

Empowering Shakespeare's Sister:
Parental Leave and the Level Playing Field

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ABSTRACT

Paid family leave remains among the most commonly discussed public policy proposals for alleviating the work-family stresses experienced by increasing numbers of dual-career parents. The passage of the nation's first paid leave bill in California in 2002 provides momentum to leave policy proponents. This paper reports empirical findings from the Family, Gender and Tenure Project at the University of Virginia, a nationwide study of 168 randomly selected universities, that investigates the extent and effect of paid parental leave in academia and examines whether or not the expressed goals of parental leave policy are realized in its implementation.

Paid leave is part of a larger constellation of policies that are designed to address the issue of gender equity in the workplace. In academia, as in the workplace more generally, one of the principal objectives of paid leave policies is to "level the playing field" so that female professors who give birth will have a fairer chance to get tenure without neglecting their child-care responsibilities.

My operationalization of this goal articulates three specific aims related to positions, pay and promotion. In short, the data provides mixed results related to the effects of paid parental leave policies on these measures of achievement for women. Schools with paid parental leave policies have higher percentages of female faculty and higher promotion rates, but slightly less equal female/male salary ratios, controlling for rank, type and size of institution. Additionally, the data indicates that more equal salary ratios also have a relationship with higher percentages of female faculty, but no relationship with female promotion rates.

These results indicate a need for further research into the effectiveness of paid leave policies specifically related to leveling the playing field, and into the comparative effectiveness of economic factors and dynamics. However, I conclude that there is foundation for tempered optimism regarding the effectiveness of paid leave policies for advancing gender equity in the workplace, measured at the institutional level.

Empowering Shakespeare's Sister: *Parental Leave and the Level Playing Field*

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*What is the state of mind that is most propitious to the act of creation . . .
to write a work of genius is almost always a feat of prodigious difficulty . . .
Generally material circumstances are against it.
Dogs will bark; people will interrupt; money must be made; health will break down. . .
But for women . . . these difficulties were infinitely more formidable . . .
In the first place, to have a room of her own . . . was out of the question . . .*

Virginia Woolf, *A Room of One's Own*, 1929

1. A Room of One's Own

In Virginia Woolf's famous 1929 address at Cambridge University, in which she contemplated the accomplishments, or lack thereof, achieved by women, she challenged her audience to imagine the possibility that Shakespeare had an equally talented, but unknown, sister. As conjured by Woolf, Shakespeare's sister, Judith, quite possibly a woman of genius, nevertheless would have been a woman bound down by material circumstance and societal prejudice. Without the empowering intellectual freedom provided by "500 pounds and a room of her own," Judith Shakespeare would have been constrained by the biological imperatives and relentless responsibilities of womanhood, bearing children and consigned to tedium "in a kitchen chopping up suet," and her talents would have been – perhaps were – lost in the mists of history. (Woolf 1993)

The contemporary debate over the "glass ceiling" sounds these same themes. (Crittenden 2001; Friedan 1997; Fuchs 1988; Goldin 1990; Hewlett 1986; Hewlett 2002; Hewlett and Vite-Leon 2001; Hochschild 1989; Kessler-Harris 1982; Schwartz 1994;

Schwartz 1989; Valian 2000; Williams 2000) Woolf had been asked to address the undeniable fact that there were, at that time, vanishingly few women of significant accomplishment, particularly in the arts. Contemporaneous commentators argued that women as a gender were incapable of brilliance; professional *terra* was the sole province of men.

Today we confront a vastly transformed landscape: given the opportunity, women have advanced into virtually every field of accomplishment and have distinguished themselves. Nevertheless, despite their impressive gains, a gap remains between the professional advancement of men and women. Woolf appears to have been right on two related but separable counts: female achievement was constrained by lack of resources, but it was also inhibited by childbearing and gender-linked caregiving responsibilities; the former was a barrier more easily removed than the latter.

One of the answers advanced most frequently to this dilemma, as a matter of public policy, is paid leave of some kind. Nearly alone among western industrialized nations, the United States does not provide, or mandate, paid maternity, parental or family leave.¹ (Kamerman 2000, p. 1) This comparison provides a starting point for some to argue that America is a “laggard” welfare state and call for policy change. Among others, Theda Skocpol argues that “universal access to paid family leaves,” should be a top national

¹ South Korea also has no leave mandates, paid or unpaid; New Zealand and Australia have mandated unpaid leave. All other OECD countries have some provision for mandated paid maternity or parental leave. A brief word about terms: maternity leave, whether paid or unpaid, is the policy crafted to provide for a woman’s leave needs related to childbirth. Those policies have been expanded in recent years to include paternity leaves for men in an effort to promote gender-neutrality and decrease the stigma attached to utilizing the benefit. I will call these policies that include both men and women, “parental leave.” In their latest evolution, these policies have been further expanded to include leave needs for care of older children, spouses, or other dependents, including elderly parents. These I will refer to as “family leave.” Although family leave is important because it is the final version of “leave” that passed Congress and an unpaid version is now legally mandated, the focus of this work will be on parental leave in order to keep the analytical framework centered on pregnancy, childbirth and infant care concerns. See (Bernstein,

priority.(Skocpol 2000) Steven Wisensale concludes a book examining the politics of family leave policies with a recommendations section that begins: “Make family leave paid leave and do it now!” (Wisensale 2001, p. 243) Other researchers describe the lack of parental leave in the United States, along with other policies like subsidized childcare that enhance maternal employment, as a “cause for alarm.” (Gornick, Meyers, and Ross 1997b)

These academic researchers are joined by policy entrepreneurs like the Work and Family Institute, the Institute for Women’s Policy Research, and others, in intense advocacy of federal mandates for paid leave. Current American policy on parental leave is governed at the federal level by The Family and Medical Leave Act (FMLA), a law signed by President Bill Clinton in 1993. Clinton’s predecessor, President George H.W. Bush, twice had vetoed the same legislation, providing telling evidence of the strong political divisions over this issue. The FMLA established a job-protected leave of twelve weeks for parents of either sex at the birth or adoption of a child. This leave is unpaid and applies only to companies with fifty or more employees, although some companies voluntarily augment the mandated unpaid leave with a paid leave benefit of variable lengths.

By contrast, the European Union mandates a paid parental leave of three months. And Sweden provides the oft-cited gold standard: a one-year paid parental leave at 80% of earnings. (Kammerman 2000; Parry 2001) This rather stark contrast in provision of mandated benefits is a source of political pressure for a reexamination of our parental leave policies and fuels the movement to establish a federal paid leave mandate. Political

2001), for a discussion of the political compromises that necessitated the passage of family leave instead of parental or maternity leaves.

activity on the issue is fairly extensive: in 2000, legislation providing for paid leave was introduced in 16 states; in 2001, 15 legislatures considered some form of paid leave.² With the passage in California of the Paid Family Leave Act in 2002, which provides for up to six weeks of paid leave for the birth or adoption of a child,³ this public policy is gaining more momentum in the American context. Nevertheless, despite this concerted and focused activity aimed at a domestic movement for paid leave, the issue has received very little specific attention from political scientists.

This paper reports empirical findings from the Family, Gender and Tenure Project at the University of Virginia, a nationwide study that investigated the extent and effect of paid parental leave in the academic arena. Two separate surveys have been conducted – the first gathered institutional-level information, while the second provided individual-level data on junior faculty on the tenure track with and without children. This paper focuses on results from the institutional survey in which school administrators were queried about the nature of their policies intended to help faculty balance work and family. More detail on the methodology used is reported below.

This study, while broader than a case study, offers many of the strengths of a “crucial-case” study,⁴ which is a case that provides a fit so close to the subject under

² National Conference of State Legislatures, see: <http://www.ncsl.org/programs/employ/01babyui.htm>. See also for comprehensive listing of state family and medical leave legislation: <http://www.ncsl.org/programs/employ/fmlachart.htm>. See also Wisensale, 2001, Chapter Five for discussion of state initiatives, pp. 109-132.

³ Modeled after FMLA, the bill also provides for leave in the case of other family care needs, like personal, spousal or parental care, and so it is “family” leave instead of “parental” leave.

⁴ Harry Eckstein argues that this method, utilized rigorously, offers powerful possibilities for theory development and testing. In the crucial-case study, the presenting case “must closely fit” the theory such that “it must be extremely difficult, or clearly petulant, to dismiss any finding contrary to theory as simply ‘deviant’ and equally difficult to hold that any finding confirming theory might just as well express quite different regularities.” In other words, there must be a clear fit between the characteristics of the crucial case, and the variables related to the theory investigated.

investigation that the findings can be characterized logically as representative.(Eckstein 1975) The academy does so.

If paid leave has the potential to work effectively and advantageously anywhere, it should do so in academia. (Raabe 1997) Motivation to recruit and retain female faculty is high. University communities are typically characterized by a commitment to justice concerns. And female faculty members are, by definition, well educated and have high levels of professional commitment. These women may also be more likely to be married to men less invested in traditional gender roles.

Furthermore, academia provides a clear example of the pressures that feed into the work-family crucible. Junior faculty members in academia contend with a set of career pressures that are unique: the highly structured, time-constrained career ladder of the tenure process⁵ is a system that is specific to the academic arena. Nevertheless, the intense academic career track exhibits pressures similar to those faced in other professional occupations, and is analogous to the experiences of other professionals in other disciplines trying to balance career and family. The average Ph.D. recipient is thirty-four years old. (Drago and Williams 2000) Therefore, the average academic woman confronts the beginning of the intense tenure process precisely during years when she might be beginning her family.(Finkel and Olswang 1996; Young and Wright 2001) In fact, a recent study using data from the National Center for Education Statistics, found that the majority of academic women who do achieve tenure, do not have children in the post-Ph.D. time period. (Mason and Goulden 2002)

⁵ The tenure process typically spans seven years, which is the official recommendation of the American Association of University Professors. For tenure procedures and recommendations, see <http://www.aaup.org/Issues/tenure/index.htm>

Similarly, men and women who enter the legal profession face the challenge of making Partner in their law firm in their late 20's and early 30's, which notoriously conflicts with childbearing⁶; the military has a time-bounded "up or out" system very similar to the tenure process; the medical profession, with its residency system is similarly indifferent to parenting concerns; and the corporate world -- birthplace of the "mommy track" -- while lacking a specified industry-wide "system" for advancement, does place a high premium on an "overtime culture," that makes high achievement and childbearing difficult to reconcile. (Fried 1998; Schwartz 1989) For these reasons, I argue that data developed on academic professionals is representative of professionals in other areas.

The Level Playing Field Hypothesis

Paid leave is part of a larger constellation of policies that are designed to address the issue of gender equity in the workplace. In academia, as in the workplace more generally, one of the principal objectives of paid leave policies is to "level the playing field" so that female professors who give birth will have a fairer chance to get tenure without neglecting their child-care responsibilities. Providing a common thread, this objective, and even the sports metaphor framing terminology, parallels that used in the debate over Title IX and gender equity in collegiate athletics and federally-supported education programs. One work-family researcher describes the lack of a maternity leave as a barrier that "might prevent women with children from competing on an equal footing in the labor market." (Waldfoegel 1998) Additionally, the AAUP describes a paid leave policy as one among several that demonstrates "commitment to gender equity." (AAUP

⁶ Joan Williams of American University is currently conducting Sloan Foundation-funded research into the

2001) Perhaps even more importantly, even when the level-playing-field goal is not explicitly outlined, paid leave is frequently discussed in the context of furthering gender equity and ensuring women's ability to compete with men professionally.(Kamerman 2000; Valian 2000; Williams 2000) But is paid parental leave effective in addressing the level-playing-field goal? The study of this particular question is still in its early stages, and researchers have identified the effect of leave policy on gender equity and career advancement as a question in need of further examination. (Gornick, Meyers, and Ross 1997b; Raabe 1997; Schwartz 1994)

In this paper, I report data from the institutional survey related to the question of leveling the playing field. Frequent categories used to measure gender equity in the workplace are the extent of gender segregation in occupations, pay equity and relative promotion rates. (Blau and Ferber 1986; Ferber and Loeb 1997; Schwartz 1994; Valian 2000; Winter-Ebmer and Zweimuller 1997) Therefore, my operationalization of the level-playing- field goal articulates three specific aims related to positions, pay and promotion. I assess whether or not parental leave is effective at the institutional level in enabling larger numbers of women to combine a professional career with childbearing by examining three dependent variables at surveyed institutions: first, the percentage of female professors; second, female promotion rates; and third, the ratio of female to male salaries. I test the following hypotheses related to the theory that parental leave is an effective public policy:

possibility of a part-time partner track for lawyers who want to be parents.

Leveling the Playing Field Hypothesis -- Institutional Level

1. *Assuming paid parental leave policies are effective at leveling the playing field for women professors, then we would expect universities with paid leave policies to have higher percentages of female professors than schools without these policies.*
2. *Assuming paid parental leave policies are effective at leveling the playing field for women professors, then we would expect a higher percentage of female faculty members to achieve tenure at institutions with paid leave policies than those without these policies.*
3. *Assuming paid parental leave policies are effective at leveling the playing field for women professors, then we should see no difference in the salary levels of male and female professors at paid leave schools, and any difference that does exist, should be less than any difference that exists at schools without a paid leave policy.*

In short, the data provides mixed results related to the effects of paid parental leave policies on these measures of achievement for women. Schools with paid parental leave policies have higher percentages of female faculty and higher promotion rates, but slightly less equal female/male salary ratios, controlling for rank, type and size of institution. Additionally, the data indicates that more equal salary ratios also have a relationship with higher percentages of female faculty but no relationship with female promotion rates. I conclude that these results indicate a need for further research into the effectiveness of paid leave policies specifically related to leveling the playing field for professional women, and further research into the comparative effectiveness of economic factors and dynamics.

Background

The academic literature related to parental leave is nearly unanimous in support of expanding current American policy to mandate paid leave. (Bailyn, Drago, and Kochan 2001; Berggren 2002; Bernstein 2001; Boxer 1996; Dorman 2001; Ferber and Loeb

1997; Fried 1998; Glass and Riley 1998; Gold 1996; Gornick, Meyers, and Ross 1997b; Haas 1992; Kamerman 2000; Kamerman and Kahn 1978; Kamerman and Kahn 1987; Parry 2001; Raabe 1997; Waldfogel 1998; Williams 2000; Wisensale 2001; Women 1992; Zigler and Frank 1988) In 1988, Edward Zigler, Meryl Frank and the contributors to *The Parental Leave Crisis: Toward a National Policy*, argued that there was a crisis of such magnitude among parents trying to meet simultaneously their family obligations while performing in the labor market, that a national policy response was needed – expressing precisely why this is an issue of importance to political scientists. The central recommendation of the book, which reports the results of an Advisory Committee on Infant Care Leave convened at the Bush Center in Child Development and Social Policy in 1983, was a call for the federal government to mandate the provision of an optional six-month “infant care leave” for all workers that, for the first three months, would be paid at 75% of salary and unpaid for the remainder.

Similarly, a 1988 Wingspread Conference on parental leave and childcare at the University of Wisconsin-Madison, which included a Task Force on Parental Leave Research, issued a recommendation for a federally mandated paid leave policy. The Task Force called for income replacement at 75 percent of wages for a 26-week job-guaranteed temporary disability leave and a 26-week job-guaranteed family leave for care of a family member, for a total of a possible 52 weeks total of paid leave. Additionally, they identified a need for more research data regarding the “implications of family leave policies on business” with the stated goal of identifying “the benefits of family leave policy to the employer.” (Hyde and Essex 1991, p. 464)

Job Continuity, Occupational Segregation and Pay Equity

In the ensuing decade, researchers have examined this question of the benefit of family leave to the employer, and one particular focus has been whether or not provision of a leave policy, paid or unpaid, provides job continuity. One study, based on data from the National Longitudinal Survey of Youth and the Current Population Survey, found that although “new mothers have an excess probability of leaving their jobs,” taking leave facilitates mothers returning to their same employer. (Klerman and Leibowitz 1999) And several studies have found that use of leave among women does contribute to job continuity. (Blau and Ferber 1986; Joesch 1997; Ruhm 1998; Waldfogel 1998) Other research has indicated that length of leave is also important, with shorter leaves providing more reliable workforce attachment. (Glass and Riley 1998; Gornick, Meyers, and Ross 1997a; Kamerman 2000)

This tendency of female workers to interrupt their career progression contributes to a gender gap in pay ratios and occupational segregation. As a result, other researchers have focused on this same issue of job continuity from the perspective of the female employee: longer job tenure results in increased human capital, which has positive professional effects. For example, both occupational segregation and salary ratios are narrowing steadily. (Blau and Ferber 1986; Lomperis 1990) The wage ratio between men and women among 35 to 44 year-olds and 45 to 54 year-olds rose from .55 and .54 in 1969 to .74 and .69 in 1994 among those with 16-plus years of education. Female college graduates are the cohort making the greatest strides. (Blau 1998) One study found that female/male earnings ratios at “narrowly defined occupations” are often .8, and, at specific institutions, quite commonly .9 or .95. (Gunderson 1989)

This narrowing of the gender gap in pay ratios has occurred partly because of a rise in women's human capital and shift in occupational segregation. (Waldfogel 1998) Specifically, when productivity-related factors, like occupation, training and job requirements, are used as controls, the wage gap narrows. The key factor is time-on-the-job. Job continuity, however, for women, may necessitate some kind of leave policy. Indeed, one study found that women who have maternity leave coverage have higher pay compared to women who did not have the ability to take leave. (Waldfogel 1998)

Even so, the research results on paid leave do not demonstrate consistently favorable effects for gender equity. In Sweden, with their extremely generous leave policies, occupational segregation is still high. (Blau and Ferber 1986) And particularly in the American context, some research has indicated that use of leave may result in negative career effects. (Blair-Loy and Wharton 2002; Evans, Henkle, and Colamonicio 2001; Gerson and Jacobs 2003; Schwartz 1994)

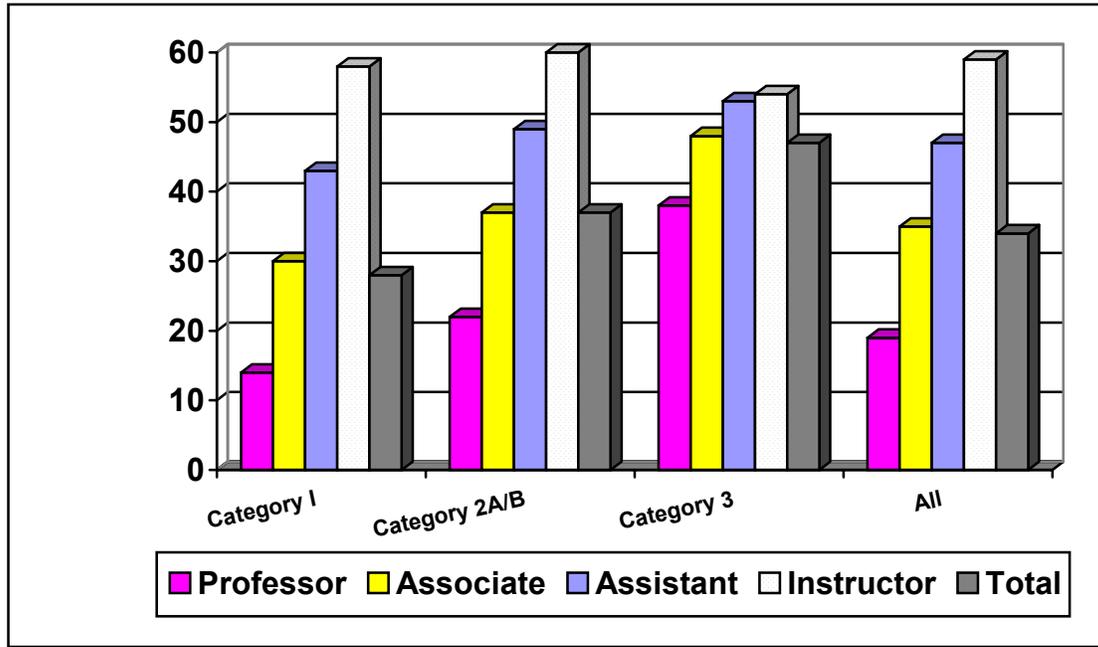
This fear of negative effects surfaces frequently in research that focuses on employee attitudes toward the policies, and is demonstrated by low policy utilization rates. One study of 189 female tenure-track assistant professors at a major public research university with a paid, 90-day leave policy, found only 30 percent of faculty members took the leave available to them, with 70 percent reporting that they felt that taking leave would hurt them professionally (Finkel, Olswang, and She 1994). Another study utilizing a focus group of 46 respondents at a major public university identified "fear of repercussions" as one of six major barriers to the use of work-family policies.(Harris, Grandey, and Blair)

Issues in Academia

Among the research done on leave policies, several studies address the academic arena. This is partly because academia provides a good example of a highly gender-segregated workplace. (Blau and Ferber 1986; Ferber and Loeb 1997; Mason and Goulden 2002; Valian 2000) Not only is academia a male-dominated profession, but it provides a clear and consistent example of “vertical segregation” with women making up the larger proportion of the lower end of the career-ladder.(Blau and Ferber 1986)

According to the American Association of University Professors (AAUP), women hold only 14 percent of the full professorships at doctoral institutions. At the other end of the professional spectrum, 57 percent of instructors, lecturers and people holding unranked positions, are women. The following graph shows the proportion of women faculty members at each rank at each type of institution, ranging from Category I, doctoral institutions, to Category 3, two-year institutions. The graph tells two stories: first, at every level of institution, we see the proportion of women *increasing* as rank *decreases*; and second, as rank of institution *decreases*, we see the proportion of women *increasing*.(Benjamin 2002)

Figure One: Proportion of Female Faculty Members by Rank and Type of Institution



Source: *Annual AAUP salary survey, 1997-98*

This gender segregation in academia is accompanied by a wage gap, which is more pronounced at the full professor level. And recent research utilizing data from the National Center for Education Statistics found that this gap in faculty salary ratios has actually grown wider in last 30 years.(Mason and Goulden 2002)

The research done on gender equity in the academy focuses on the stress women, particularly mothers of young children, face in adequately meeting both their professional and parenting responsibilities. One study that examined 1,979 respondents who were full-time, academic faculty members at 24 medical schools, concluded that family responsibilities provide a higher obstacle for female faculty with children.(Carr et al. 1998) Similarly, a survey of 1,167 faculty members at the University of Michigan, found that female faculty members were more likely to have either had children prior to

beginning their academic careers, or delayed childbearing until after being established in their careers. (Blackburn and Hollenshead 1999)

Another widely cited study done at the Massachusetts Institute of Technology, authored by 15 senior female faculty members, found that the percentage of female faculty members in the School of Science was only 8 percent in 1994. This percentage had remained virtually unchanged for at least ten years, having increased from 7.5 percent in 1985. The authors identified the “childbearing issue” as one of the critical areas to be addressed. They concluded that MIT needed an emphasis on maternity leave because one of the “most common concerns” expressed by junior female faculty was “the extraordinary difficulty of combining family and work.” After the release of the report, by 1999, the percentage of female faculty at MIT had increased to 10 percent.(MIT 1999)

In acknowledgment of the problem gender imbalance poses for the academy, the AAUP issued a Statement of Principles on Family Responsibilities and Academic Work in May 2001. The statement identified the disparate family obligations of men and women as one of the primary causes of this gender differential in academic achievement and called for a “renewed attention” to the “healthy integration of work responsibilities with family life in academe.” (AAUP 2001) As a result, instituting leave policies continues to receive increased attention on university campuses. For example, a report produced by the Joint Provost/Faculty Senate Task Force on Family Leave Policy at the University of Southern California identified recruitment and retention of top faculty as one of the primary goals of the policy. (Brand et al. 2000) Our study builds on these cited above, by further examining how effective paid leave policies are at promoting gender equity in the workplace, specifically in academia.

Methodology

The research objective for the Family, Gender and Tenure Project as a whole was to find and interview individual faculty members at universities and colleges nationwide with a paid parental leave policy. As a result, we used a multi-stage stratified sampling technique, and the sample of universities with which we began was chosen to be representative of faculty nationwide. The analysis reported here is based on a sample of 168 four-year colleges and universities (comprised of two separately drawn probability samples of 84 schools) drawn from all of the institutions listed in *Peterson's Guide to Four-Year Colleges*. The sample was stratified by competitiveness; within strata, schools were selected with probabilities proportionate to the size of each school's full-time faculty to ensure that smaller schools would not have a disproportionate chance of selection. The result was a representative sample of faculty at universities nationwide.

Because the sample of universities was chosen to be representative of faculty, the institutional data reported in this paper from the Combined Sample have been weighted by the inverse of the probability of selection. The weighting was done by stratum, and determined by the size of the faculty of each school within each stratum. The final weighting was smoothed to bring the sample size to 168.

The first-stage institutional survey was used to identify schools with paid leave policies; these schools were then used to assemble the sample of eligible professors for the second-stage individual survey. During the summer of 2001, a researcher interviewed by telephone administrators at each of the 84 colleges and universities in Sample One. Although this paper covers only the data related to paid leave policies, the survey included questions about both leave and stopped clock policies. The administrators were

queried on the availability, content and policy history of the policies; eligibility requirements and procedures for utilizing the policies; extent of policy utilization, and the existence of any positive or negative issues arising from the presence or absence of the policies. At the completion of the institutional survey, 7 schools from Sample One and 8 schools from Sample Two remained non-responsive. The valid cases used for the analysis presented here were 153 (91 percent of the original sample).

Some administrators requested additional information and a hard copy of the survey. These requests were accommodated and the survey then retrieved by fax or mail. This data was compared with and augmented by public information on university policies gathered from university web sites.

Later, in order to increase the sample size, using identical sampling methods, we drew the second sample, Sample Two, of 84 additional universities. This group of universities was not administered the extensive institutional survey; we called them to determine merely whether or not they met our criteria for inclusion as a paid leave school.

Lastly, in order to gather additional institutional information, I used the annual salary survey of the American Association of University Professors (AAUP) to obtain numbers of faculty members by gender for 126 schools and salary data by gender for 118 schools in the Combined Sample (75 and 70 percent respectively of the total sample). I also gathered enrollment data from institutional web sites. I then used the enrollment data and the AAUP data to generate female faculty percentages, salary ratios, promotion rates and student-faculty ratios as described below.

1. *Descriptive Findings*

Leveling the Playing Field Hypothesis -- Institutional Level

Percentages of Female Faculty

1. **Leveling the Playing Field Hypothesis**¹: Assuming paid leave is an effective policy instrument for leveling the playing field for women professors, then we would expect universities with paid leave policies to have higher percentages of female professors than schools without these policies.

Null Hypothesis → *paid parental leave policies do NOT increase an institution's percentages of female professors. There is no difference between schools with paid leave policies and those without.*

In examining the relationship of paid leave policies and the level-playing field hypothesis, we would expect to observe the policy enabling higher numbers of women to remain in the workplace, thereby promoting greater gender balance in the workplace. Or, more precisely, it is the percentage of women, relative to the concentration of men in a particular occupation, which is of specific concern. As the data cited in Chapter Four demonstrates, academia is a highly gender-segregated workplace. Does paid parental leave make any difference to the gender balance when it is in place at particular universities?

The relationship between paid leave and gender balance is also thought to act in the opposite direction: paid leave could also be the dependent variable. A factor that is often thought to influence the presence of work and family benefits, like paid leave, is the number, and ultimately the percentage, of women in a particular field or specific workplace. This hypothesis maps onto the academic context quite well: one might easily expect to see a higher prevalence of parental leave policies where there is a critical mass of female professors. Alternatively, one might also expect to see the converse: in a

workplace that is reputedly highly interested in recruiting women, like academia, parental leave policies might be more prevalent and utilized as a recruitment and retention device.

I tested these hypotheses with this data in three different ways. First, using the AAUP data on numbers of male, female and total faculty, I calculated the percentage of female faculty for each school and then compared the mean percentage of female faculty at paid and no-paid-leave schools. Next, for the schools in Sample One, I incorporated the element of time into the analysis, by dividing the paid leave schools into those that have had their policy for seven years or more, and those with newer policies.⁷ The assumption is that the schools where the policy has been in place for a longer period of time will have had a longer time to see the effects of the policy and that a seven-year demarcation will parallel the typical tenure track time frame, giving adequate time for a policy to show some effects on a particular cohort of women.

Finally, I developed a “generosity index” which stratified the schools by the amount of leave they allow. There is a fairly wide range of policies among the schools in the sample, and there might be some effect from gradations more fine-tuned than the dichotomous presence or absence of policy variable. This scale I developed ranged from a low of 0, for the no paid leave schools (those which rely only on the mandates of the Family and Medical Leave Act), to .25 for those schools which allow the use of sick leave, and those which give two weeks of paid leave; .5 for those schools which give six to eight weeks of paid leave; .75 for those which allow ten to twelve weeks of paid leave and those that allow some sort of reduced teaching load, or rearranged schedule; and a high of 1 for schools that provide a full semester or quarter of paid leave.

Before testing for a possible relationship between paid leave and female faculty percentages, I examined the data to see if, in fact, there is a gender gap in our sample. Indeed, at institutions with paid leave policies, I find that a gender gap does persist: the mean percentage of female faculty at paid leave schools is 30 percent.

How does this compare to schools without paid leave policies? For the first test of the relationship between paid leave and female faculty percentages, using analysis of variance (ANOVA), I compared the mean percentages of female faculty at paid leave schools and schools without paid-leave. The ANOVA test indicates that the relationship between paid leave and female faculty percentages may possibly be a weak inverse one. At schools without a paid leave policy, the mean female faculty percentage is 31 percent, which is nearly equal to the percentage at paid leave schools. The difference is not significant.

Next, I tested this relationship against the paid leave variable, utilizing the time variable developed for the Sample One schools. The mean percentage of female faculty at paid leave schools that have been in place for over seven years (n=3) is 29 percent, and at those with policies in place under seven years (n=11), it is 32 percent. At the schools without a paid leave policy, the mean female faculty percentage is 35 percent (n=28). This is a slightly stronger indication of an inverse relationship, with the schools that have had the policy in place the longest having the lowest female faculty percentages. However, this relationship is not statistically significant either.

Lastly, I tested the generosity index against the female faculty percentages to determine whether longer leaves might prove more effective than shorter ones. The

⁷ We have this data for 25 out of the 31 paid leave schools in Sample One (81 percent). Some administrators, when asked, did not know the implementation date of the policy. The schools in Sample

results demonstrate no discernible pattern. In fact, surprisingly, those schools with the most generous policies prove to have exactly the same percentage of female faculty as those with none, and are among those institutions with the lowest mean percentage of female faculty. The institutions with reduced schedules, or a paid leave less than a full semester, have the highest percentages of female faculty. But, once again, though interesting, and surely worthy of further study, these variations are not even close to statistical significance. ($p=.157$)

In this sample, I find no statistically significant relationship⁸ between the percentage of female faculty and the presence of a parental leave policy, above a short-term maternity leave, even for those policies that are more generous.⁹ Therefore, neither the “critical mass” nor the alternative “recruitment” hypothesis is confirmed by our data.¹⁰

- ***I fail to reject the null hypothesis: in this sample, I find that a gender gap in percentage of female faculty persists at schools with paid leave policies. Additionally, there is no relationship between the percentage of female faculty and the presence of a parental leave policy above a short-term maternity leave: there is no difference between the female faculty percentages at schools with paid leave policies compared to those without the policies.***

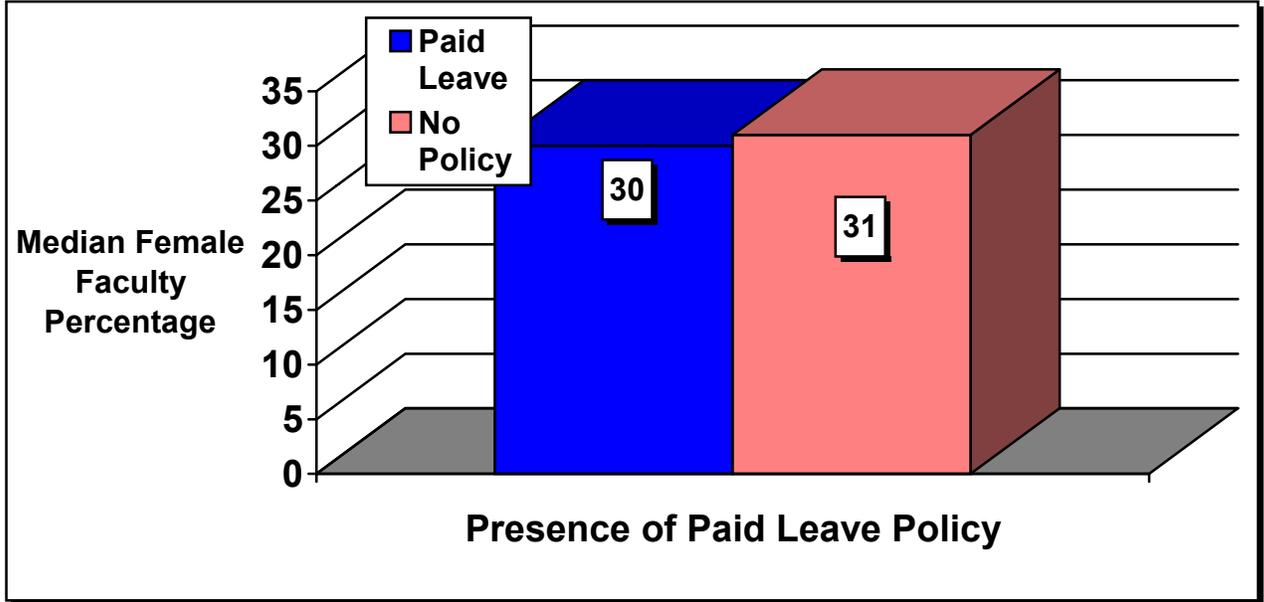
Two were not asked when they established their policies.

⁸ I will use the standard level of $<.05$ as the measure of statistical significance, unless otherwise noted.

⁹ Female faculty percentages ranged from 10% to 54.28%, with a mean of 30.7%. This is with the removal of two outliers, one currently, and one formerly, a school for women. Both have over 70% female faculty. With their inclusion, the mean is 32.3%.

¹⁰ All graphs use the dichotomous yes/no leave variable in order to simplify the data presentation.

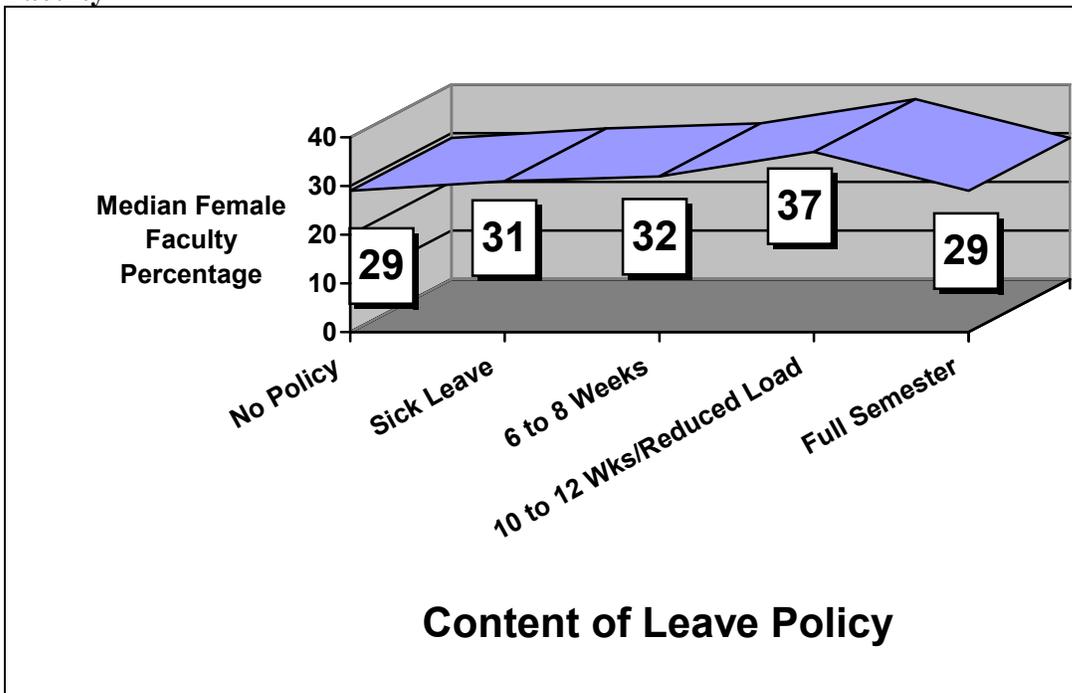
Figure Two: Correlation of Parental Leave Policies with Percentages of Female Faculty



n= 113; t=-.608, df= 111, p = .545

Time delta variable: No policy mean (n=28) =35; Under Seven Years mean (n=11) =32; Over Seven Years mean (n=3) = 29, p=.445

Figure Three: Generosity Index of Leave Policies and Percentages of Female Faculty



n=113, F=1.694, df=4, p=.157: No policy, n=38; sick leave, n=25; 6 to 8 weeks, n=14; 12 weeks, n=37; full semester, n=29

Effect on Female Promotion

2. **Leveling the Playing Field Hypothesis 2:** Assuming paid leave is effective at leveling the playing field for women professors, then we would expect to see a higher percentage of female faculty members successfully achieving tenure at institutions with paid leave policies than those without these policies.

Null Hypothesis→ *paid parental leave policies do NOT produce higher promotion rates for female professors. There is no difference between schools with paid leave policies and those without.*

Since achieving tenure is a major mark of professional success in academia, examining an institution's record of granting tenure to female faculty is another measure of the level playing field. One clear measure of policy effectiveness for paid leave would be higher promotion rates of women. Finding this kind of data could be an extremely onerous and time-consuming, and perhaps ultimately impossible, project. Fortunately, the AAUP salary survey data provided an avenue to construct a rough proxy for this variable. The AAUP dataset includes the percentage of female faculty at each institution, *at each rank*. Therefore, I constructed a "tenure ratio" by first calculating the ratio of female to male professors at the assistant level (female assistant professors/male assistant professors), and the ratio of female to male professors at the associate level, which is typically the tenure level, (female associate professors/male associate professors) at each institution in the combined sample. I then divided the assistant professor ratio by the associate professor ratio to determine the stability of the ratio between these two promotion levels (tenure ratio = ratio of female to male assistant professors/ratio of female to male associate professors). I use associate professors rather than full professors because the time lag between full and assistant professor seemed too

great to provide confidence that there would be an accurate reflection of policy effects at any given institution.

I first examined the mean tenure ratio with Analysis of Variance using the dichotomous yes/no leave variable and found a very significant difference – schools with a paid leave policy have a tenure ratio of .69, and those without a paid policy have a tenure ratio of .49.¹¹ ($p=.002$) This means that schools with paid leave policies have a tenure ratio closer to 1 than those schools without a paid policy. A tenure ratio of 1:1 would mean that an institution maintains its ratio of female-to-male faculty from the assistant level to the associate level. For example, a school with a female/male ratio of .20 at the assistant level, which declined to .14 at the associate level, would have a tenure ratio of .70. If their female/male ratio declined to .10 at the associate level, compared to .20 at the assistant level, their ratio would be .50.

One limitation of this variable is that it does not include actual longitudinal data; it may be another measure for the gender gap on individual campuses, rather than measuring actual promotion rates. Additionally, schools with a larger “base,” a higher percentage of female assistant professors, will have a larger denominator, and may end up with a lower tenure ratio, even if the higher base was a result of an active effort to recruit female assistant professors. While acknowledging these limitations of this method of operationalizing a tenure ratio, the gender gap among faculty on campuses is a mature issue that institutions have been addressing for over two decades.¹² Therefore, some

¹¹ The tenure ratio of associate to assistant professors has a range of .06 to 1.35, and a mean of .56, excluding an outlier case of 2.00; with the outlier, the mean is .57 and the relationship is significant in both cases.

¹² The AAUP began collecting gender-related data in 1975. Benjamin, Ernst. 2003. *Disparities in the Salaries and Appointments of Academic Women and Men: An Update of a 1988 Report of Committee W on the Status of Women in the Academic Profession* American Association of University Professors, 2002 [cited July 2003]. Available from www.aaup.org/issues/womeninHE/WSALTAB2.htm.

progress should be evident by now. As a result, I believe an institution's ability to maintain, or even possibly improve, its percentage of female professors may be reflected in this construction of the "tenure ratio" which measures the proportion of female associate professors, relative to their male colleagues, in relation to that same proportion at the assistant professor level.

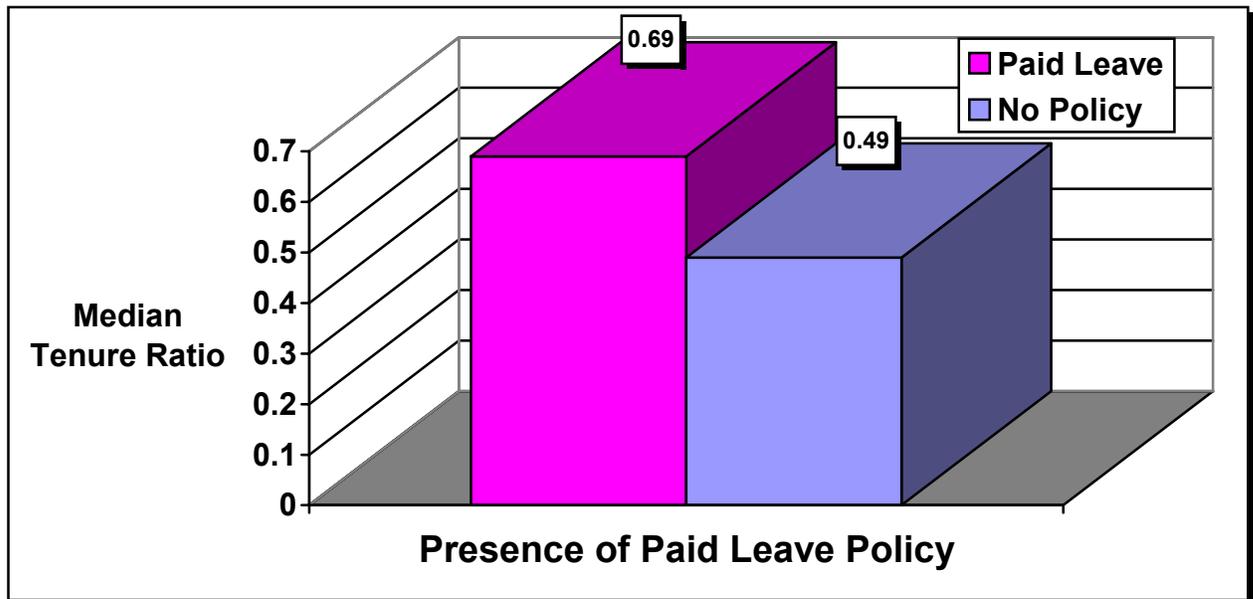
Next, using the leave variable that incorporates the length of time the policy has been in place,¹³ I find dramatically different results from that demonstrated by using the dichotomous yes/no leave variable (see Figure Four): schools without a policy have a mean tenure ratio of .74; those with a policy for under seven years are at .69, and those with a policy over seven years are at .74. This relationship was not statistically significant.

Finally, testing this relationship with the generosity index revealed intriguing results: once again, the category of leave policies that included the rearranged course loads had the best result, the highest rate of promotion for female faculty as measured by the tenure ratio described above. As the generosity index increases, the tenure ratio improves. ($p=.012$)

- ***I reject the null hypothesis: in this sample there is a relationship between the existence of a paid parental leave policy and higher promotion rates for female faculty. There is a statistically significant difference between the promotion rates of female faculty at schools with and without paid leave policies.***

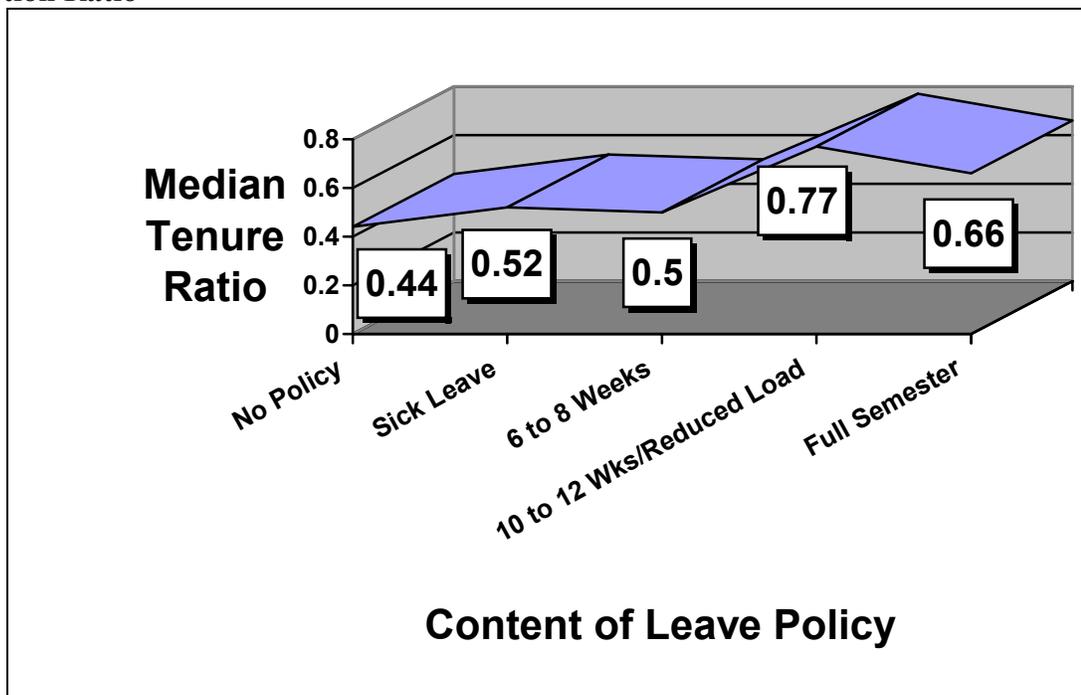
¹³ This data only applies to Sample One – see note 7.

Figure Four: Female Faculty Promotion Ratio at Institutions With, and Without, Paid Parental Leave Policies



$n=120$, $F=10.495$, $df=1$, $p=.002$
Time delta variable: $p=.861$

Figure Five: Relationship between the Generosity Index and Female Faculty Promotion Ratio



$n=120$, $F=3.352$, $df=4$, $p=.012$

Effect on Salary Levels

3. **Leveling the Playing Field Hypothesis 3:** Assuming paid parental leave policies are effective at leveling the playing field, then we would see no difference in the salary levels of male and female professors at paid leave schools, and any difference that does exist, should be less than any difference that exists at schools without a paid leave policy.

Null Hypothesis → *institutions with paid parental leave policies do NOT have equal salaries for male and female professors. There is a difference between the salaries of male and female professors at paid leave schools, and this difference is greater than the difference that exists at schools without a paid leave policy.*

Another way to measure the ability of women to compete on an even playing field is by how much they are paid. Are female professors able to compete with their male colleagues on salary? Or is there a gender gap in compensation rates? Does the existence of a paid leave policy lead to more equivalent salary levels for men and women?

The AAUP survey reports salary data for both men and women at the full professor, associate professor and assistant professor levels. I converted these data points into a salary ratio of female to male salaries as a whole at each individual institution for the combined sample.¹⁴ This enabled me to test with ANOVA the relationship between the existence of paid leave policies and compensation for male and female professors.

First, I find that a salary disparity does exist at paid leave schools, although the gap is quite small – the mean compensation for female faculty is 94% of their male colleagues' compensation.

Second, how does this compare to schools that do not have paid leave? I find that there is not a significant difference between the salary ratios at schools with and without

¹⁴ The salary ratio variable had a range of 82.79 to 104.38 with a mean of 94.87, excluding an outlier of 116.37. The mean with the outlier is 95, and both relationships are insignificant.

paid leave policies: female professors at schools without a paid leave policy are paid 95% of their male colleagues' compensation.¹⁵

Lastly, I also tested this relationship by promotion level with the dichotomous leave variable, the time delta variable, and the generosity index. At the associate professor level, there is a statistically significant relationship between salary ratios and paid leave. ($p=.012$) In fact, associate professors at schools without a paid leave policy have a 97 percent pay ratio, the highest of any category, paid or unpaid, at any promotion level. It is interesting to note that the full professor ratios at both paid and no policy schools are lower than the associate and assistant ratios. (See **Table One.**)

The time delta variable revealed no significant relationship at any level. But the generosity index provided very interesting results. The relationship between the generosity of a leave policy was significant, and somewhat surprising, at both the associate and the assistant levels. (See **Table Two.**) Female assistant professors and female associate professors are paid at 100 percent of their male colleagues at institutions where they are offered a paid leave of six to eight weeks.

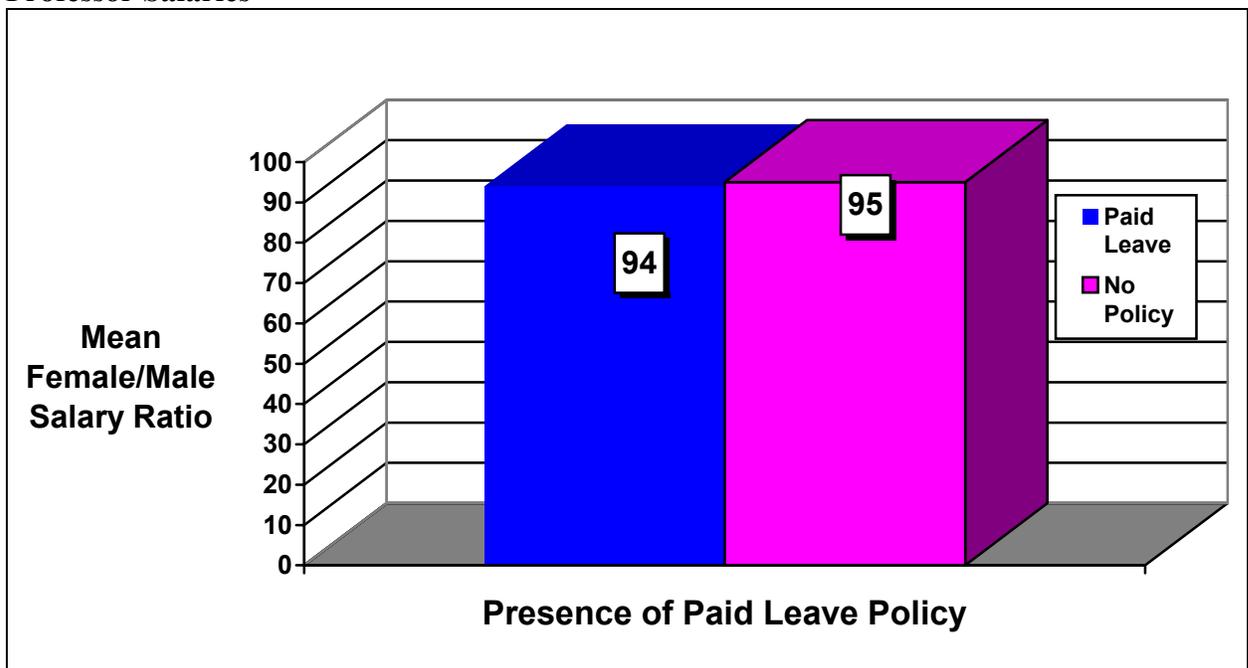
Certainly a reasonable argument could be made that these results – both the female/male ratio, and the differences between policy categories – are too small to be substantively significant. This may be true. Although, as I will discuss further in the conclusion, others argue that even very small differences like these become cumulatively substantive over time. (Valian 2000) For my purposes here, I would draw attention to the pattern of the results, and their value relative to other categories rather than their absolute

¹⁵ I also tested this relationship using the leave delta variable which incorporates the length of time the policy has been in place; this relationship was highly insignificant, $p=.922$. And I tested the “generosity index,” which stratifies leave policies by length of leave time provided, as described more fully above; this relationship is also highly insignificant $p=.563$.

value, in order to question what the data might tell us about the incremental effects of a paid policy.

- *I reject the null hypothesis: in this sample, I found that, although there is a small difference in the salaries of male and female professors at paid leave schools—women are paid 95% of their male colleagues -- the ratio at paid-leave schools is not significantly different from the ratio at schools without paid leave policies. However, at the associate professor level, there is an inverse relationship between paid leave policies and salary ratios between male and female professors.*

Figure Five: Relationship of Paid Leave Policies to the Ratio of Female to Male Professor Salaries



$n=106, t=-1.043, df=104, p=.299$

Table One: Relationship of Paid Leave Policies to the Ratio of Female to Male Professor Salaries, by Promotion Level

Promotion Level	Paid Leave Mean	No Policy Mean	Significance
Professors	.92	.94	$p=.241$
Associate Professors	.95	.97	$p=.012$
Assistant Professors	.95	.96	$p=.745$

Table Two: Relationship of Paid Leave Policies to the Ratio of Female to Male Professor Salaries, by Generosity of Leave Policy

Promotion Level	No Policy	Sick Leave	6 Wks	8-12 Wks/ Reduced Load	Full	Significance
Professors	.94	.95	.91	.94	.91	$p=.194$
Associate Professors	.98	.95	1.01	.95	.95	$p=.002$
Assistant Professors	.95	.94	1.01	.97	.96	$p=.010$

Correlation of Pay Ratios and Female Faculty Percentages

If the percentage of female faculty is not related to the presence of a paid leave policy does a variation in salary ratios increase the percentage of female faculty? Since the salary ratio variable and the female faculty percentage are both interval-ratio measures, I used Ordinary Least Squares regression to test the relationship. I find that there is a highly significant relationship between these two variables. ($p=.000$) The coefficient of 1.02 indicates that the association is a positive one: for each one percent increase in the salary ratio, there is a one percent increase in the total percentage of female faculty. The R^2 is .18, indicating the need to identify more explanatory variables.

- **Finding:** Where the existence of paid leave policies does not have a relationship with percentages of female faculty, as **pay ratios** between men and women equalize, there is a *positive association* with female faculty percentages.

Correlation of Pay Ratios and Promotion Rates

Before turning to a multivariate approach, given the relationship discovered above between female/male pay ratios and total percentage of female faculty, I returned to the pay ratio variable to test for a relationship with promotion rates. Once again using Ordinary Least Squares regression, I did not find a statistically significant relationship for the overall salary ratio. ($p=.811$) However, given the variation in the salary ratios detailed above, I tested this relationship at the various promotion levels. I find that the salary ratio at the associate level is highly significant, but it has an *inverse* relationship with the tenure ratio. ($p=.004$) The R^2 indicates that the salary ratio explains 7 percent of the variation in the tenure ratio; when the salary ratio at the associate level improves by .1, the tenure ratio declines by .15.

- ***Finding:*** Female faculty promotion rates, as measured by the proportion of associate professors to assistant professors at individual institutions, are not related to more equal salary ratios as a whole. However, when the salary ratio at the associate level improves, the tenure ratio declines.

2. Multivariate Hypothesis Testing

In this examination of the level playing field hypothesis, and the association of paid leave and institutional-level variables, I find mixed results on three different measures of gender equity. First, I find that paid leave is not correlated with higher percentages of female faculty. However, secondly, paid leave *does* correlate with higher promotion rates for female professors. The generosity index indicates that the schools with paid policies above eight weeks but not for the full semester, or which offer flexible arrangements, have the highest percentages of female professors. And, third, paid leave is not correlated with more equivalent salary ratios for female professors as a whole. Nevertheless, at the associate professor level, paid leave has an inverse relationship with salary ratios. The schools with the best salary ratios are those that offer six weeks of paid leave. It is important to note that, however, in this sample, male and female professors are already paid nearly equally: the mean compensation for female professors at paid leave schools is 95 percent of male salaries.

Additionally, I find what appears to be another promising relationship: the ratio of how well female professors are paid relative to their male colleagues relates positively to higher percentages of female professors, and is highly significant. However, although this association does not hold for promotion rates for female professors overall, at the associate professor level, this relationship is an inverse one.

These mixed results for paid leave on the institutional measures may not indicate that the policy is ineffective. It may be that the policies have not been in place long enough to demonstrate conclusively their effects. It may also be that the effects are there, and important, but too small to be picked up in a broad-scale study like this one. Indeed,

the effects that we are searching for are difficult to measure under ideal circumstances. Operationalizing and quantifying a concept like a “level playing field” is a complicated endeavor.

In fact, these mixed results are extremely intriguing. Why would a paid leave policy correlate with a higher female tenure ratio, but not higher total percentages of female faculty? Additionally, the effects demonstrated by the economic variable, pay ratios between men and women, pose more challenging questions. Why is this factor associated with increased percentages of female faculty, yet at the associate professor level, inversely associated with female promotion? The strength of the salary ratio variable is that it is not an absolute measure of compensation, which would make comparison across institutions extremely difficult, but it is a relative one specific to each institution: how are women on each campus compensated relative to their nearest male colleagues? When we see that this measure does have an effect on the total percentage of female faculty, we have to ask what mechanism is at work. This measure may be giving us an indication of an institution’s ability to recruit and retain talented female faculty, as comparative salary information is certainly a data point with which most academics are familiar. But, it may also be giving us some measure of an administrative attitude toward gender on a particular campus.¹⁶

¹⁶ This begins to broach the larger pay equity debate, which I will not address here. An alternative argument made in this context is that the gender gap in compensation can be accounted for by differences in professional qualifications, specifically those related to, or affected by, continuous time spent in the workforce, a factor which is highly influenced by parenting concerns.

Multivariate Regression Model

In order to assess more accurately the effects of both paid leave and salary ratios with percentage of female faculty and promotion rates, and to control for intervening variables, I turn now to a multivariate analysis. For example, we have been using a higher percentage of female faculty as a positive measure of a more level playing field. However, as the gender gap data from the AAUP cited earlier demonstrated, the percentage of female faculty increases as the rank of the institution decreases. There is also a relationship between the type of institution, private or public, and female faculty. We need a multivariate analysis to control for these factors, and some others, to determine which factors are more influential in leveling the playing field for women.

All of the variables utilized in the multivariate analysis have been introduced above, with the exception of two variables employed to measure institution size and one to measure institutional wealth. I use number of students and number of faculty, separately, as two different proxy measures for institutional size. Calculating the ratio of these two variables, I developed a student/faculty ratio for each institution to use as a proxy measure for institutional wealth.

The following are the variables utilized:

- GENEROSITY INDEX – index of leave policy content ranging from a low of unpaid leave to a high of a full semester paid leave
- SALARY RATIO -- Ratio of female to male salaries: Average of total female salaries at all ranks divided by average of total male salaries at all ranks.
- PERCENT FEMALE FACULTY – Number of total female faculty divided by total faculty.
- TYPE – Institution’s Private or Public status; dummy variable with public as the reference group

- RANK: Institution's competitiveness level recoded into three ranks: elite and very difficult as Rnk1: TOPRANK, moderate as Rnk 2: MIDRANK, and minimum and noncompetitive as Rnk3: LOWRANK; dummy variable with lowrank as reference variable
- TENURE RATIO – Ratio of female to male professors at assistant rank, divided by ratio of female to male professors at associate rank: proxy variable for female tenure promotion:
- STUDENT-FACULTY RATIO – total number of students divided by total number of faculty: proxy for institutional wealth
- NUMBER OF STUDENTS- Number of students: proxy for institution size
- NUMBER OF FACULTY – Number of faculty: proxy for institution size

I began with paid leave as the independent variable of interest. When the bivariate analysis demonstrated mixed outcomes for women, I developed an alternative hypothesis focusing on an economic driver: paying women more fairly may be more effective at leveling the playing field than providing them with paid leave. To measure pay equity, I developed the salary ratio variable described above. Therefore, there are two independent variables of interest: paid leave and salary ratios. (The generosity index is a secondary measure of the leave factor.) As measures of “positive outcomes for women” I use as my dependent variables: salary ratios, percentage of female faculty at an institution, and female promotion rates.

We also know, however, that there are some other important variables, ones that may or may not have a direct effect on the question of a level playing field, that will effect these dependent variables. Some of these that I have identified, and can quantify in this analysis, are rank, type of institution, size of institution as measured by number of students and number of faculty, and wealth of an institution as measured by student/faculty ratios. These institutional variables I will use as control variables.

In summary, as we move into the multivariate analysis, I test two hypotheses for their effect on the level playing field. The first is a Policy Effect Model that posits the power

of a policy measure, in this case paid parental leave, to effect improvement in the “level playing field.” The second is an Economic Effect Model that asserts the importance of more direct economic forces, like salary ratios, in shaping the landscape for women in the labor force.

Multivariate models

Using these variables identified above, I developed three models to compare the relative effects of paid leave and salary ratios on higher female faculty percentages, female promotion rates and more equivalent salary ratios. The first model uses salary ratios as the dependent variable, with paid leave and percent of female faculty as the independent variables. Type of institution, rank, wealth and size of institution are the control variables.

Model One

<i>Salary Ratios</i>	R ² = .317 (3.24)	.000
INDEPENDENT VARIABLES	Coefficients	Significance
Generosity Index	-1.78 (.947)	.064
Percent Female Faculty	.181 (.043)	.000
Type of Institution: PRIVATE	-1.76 (.924)	.061
Rank: TOPRANK	-.626 (1.61)	.698
Rank: MIDRANK	-1.35 (1.37)	.326
Student/faculty ratio	-.167 (.080)	.039
SIZE1: Students	.001 (.000)	.996
SIZE2: Faculty	-.001 (.002)	.327
(Constant)	95.351 (2.66)	.000

n=93 (standard error in parentheses)

I find that this model is highly significant ($p=.000$), with an R² indicating that these independent variables can predict 32 percent of the variation of salary ratios between men and women. The most important result for our purposes is the confirmation

of the bivariate analysis related to paid leave policy: paid leave does have a significant effect on salary ratios at the .10 level, even when controlling for rank, type, size and wealth of an institution. This relationship however, is an inverse one. As the leave policies become more generous, the salary ratio decreases.

On the other hand, the model indicates that total **percent of female faculty** has a highly significant positive relationship with salary ratios. Given that the base for salary ratios is high already at 95 percent, the effect is small. For every 1 percent increase in female faculty, salary ratios increase by .18. Or, when the percentage of female faculty increases by 10 percent, you will see a narrowing of the salary ratio between men and women by almost 2 percentage points.

It is interesting that two other variables, type of institution (at .10) and wealth of institution (as measured by student/faculty ratios), are significant. Again, the effects are small, but at first, might appear contradictory: when an institution is private, instead of public, their salary ratios are actually lower, and when the institution is less wealthy, with higher student-faculty ratios, their salary ratios are also lower. I expected private institutions to have more resources, and therefore, better salary ratios. However, bivariate correlations do indicate a highly significant negative relationship between private institutions and the wealth variable. While acknowledging that the salary ratios we are examining are already fairly equal, it also might be that public institutions feel more political pressure to equalize their salary ratios.

Model Two

<i>Female Faculty Percentages</i>		
	$R^2 = .336$ (7.48)	.000
INDEPENDENT VARIABLES	Coefficients	Significance
Generosity Index	4.85 (2.17)	.028
Salary Ratio	.966 (.228)	.000
Type of Institution: PRIVATE	2.68 (2.16)	.219
Rank: TOPRANK	.855 (3.72)	.819
Rank: MIDRANK	1.26 (3.18)	.692
Student/faculty ratio: WEALTH	.336 (.186)	.074
SIZE1: Students	.001 (.000)	.880
SIZE2: Faculty	-.004 (.004)	.268
(Constant)	-69.17 (23.52)	.004

n=93 (standard error in parentheses)

The second model examines the interaction of the variables that affect female faculty percentages. The model is highly significant. ($p=.000$) The R^2 indicates that the model can explain 34 percent of the variation in female faculty percentages among institutions. After controlling for type, rank, wealth and size of institution, we are left with two significant factors: paid leave and salary ratios. The generosity index indicates a fairly large positive effect for paid leave with female faculty percentages increasing by almost 5 percentage points as the index moves upward. Salary ratios and female faculty percentages have a nearly 1:1 relationship, increasing positively together.

Model Three

<i>Tenure Ratio: Female Faculty Promotion Rates</i>	R ² = .178 (.286)	.019
INDEPENDENT VARIABLES	Coefficients	Significance
Generosity Index	.224 (.083)	.008
Salary Ratio	.002 (.009)	.825
Type of Institution: PRIVATE	.103 (.079)	.194
Rank: TOPRANK	.087 (.142)	.542
Rank: MIDRANK	-.043 (.119)	.716
Student/faculty ratio	.021 (.007)	.004
SIZE1: Students	-.001 (.000)	.096
SIZE2: Faculty	.001 (.000)	.026
(Constant)	-.195 (.887)	.827

n=98 (standard error in parentheses)

The final model examines the Policy Effect and the Economic Effect on female faculty promotion rates. The model is significant, but has weaker explanatory power than the previous two models. The R² of .18 indicates that the model can explain nearly 20 percent of the variance of female faculty promotion rates at different institutions. Controlling for type, rank, wealth, and size of institution leaves one statistically significant independent variable: paid leave is highly significant. ($p=.006$) As the generosity index moves upward, the tenure ratio increases by .23.

Additionally, three of the control variables achieve statistical significance, although the effects are negligibly small: the student/faculty ratio and the size of the faculty have small positive effects on the tenure ratio; and the size of the student body has a slightly negative effect (at .10).

Discussion

Previous research on parental leave policies have focused on questions of job continuity and female fertility as a method of addressing the accumulation of human capital necessary for participating in the labor force. This study takes that question one step further to address explicitly the underlying question of gender equity: *does parental leave in fact increase women's gains in the labor force?* Specifically in the American context, previous research has also been hampered by the lack of data on paid policies. This study provides original data that addresses that gap.

The results provide evidence that where paid leave policies are made available, compared directly with similarly situated workplaces without a paid leave, the results may include both higher percentages of female employees, and higher promotion rates for women. There is also evidence that male-female pay ratios that are closer to equivalence result in higher percentages of female employees.

These results, however, are not without some ambiguity. In addition to these positive results, there is some evidence, although the size of the effect is small, that a paid leave is also associated with a depression of the pay ratio. Indeed, the bivariate analysis revealed the surprising finding that the institutions that offered an unpaid leave of six weeks were the ones that had complete pay equity, a 1:1 ratio.

It was also surprising that the pay ratio in this sample was already quite high, with a mean salary ratio of 94 percent and 95 percent at paid policy and no policy institutions respectively. Some might argue, then, that the effects observed in this study are merely marginal. Even so, others would respond that even such a small disparity in

compensation has a compounding effect that will result in a significant “accumulation of disadvantage” over time. (Valian 2000) Virginia Valian, author of *Why So Slow*, a study of the advancement of women in the labor force observes that: “Even a small disparity, if consistent, represents inequality.” She uses a 95 percent wage gap as an example, and argues that only 100 percent parity is good enough.

Are women in some cases gaining benefits at the expense of compensation? This is an important question. One qualitative study of 22 mothers who were professors of social work probed the respondents’ opinions about policies that were most helpful in addressing the work-family challenge. Although three women in the survey cited parental leave as a valuable institutional support, another respondent mentioned the “unintended consequences” of some pro-parent policies. The list of “suggestions for change” does not include a leave policy, but it does list increased salary levels and support for flexibility. A specific example given by one woman is that a higher salary would enable buying a house closer to campus, a move that would enable more family time. (Young and Wright 2001)

Another surprising result appeared in the relationship between more generous leave policies and higher tenure ratio. This positive result seems fairly straightforward, and what policy makers intended, until noting that the bivariate analysis reveals that the highest tenure ratio is found at schools that offer a paid leave above six weeks, but below a full semester. The multivariate model for the tenure ratio shows a very small coefficient, but the effect demonstrated by paid leave might have been greater were it not for the slightly negative pull of the full semester category at the top of the generosity index. This result was consistent with the additional finding in the bivariate analysis that

schools that offered a full semester of leave were among those with the lowest percentages of female faculty, matched only by those that rely on the federally-mandated unpaid FMLA leave.

Does this provide evidence of unintended consequences from policy utilization? Perhaps not since the difference between the tenure ratio at unpaid leave schools (mean ratio = .49) and the full semester schools (mean ratio = .66) is itself relatively large. Even so, the possibility is one that needs further exploration.

In conclusion, this data highlight the need for additional research specifically focused on which policies or approaches maximize the ability of female professionals to balance the work and family pressures they confront. It appears that these results demonstrate a stronger Policy Effect from the paid leave policy, than an Economic Effect from the salary ratio. However, there is some contrary evidence that may demonstrate unintended consequences. With these caveats, I believe that these results provide some foundation for tempered optimism regarding the effectiveness of paid leave policies for advancing gender equity in the workplace, measured at the institutional level.

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