66 children compared to the American average of two children. Significantly, Mason and Goulden (2002) found that a man with a baby in the early career stage was more likely to secure tenure than a woman with a baby. Strategies which limit or require careful timing of when to have children is due to the institutional culture that shape women's strategies regarding childbirth.

Patterson (2008: 16) points out that "time and biology are the uncontrollable culprits." The average age for a woman receiving her PhD is thirty-three. The tenure clock usually runs six years. Thus, when doing the math it is evident that for women, tenure occurs when the risks of pregnancy become higher. Unsurprisingly, Mason and Goulden (2002: 10) found, "Women in science who achieve tenure are twice as likely as men to be single."

This is also true for women in the social sciences and humanities. Philipsen's (2008) study of women in academe, found that many women feel that having a spouse or children would impede their opportunities. One woman they interviewed expressed irritation at having to choose her career over having a family due to the "tenure or nothing" approach in her job.

Mason, Goulden and Frasch (2009) surveyed 19,000 doctoral students from the University of California campuses and found that PhDs preparing to enter the academic market were concerned about the pressures associated with tenure-track positions. Many respondents did not want the "lifestyles of their advisers or other faculty in their departments" (Mason, Goulden, and Frasch, 2009: 1). According to many of the respondents, the academic fast track at research-intensive universities has a "bad reputation" for not allowing faculty to have personal lives. The authors explain that the new generation of doctoral students made up of equal numbers of men and women desire flexibility and work/life balance. However; "...changes to the structure and culture of academia have not kept pace with these major shifts; assumptions about the notion of the 'ideal worker' prevail, including a de facto requirement for inflexible, full-time devotion to education and employment and a linear, lockstep career trajectory" (Mason, Goulden, and Frasch, 2009: 1). Even more importantly, female doctoral recipients are disproportionately following alternatives to tenure-track positions. These women may turn to adjunct and contingent faculty work or exit the academy all together (Wolfinger, Mason, and Goulden, 2009).

Although tenure-track academics enjoy autonomy not necessarily present in other prestigious professions, they are accountable for significant pressures of scholarship, teaching, and committee work and the "up or out" mentality of the academy (Philipsen, 2008). Solomon (2008) conducted interviews of untenured assistant professors concerning their work/life management from two large research universities in the northeast. The study focused on the "star" ideology associated with tenure-track and tenured faculty positions. Solomon contends that the star ideology actually sets the expectations for faculty. These expectations include working hard and working long hours. Many are left with little or no time for families. According to Hochschild (1991), there is a blurred line between work and family. The two cannot be separated, making it difficult to ever truly find a balance between work and family.

Even with women's careful planning and equal ambition, men continue to dominate certain professions, academia being one of those professions especially at senior positions. Women do hold a number of high-powered positions in academe, but they generally remain underrepresented in the higher prestige and income positions. Further, the work/ family relationship is more likely to affect women negatively due to traditional gender expectations.

For these reasons, many universities are attempting to develop more family-friendly policies to remain competitive in recruiting and retaining the most talented academics. The Family Medical Leave Act (FMLA) sets forth a federal mandate which allows employees twelve weeks leave in a year without penalty of losing one's position. The more popular family-friendly work policies in academia accord some paid parental leave, tenure clock stoppage, and childcare.

Need for Changes

Comparatively, policies nationwide vary from university to university. Currently, many studies have begun to address the need for policy changes in the academy to accommodate family issues. Some are as bold as the need to change the tenure system altogether (Curtis, 2004; American Council on Education: Office of Women in Higher Education, 2005; Philipsen, 2008). The contention is that the tenure system is no longer advantageous for the current state of higher education. With women earning doctoral degrees equal to men, women continue to have high attrition rates, especially in the STEM disciplines, due to traditional gender expectations, especially in their role as caregivers. For these reasons, the entire system encourages bias against women whether or not they have children.

A pointed problem with FMLA is that it does not cover an entire semester. FMLA is not consistent with the academic timetable of a 16-week semester, especially at universities that are runs on a semester-by-semester basis. To overcome this dilemma, many departments use informal plans to cover teaching and committee work relief when a faculty member is on leave. These types of informal "deals" can be inequitable to other faculty members who may not have negotiated a better deal. Further, the stigma attached to taking time off can equate to not being a serious academic.

Family-friendly policies many times fail to acknowledge parenting is a life-long event. Children get sick, have time off school, and sometimes need more attention from their parents. The policies do not account for the series of life events such as taking care of a sick child or elderly parents that compel an employee to take on less responsibilities or time off from work which include events. Since women are still considered the primary caregivers, they will continue to have difficulties balancing work and family under current institutional conditions and gender understandings.

The American Council on Education (2009) describes the many structural hurdles, such as tenure and promotion policies, that faculty need to overcome. The Council goes to indicate that the traditional model of academe specifically affects women and people of color. How one ascends the academic ladder often depends on the policies and practices of the university. Mason and Goulden (2004) contend that to eliminate gender inequity in balancing family and career, the academy will have to restructure the work place through policies and practices. These changes include being able to stop the tenure clock for childbirth, give ample childbirth leaves, allow for reduced duties, and have on-site child care.

Policies

Many universities offer some policies to help their faculty balance work and family. They are typically cost-effective.

Stopping the Tenure Clock

According to Mason and Ekman (2007), most universities and colleges will offer a stop in the tenure clock. This policy allows women to take a pause while working up the tenure ladder without penalty. Stopping the tenure clock is the least costly policy which can be enacted by an institution. However, Mason and Ekman point out that many women are concerned about taking advantage of this policy. As one assistant professor commented in their study, "I know that when it comes time for tenure they will just count my publications and divide by years—they won't care about the year when they are supposed to stop the clock" (p. 63).

Another concern pertains to the "mommy track," which usually refers to women who have less time for their careers due to their care duties as wives and mothers (Cummins, 2005). Bhattacharjee (2004) examines two major university studies that indicated women fear taking tenure clock extension. Only one third of eligible faculty members took advantage of the tenure clock extension policy at one university. At the other university, only seven out of forty-eight took advantage of the policy. These studies indicate the significance of cultural and institutional norms which discourages women faculty, especially those in the sciences, from using this policy when it is negatively associated with not taking their careers seriously.

Paid Parental Leave

The FMLA mandates an employer to allow an employee (albeit only employers with 50 or more employees) twelve months leave in the event of birth of a baby, an illness, or to care for a sick immediate family member. FMLA does not require the employer to pay the employee for any of the leave time, which makes it very difficult for most workers to make use of leave policies. Allowing for some paid parental leave can alleviate the challenge of taking time off for life events.

Paid family leave nonetheless varies from university to university. Commonly, adoptive parents will be included in parental leave policies. At the bottom of the ladder, new parents must use accrued paid sick days and holidays to cover time off. For women, more often than not, the mere physical act of giving birth requires time off to recover. Research has also indicated that child-parent bonding is optimal when both parents can be with an infant. Using accrued paid sick days and holidays may not be enough to cover the time needed for recovery and bonding. Some universities have chosen to acknowledge the special need for a parent-- again especially the mother-- the time to recover from childbirth and to bond with a new baby. This paid time for mothers usually exceeds that of fathers. Generally, six to eight weeks is paid for parental leave, after which the parent must use accrued sick and holiday pay to cover any additional time off.

At the top of the ladder, the most forward thinking universities allow a full semester paid. Obviously, these universities would be the most attractive to parents.

Childcare

Childcare occurs at four different levels in a child's development: infant care, toddler, preschool, and after-school care for elementary school children. Childcare can include in-home care or a childcare facility. There is much variation in childcare facilities. Universities can help new parents or new hires by finding adequate childcare, but an on-site childcare facility equates to spending less time driving to an offsite facility and more time with their child. In Mason and Goulden's (2004) study, onsite childcare was an appealing feature of a university.

Infant care is the most expensive type of childcare due the level of care needed. If a facility does have infant care, it usually begins at six week to eight weeks of age. It is also the most difficult type of care to find, creating a dilemma for parents. For academics, having onsite infant care is important in relieving stress of having a baby close by (Mason and Goulden, 2004). An institution needs to decide whether it is cost effective to the institution, and beneficial to parents, to institute infant care or a longer paid parental leave.

After school care many times is not addressed as a childcare need. Young children cannot come home from school without supervision. Some faculty members can manipulate their schedules to be at home when children get off the bus if they have supportive deans and department heads; however, this is not the case for all.

Another policy being implemented by the some universities working toward a family friendly environment is sick childcare. The University of Wisconsin has an onsite childcare facility with a place for mildly sick children set aside to relieve parents of the worry of taking time off work. Another innovative policy is to hire certified caregivers to give in-home care as occurs at the University of Michigan. If a child is sick, the university contacts the certified caregiver for the faculty member.

Thus, childcare policies are necessary for a family friendly environment since parenting continues beyond the birth and subsequent recovery period. Having children close to work, such as onsite care, can be an asset to a university.

Conclusions

Although not all women opt out of academia for family reasons, is strong evidence that supports family issues as a factor in the leakage in the academic pipeline, especially in the STEM disciplines. Universities that are working toward more family-friendly environment are more likely to attract and retain the "brightest" by developing family-friendly policies. However, the literature also indicates that even when formal policies are in place, the overall structure of academia (or its institutional culture) needs to be more receptive to work-family balance.

Drago (2007) addresses the broader social implications of work/family, pointing out there are broad cultural norms that are conflictual. One is the *motherhood norm* wherein women should be mothers and perform unpaid work to care for others. The *ideal worker norm* is a "belief among managers and professionals in total commitment to career, and high rewards for this commitment" (p. 7). Further, *the individualism norm* is the belief that people should be able to help themselves and not expect the government help. Drago asserts these three norms shape the gaps of care, gender, and income. In order for change to occur, societal norms and values must also change.

While the continued traditional structure of the academy is not much different than society as a whole, faculty member academics – as scholars and innovators – can help to drive change. While we recognize the need for flexibility at the level of the department and college, the university hierarchy should demonstrate support for family friendly policies. Importantly, leadership is essential for the institutional and normative changes needed.

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