

UCLA

**Volume III. 1986-87 - Women at Work: The Conference Papers,
May 1987**

Title

Sex Differences in the Allocation of Work Effort Among Professionals and Managers

Permalink

<https://escholarship.org/uc/item/36k043k5>

Authors

Bielby, Denise D.

Bielby, William T.

Publication Date

1987-05-01

Notice:

This working paper was printed by the Institute as a means for disseminating the research findings of Institute and University-related scholars. The text is provided in order to facilitate academic discourse and is free to use for personal academic purposes utilizing proper citation. Copyright of the information contained within lies with the authors, and requests for use other than personal research purposes must be directed to the authors.

SEX DIFFERENCES IN THE ALLOCATION OF WORK EFFORT
AMONG PROFESSIONALS AND MANAGERS[1]

Denise D. Bielby
William T. Bielby

ABOUT THE AUTHORS.

Denise Bielby received her Ph.D. in Sociology from the University of Wisconsin, madison. Currently she is a Lecturer in the Department of Sociology at the University of California, Santa Barbara.

William Bielby received his Ph.D. in Sociology from the University of Wisconsin, Madison and currently is Professor of Sociology at the University of California, Santa Barbara.

A version of this paper was prepared for the UCLA Conference on WOMEN AT WORK, May 1987, sponsored by the UCLA Center for the Study of Women, the Institute of Industrial Relations, and the Institute for Social Science Research.

The research reported here builds on our earlier work on sex differences in the allocation of effort. In our earlier analysis of data from a representative sample of the working population (Bielby and Bielby 1985), we found that women allocate significantly more effort to work than do men with comparable job and family responsibilities. Below, we extend those findings with analyses of patterns of allocation of work effort among men and women professionals and managers.

BACKGROUND

Although women increasingly compete in male dominated professions and remain in the labor force more continuously throughout their lives, disparities persist between men and women's socioeconomic achievements. To explain these differences, economists point to other features of adult social roles

that offset the convergence in men's and women's labor force participation (O'Neill 1985). Fuchs (1971) identified "role differentiation" (the tendency for females to specialize in labor intensive household work) as the chief constraint to women's investment in human capital and choice of jobs. Research shows that despite increased female labor force participation, women remain largely responsible for child care and other household tasks (Stafford 1980; Hartmann 1981; Fox and Nichols 1983). These responsibilities, economists argue, affect not only the continuity of labor force participation but also the types of work women seek outside the home and their orientation toward that work (Polachek 1979; Becker 1985). That is, compared to men with comparable labor force experience, women choose different kinds of jobs and they are less attached to them.

Becker (1985), a leading proponent of the human capital model, asserts that a fundamental reason for sex disparities in socioeconomic attainments is differences in the amount of effort men and women devote to work outside the home, even when they work the same number of hours. Effort refers to the amount of physical and mental energy devoted to work and is different from the skill and responsibility requirements of a given job and the particular constellation of skills and experience a worker brings to it. In the words of Becker, "the evidence still suggests, although it does not demonstrate that the earnings of men and women would not be equal even if their participation were equal" (1985:s35, emphasis added).

Further, Becker notes, because women devote less effort to marketwork, they acquire less human capital per hour of work experience. Faced with lower earning prospects compared to men, women also supply fewer hours of market work, which in turn reduces human capital acquisition and subsequent earnings. Consequently, earning disparities between males and females become larger through the course of the work career (Becker 1985:S53).

Becker's model of effort allocation implies that an hour of a man's time produces more value to an employer than an hour of an equally skilled and experienced woman who has greater household responsibilities. This in turn influences both employers' treatment of equally capable male and female employees and workers' subsequent decisions about investing time and energy in household versus market work.

But is it in fact true that women with family responsibilities expend less effort in the workplace in order to conserve energy for household activities? While economists and sociologists have done considerable research on how men and women allocate time to household and workplace activities, there is little, if any, systematic empirical research on how effort is allocated. The assertion that women seek less demanding jobs and exert less effort on the job is simply a widely held but untested assumption of human capital models.

In an earlier study, Bielby and Bielby (1985) examined sex differences in work effort controlling for ten occupational categories corresponding to major census classifications--professionals, managers, sales, clerical, craft, operative, transport, laborer, farm, and service. We found a statistically significant sex difference in effort devoted to the job, with women on average devoting more effort, regardless of occupation. This difference persisted as we statistically controlled for detailed aspects of household and family responsibilities such as child care; aspects of market human capital such as part and full-time employment, education, work continuity, and income; and finally, job attributes. We also found that professionals, managers, and farmers ranked the highest among the ten occupational categories in amount of effort devoted to the job. In the present research we focus specifically on sex differences in effort among professionals and managers, two occupational categories where the numbers of women are increasing rapidly and where commitment and effort are especially important to career advancement.

Are women professionals and managers willing to work harder and more

efficiently than men for a given level of reward? Social psychological research on equity processes suggests that this is so among women generally. Equity theory examines how individuals determine the fairness of ratios of inputs to outcomes, such as what constitutes a fair reward for a given task, or what constitutes fair effort for a given reward (Walster et al. 1978). Determinations of fairness are based on perceptions of contributions relative to rewards. Experiments in simulated work settings show that men and women differ in how they invoke equity considerations in allocating effort and rewards. On average, women pay themselves less than men performing the same work, and tend to undervalue their efforts relative to men. In these experiments, women also, on average, worked more efficiently than men for a given level of pay (Lenney 1977; Callahan-Levy and Messe 1979; major et al. 1984). It appears that, on average, women have lower internal standards of "personal entitlement" and in the absence of salient external comparison standards, make fairness judgments based on application of same-sex norms about appropriate rewards (Berger et al. 1972; Crosby 1982). Because of this, women might be expected to allocate more effort than men to work activities.

Research Issues

Becker's model of the allocation of effort poses a provocative "supply-side" explanation of differences in socioeconomic attainments of men and women. However, Becker offers no empirical evidence to support his basic premise about sex differences in the allocation of effort. Furthermore, equity research suggests parameters of a human capital model of the allocation of effort differ by sex, reflecting differences between men and women in standards of fair pay and perceptions of performance. Additionally, Becker's model ignores the possibility that the total amount of effort allocated to home and work activities is greater for women than for men.

While empirical evidence from experimental studies challenges Becker's premise about sex differences in the allocation of effort, our research strategy is to rely instead on evidence from representative work settings outside the laboratory. We operationalize Becker's model as completely as possible within the limits of existing survey data. Becker's representation of the allocation of effort allows us to derive hypotheses about parameters of an operational model. Specifically, we will examine (1) whether women professionals and managers do indeed allocate less effort than men to market work; and (2) whether the distributions of household responsibilities accounts for sex differences in the allocation of effort. While we do not directly operationalize concepts for equity theory and research, that perspective, along with the results of social research on the structural features of workplaces, provide an implicit alternative perspective with which to interpret findings which appear anomalous from Becker's perspective.

Operationalizing Work Effort

Although Becker never explicitly defines work effort, there appear to be two components in his use of the concept: (1) actual energy expended on the job; and (2) the energy demands of a job. These suggest two ways to directly measure effort. The first is physiologically or neurologically based, such as measuring actual calories expended at work. The second assesses job demands and job content, focusing, for example, upon physical and mental requirements of a job task, perhaps taking into account exertion, concentration, stress, and responsibility necessary to perform the task competently.

Directly measuring calories expended or neurons triggered is obviously difficult outside the laboratory. While some standardized job evaluation procedures attempt to measure effort demands as well as skill requirements, these

techniques can easily become compromised when men's and women's jobs are to be compared (Treiman and Hartmann 1981; McArthur 1985). We rely instead on job incumbents' self-reports of energy expended and energy demands of work.

Self-reports of job traits are of course not completely accurate, but they often approach or even exceed the reliability of more "objective" measures (McArthur 1985:56-57). Of more concern for our research are potential systematic biases in self-reports by sex. On the one hand, it may be that precisely because of the energy expended on family responsibilities, a given job outside the home is perceived as more demanding by women than by men. A person who shows up for work already exhausted feels as though he or she is putting forth more effort than is actually expended. Though plausible, there is no empirical evidence that this introduces a sex bias into self-reports leading women to overstate effort devoted to work outside the home. On the other hand, both experimental studies and job evaluation research suggest that women are more likely to undervalue their work and thus underestimate the amount of effort they put into a job. On balance, there is no compelling reason to conclude that women overstate their efforts relative to men because of their household responsibilities. Moreover, our analyses statistically control for measures of household responsibilities. That should minimize the extent to which the demands from these activities bias estimates of the net (main) effects of sex. That is, we will examine differences in self-reported work effort between men and women, holding constant household responsibilities.

Specific measures of work effort from the 1977 Quality of Employment Surveys (QES) are described below, after deriving hypotheses from Becker's model of how family responsibilities influence the allocation of effort to work outside the home. Becker's model implies a specific pattern of coefficients for a statistical model comparing men's and women's work efforts. The QES data allow us to operationalize those hypotheses and test them empirically.

Models and Hypotheses

We express the relationship between work effort and its determinants as:

$$E=f(S,A,F,H,M,J),$$

where E is a measure of work effort, S is a binary variable for sex, A is age, F is a vector of family status attributes, H is a vector of measures of household responsibilities, N is a vector consisting of indicators of market human capital and labor supply, and J is a vector of job attributes. Hypotheses about the effects of specific variables are reported in Table 1.

According to Becker's model, we should find that the women, on average, devote less effort to work activities than men. However, family status, household responsibilities, and market human capital should mediate the relationship. That is, a negative zero-order effect of being female should disappear once we control for these factors. In addition, our model allows for a curvilinear pattern of work effort over the life-cycle. We expect work effort to increase early in the career, leveling off at middle age and declining at the end of the career (Rhodes 1983). We assume that the effects of age are the same for men and women, once we control for other attributes that vary over the life-cycle, such as presence of and responsibility for small children, human capital acquisition, and job rewards.

Having a working spouse should have a negative effect on work effort, since it means that there is a second adult in the household whose time and efforts are focused outside the home. Conversely, having a nonworking spouse should increase work effort, since that person is likely to specialize in household activities. Nevertheless, we assume that the effect of having a nonworking spouse is weaker for women, since nonworking husbands are likely to work less intensively and perhaps also less efficiently at household and child

care activities, compared to nonworking wives.

For similar reasons, we assume that the presence of young children has a negative effect on work effort, but only for women. Husbands rarely take responsibility for the care of children and may even allocate time and energy away from the household in order to support a growing family. Demands of caring for school-aged children are likely to be lighter than those for preschoolers, so we expect their effect on women's work efforts to be weaker.

Whether the respondent has primary responsibility for care of a child on working days, the number of hours devoted to child care and the number of hours devoted to household chores on working should each have a negative effect on allocation of effort to work activities outside the home. These measures index activities that consume energy as well as time and therefore should be associated with workplace activities that are relatively less demanding.

Table 1. Hypothesized Effects: Determinants of Work Effort

Variable	Hypothesized Effect
FEMALE (0-1)	-
AGE (yrs)	inverted U
FAMILY STATUS	
Working spouse (0-1)	-
Nonworking spouse (0-1)	++ males; + females
Children 5 or younger (0-1)	-- females only
Children 6 or older (0-1)	- females only
HOUSEHOLD RESPONSIBILITIES	
Primary responsibility for child (0-1)	-
Child care hours (hrs)	-
Household chores hours (hrs)	-
MARKET HUMAN CAPITAL AND LABOR SUPPLY	
Self-employed (0-1)	+
Part-time (0-1)	-
Part-year (0-1)	-
Schooling (yrs)	+
Labor force continuity (proportion)	+
Other family income (log \$)	-
JOB ATTRIBUTES	
Earnings (log \$)	+
Autonomy (1-4)	+
Professional vs. manager (0-1)	no hypothesis

According to human capital models, women pursue part-time and part-year jobs because they are relatively easy to combine with household responsibilities. Consequently, these should also be jobs that require less expenditure of effort. In contrast, individuals working full-time accumulate more market human capital and therefore have a comparative advantage at work activities outside the home. According to Becker's model, these people should be expending more effort at work as well. Similarly, individuals with more education and who have more continuous histories of labor force participation accumulate more market human capital and should expend more effort outside the home as well. Other family income is a measure of other resource available to the

household. Respondents in a household in which other family members contribute sizable income should face a lower utility of each additional dollar earned and therefore focus activities relatively more heavily toward household responsibilities.

Job attributes include two measures of job rewards--earnings and job autonomy--and whether an individual is self-employed.[2] Since individuals may work harder at jobs they find more rewarding or in which they have a personal stake, we expect these variables to have positive effects on work effort. Our model also controls for professional versus managerial occupation.

If Becker's model is viable, then the home and market variables that differentiate men's from women's work efforts should also apply to differences in work effort among women. That is, single, childless women and those with continuous work histories should devote significantly more effort to work activities than married women with intermittent labor force participation and substantial household responsibilities. Of course, these differences among women are implicit in the model outlined above for both sexes. However, we also apply the model separately to men and women to examine whether the effects we hypothesize differ in unanticipated ways for men and women.

Data and Operationalization

Our data are from the 1977 Quality of Employment Survey, a random sample of 1,515 adults living in households, 16 years of age and older, and working at least 20 hours per week (Quinn and Staines 1979). Excluded from our analyses of the 1977 QES are those respondents with missing data on work effort measures. Results discussed below pertain to samples of 143 women and 318 men in professional and managerial occupations.

Ordinary least squares statistical analyses are weighted to adjust for the number of eligible respondents per household and are based on pairwise-present correlations. Comparisons of results computed pairwise, listwise, weighted, and unweighted revealed no appreciable differences.

Work effort. Our dependent measure which indexes work effort is the mean of the sum of three items, each measured on a scale ranging from 1 to 4. The first is: "My job requires that I work very hard." Responses were scaled from 1 = strongly disagree to 4 = strongly agree. The second item is: "Altogether, how much effort, either physical or mental, does your job require?" Responses are scales 1 = none, 2 = only a little, 3 = some, and 4 = a lot. The final item, an important discretionary component of effort is scaled the same way. It asks: "And how much effort do you put into your job beyond what is required?" Most respondents "agree" or "strongly agree" that their jobs require hard work, and most report "some" or "a lot" for the amount of effort required and the amount of extra effort put into their work. The composite scale for male and female professionals and managers has a mean of 3.83 and a standard deviation of .40.

As expected, our composite work effort measure exhibits an inverted U shape across the life-cycle, increasing until about age 40 and decreasing thereafter. In earlier research, we found that respondents in managerial, professional, and farm occupations score highest, on average, on our measure, while respondents in operative occupations score lowest. Respondents employed full-time report greater work effort than those working part-time. In sum, while we must rely on subjective measurement of work effort, the scale we employ has face validity, acceptable reliability, and varies in predictable ways across the life-cycle and across work situations.

Female is a binary variable coded 1 for women. Age is survey year minus year of birth. Binary variables denote whether one has a working or nonworking spouse (not currently married is the omitted category). Binary variables also denote whether the respondent has preschool-age (five years of age or younger)

or school-age (six to seventeen years of age) children.

Responsibility for a child on work days is a binary measure based on the following survey item administered to respondents with working spouses: "If someone has to be home with your child(ren) or do something for (him/her/them) when you are both supposed to be working, which of you is more likely to stay home?" Response of "respondent" is coded 1; "spouse" or "it depends" are coded 0. Single parents are assigned 1 on the item, and childless respondents and respondents with nonworking spouses are assigned 0. Child care hours on work days is based on the following item: "On average, on days when you're working, about how much time do you spend (taking care of or) doing things with your children?" Childless respondents are assigned a value of 0. Household chores hours on work days is based on a similar item: "On average, on days when you're working, about how much time do you spend on home chores--things like cooking, cleaning, repairs, shopping, yard work, and keeping track of money and bills?"

Self-employment is a binary variable scored 1 for respondents who work for themselves. Part-time work is a binary variable denoting whether the respondent works 30 hours or less per week and part-year denotes working 44 or fewer weeks. Schooling is measured in years, with category midpoints assigned to the intervals used in the survey. Ideally, labor force continuity would be measured as the proportion of years in the labor force since schooling was completed. Unfortunately, the survey item referred to number of years worked since age 16, which for many respondents included work during school years. Consequently, our variable measures the proportion of years worked since age 16, and it may understate human capital acquisition for individuals who specialized in schooling activities after the age of 16.

Other family income is the difference between total family income and earnings. We assign a value of 0 to the logged variable for those with no other family income. Earnings refers to total compensation from the respondent's job before taxes and other deductions, and includes overtime pay, bonuses, commissions, etc.

Autonomy is a composite based on the average of four survey items, each scaled from 1 to 4. They are: (1) "I have the freedom to decide what I do on my job"; (2) "I have a lot of say about what happens on my job"; (3) "It is basically my responsibility to see how my job gets done"; and (4) "I am given a lot of freedom to decide how to do my own work." The first three are scaled from 1 for "strongly disagree" to 4 for "strongly agree," and the last item ranges from 1 = "not at all true" to 4 = "very true."

Finally, we control for the two occupational categories corresponding to major census groups--professionals and managers. We include one binary variable with professional coded as 1.

Sex Differences in Household Responsibilities. market Human Capital and Work Effort

Overall, most results from the present research uphold findings from our earlier analysis of all occupational groups. Men and women do differ on average in responsibilities for household activities. For example, on work days women typically spend more than twice as much time than men on household chores, 2.65 hours versus .94 hours according to the descriptive statistics in Table 2. There is a comparable difference in time devoted to child care as well, 1.34 hours versus .85 hours. (Among respondents with children, the figures are 3.32 and 1.54 hours respectively for working women and working men.) Thirty percent of the women in the sample have primary responsibility for a child on work days, while only 4 percent of the men report that kind of responsibility. (Among respondents with children, the figures are 72 percent

Table 2. Descriptive Statistics by Sex (N=461)

Variable	Range	FEMALES (F143)		MALES (N=318)		
		Mean	S.D.	Mean	S.D.	% NA
Age	18-75	39.0	12.0	40.5	10.97	1
Working Spouse	0-1	.60	-	-	.43	0
Spouse, NILF	0-1	.05	-	-	.42	0
Have Children	0-1	.05	-	-	.42	0
Children LE 5	0-1	.15	-	-	.21	0
Children GE 6	0-1	.36	-	-	.46	0
R Resp. for Child	0-1	.30	-	-	.04	1
Child Care Hours	0-8	1.34	2.09	0.85	1.10	2
House Chores Hours	0-8	2.65	1.67	.94	.80	3
Self-Employed	0-1	.19	.41	.23	.39	0
Part-Time	0-1	.15	-	-	.05	1
Part-Year	0-1	.33	-	-	.12	4
Education	6-18	15.1	2.60	14.7	2.65	0
Years Worked	1-59	16.1	10.3	23.4	11.1	0
Work Continuity	0-1	.72	.24	.89	.15	0
Log Other Inc.	0-11.0	7.06	4.13	5.78	3.91	8
Log Earnings	6.8-11.5	9.17	0.68	9.75	0.57	5
Job Autonomy	1-4	3.13	.62	3.30	.51	3
Professional Occupation	0-1	.67	-	.47	-	0
Managerial Occupation	0-1	.33	-	.53	-	0
Effort	1-4	3.53	0.40	3.49	0.40	0

for women and 8 percent for men, respectively). Forty-two percent of the men have a nonworking spouse, compared to just 5 percent of the women.

Presumably because of the differences in household responsibilities, the men in the sample have acquired significantly more market human capital than the women. Women are three times as likely to work part-time and about three times as likely to work part-year. On average, men have worked a little over seven years more than women. As a result, men earn slightly more and have a bit more autonomy on the job. Twenty-three percent of the men are self-employed, compared to 19 percent of the women.

Given the dramatic differences between the sexes in household responsibilities and market human capital, Becker's model implies that we should find men allocating significantly more effort to work activities outside the home. However, descriptive statistics in Table 2 show that this is not the case. In fact, women, on average, report slightly greater work effort than men, by .04 on the four point scale, or a tenth of a standard deviation on the effort scale.

As in our earlier study (Bielby and Bielby 1985), the sex difference in effort allocation is substantially greater when comparing men and women with similar household and job attributes. According to the model in Column 1 of Table 3, the work effort of women professionals and managers exceeds that of men with similar traits by .19 on the four-point scale, or nearly one-half a standard deviation. As in the earlier study, presence of a preschool-aged child for women (-.20) offsets the main effect of sex. That is, our results suggest that a women professional or manager caring for a young child typically reduces her level of work effort to that of the average male.

Table 3. Determinants of Work Effort Among Professionals and Managers, 1977 QES Cross Section Data, OLS Regression Estimates.

Variable	Effort Beyond Required			
	Total Sample (N=461)	Females (N=143)	Males (N=318)	Total Sample (N=461)
Female	.19	-	-	.32**'a
Age x100	-.31*	-.27	-.41+	.07
(Age-40)**2 x100	-.00	-.01	.00	.00
Working Spouse	.03	-.01	.09	.00
Spouse, NILF	.01	.16	.06	.03
Female*Spouse, NILF	.16			.16
Children LE 5	.03	-.14	.04	.01
Children GE 6	-.04	-.07	-.04	-.10
Female*Children LE 5	-.20+	-	-	-.47**
Female*Children GE 6	-.05	-	-	-.05
R Resp. for Child	-.06	-.13	-.07	-.11
Child Care Hours	.04+'a	.03	.03	.08**'a
House Chores Hours	.00	.03	-.03	-.01
Self-Employed	.06	.19+	.05	.03
Part-Time	-.14*	-.10	-.19*	.06
Part-Year	.14*'a	.27**'a	.03	.05
Education x10	.04	-.01	.11	-.04
Work Continuity	.34**	.34*	.35*	.45**
Log Other Inc. x10	.06	-.00	.08	.01
Log Earnings	.08*	.09+	.03*	.10*
Job Autonomy	.17**	.09+	.21**	.17**
Professional Occupation	-.07	.03	-.12*	.10
Constant	1.91	2.21	2.20	1.70
R2	.17	.27	.17	.12
Disturbance s.d.	.38	.37	.38	.54
Mean Dep. Var.	3.51	3.53	3.49	3.61
S.D. Dep. Var.	.40	.40	.40	.56

+: p < .10

*: p < .05

**: p < .01

a: two-tailed test, effect not in hypothesized direction

Effects of other independent variables provide mixed support for the human capital model. Among the household responsibility measures, the presence of a young child for women is the only variable with a significant effect in the predicted direction. As predicted by the human capital model, work continuity and job rewards are positively associated with work effort. That is, both male and female professionals and managers with intermittent labor force participation, low earnings, and little job autonomy devote less effort to their work. Part-time work is negatively associated with work effort, although the effect is statistically significant only among men.

Among professionals and managers, part-year employment is associated

with increased effort, a reversal of our earlier findings for all occupational groups. Supplementary analyses reveal this is due to female primary and secondary school teachers who report devoting more effort to their work.

In sum, our most important finding is that women professionals and managers devote more effort to their work than men with comparable work and family situations. The demands of caring for young children do reduce the amount of effort women allocate to work, but women with such responsibilities, on average, devote about as much effort to work as do men with similar work and family responsibilities.

There could be, however, an alternative explanation for our findings. Our results assume that the three effort indicators are interpreted the same way by men and women. But it may be that our findings are an artifact of the way men and women professionals and managers respond to the items. For example, it may be that when confronted with a work role requiring a given amount of effort, a woman is likely to perceive it to be more demanding, due to the drain on her total stock of energy from her household responsibilities. If that were the case, we might expect women professionals and managers to report greater work demands on the items regarding the effort requirements of the job. However, this should not be the case for the measure referring to effort beyond what is required on the job. If the human capital model is valid, we would not expect higher scores from women on the item: "And how much effort do you put into your job beyond what is required?" This discretionary component of effort should be precisely where women make the trade-off sacrificing effort in the workplace in order to meet family obligations. To test this alternative explanation, we replicated our analysis using only the item referring to effort beyond what is required as the dependent variable.

In the far right column of Table 3 we report results for this item. The effect of being female is positive and actually larger than the coefficient for the three item scale (.32 versus .19). That is, compared to men with similar household and work situations, women report devoting substantially more effort to the job beyond what is required. (The effect of being female is more than a half of a standard deviation on the item measuring effort beyond what is required.)

There is one important caveat to our findings. Once again, greater effort among women professionals and managers is not apparent among those with young children. The negative interaction of being a female professional or manager and having a young child (-.47) more than offsets the main effect of being female (.32). In short, compared to her male colleagues, a woman professional or manager is devoting more extra effort to her work, unless she has the responsibility of caring for a young child.

SUMMARY AND CONCLUSIONS

The human capital model of the allocation of effort to work and household activities proposed by Becker (1985) assumes that, on average, women devote less effort to work activities than men. The lower work effort of women is assumed to be due to their greater family responsibilities and lower market human capital. Our analyses of professionals and managers using the 1977 Quality of Employment Survey fail to support the assumption about sex differences in work effort. In fact, on average, women report working at jobs that require slightly more effort. Compared to men with similar household responsibilities, market human capital, earnings, and job responsibilities, women allocate substantially more effort to work activities; the net sex difference is nearly one-half standard deviation on the scale we use. Moreover, to the extent that women do allocate effort away from the workplace in order to meet family demands, those trade-offs bring their work effort back to the level of the typical male with no such family responsibilities.

Our findings have some important implications for women's careers in the professions and in management. In order for a woman professional or manager to prove herself in a male-dominated work setting, she may have to demonstrate more effort beyond what is expected of the typical male. Our results show that women professionals and managers in the late 1970s were investing energy in their careers substantially beyond what was required. However, the demands of childrearing may keep women with young children from signaling their commitment to employers by devoting extra effort to the job. Since employers may believe that women with young children are less committed to their careers, women who "merely" devote as much effort to their jobs as their male counterparts may be at a disadvantage in terms of career advancement. Unfortunately, dropping out of the labor force to attend to child care responsibilities is not a viable solution for women professionals and managers attempting to balance career aspirations and family commitments. Our results show that professionals and managers with interrupted careers devote less effort to their work. This suggests that unless the household division of labor becomes more equitable, or employers become more accommodating to the family constraints faced by mothers, women professionals and managers with young children will face even greater career barriers than childless women.

Finally, our results underscore the importance of evaluating empirically assumptions about differences in the subjective orientations that women and men bring to their careers. The human capital model of the allocation of effort is certainly a plausible explanation for differences in earnings and career prospects among men and women with comparable labor force experience, and it is consistent with popular notions about how family demands interfere with women's careers. However, women professionals and managers appear not to behave in a way consistent with the assumptions made by neoclassical economists and, presumably, many employers. A significant challenge facing women in the professions and in management is to have their efforts both recognized and rewarded.

1. This research was supported by the Sociology Division of the National Science Foundation and by the Academic Senate Committee on Research, University of California, Santa Barbara.
2. Preliminary models also included a measure of perceived promotion opportunities. However, it had no statistically significant effects, and a high proportion of the cases had missing data. Consequently, the measure was dropped from subsequent analyses.

REFERENCES

- Becker, G.S.
 1985 Human capital, effort and the sexual division of labor. *Journal of Labor Economics* 3 (Supplement):S33-58.
- Berger, J., M. Zelditch, Jr., B. Anderson and B.P. Cohen
 1972 Structural aspects of distributive justice: a status value formulation. In J. Berger, N. Zelditch and B. Anderson, editors, *Sociological Theories in Progress*, Volume 2. Boston: Houghton Mifflin.
- Bielby, D.D. and W.T. Bielby
 1985 She works hard for the money: household responsibilities and the allocation of effort. Paper presented at the 1985 Annual Meetings of the American Sociological Association, Washington, D.C.

- Callahan-Levy, C.M. and L.A. Messe
1979 Sex differences in the allocation of pay. *Journal of Personality and Social Psychology* 37:433-446.
- Crosby, F.
1982 *Relative Deprivation and Working Women*. New York: Oxford University Press.
- Fox, K.D. and S.Y. Nichols
1983 The time crunch. *Journal of Family Issues* 4:61-82.
- Fuchs, V.
1971 Differences in hourly earnings between men and women. *Monthly Labor Review* 94:9-15.
- Hartmann, H.I.
1981 The family as the locus of gender, class and political struggle: the example of housework. *Signs* 6:365-394.
- Lenney, E.
1977 Women's self-confidence in achievement settings. *Psychological Bulletin* 84:1-13.
- McArthur, L.Z.
1985 Social judgment bias in comparable worth analysis. In H.I. Hartmann, editor, *Comparable Worth: New Directions for Research*. Washington, D.C.: National Academy Press.
- Major, B. D.B. McFarlin and D. Gagnon
1984 Overworked and underpaid: on the nature of gender differences in personal entitlement. *Journal of Personality and Social Psychology* 47:1399-1412.
- O'Neill, J.
1985 The trend in the male-female wage gap in the United States. *Journal of Labor Economics* 3 (Supplement):S91-116.
- Polachek, S.W.
1979 Occupational segregation among women: theory, evidence, and a prognosis. In C.B. Lloyd, E.S. Andres and C.L. Gilroy, editors, *Women in the Labor Market*. New York: Columbia University Press.
- Quinn, R.P. and G.L. Staines
1979 *Quality of Employment Survey, 1977: Cross Section*. Ann Arbor, Michigan: Inter-university Consortium for Political and Social Research.
- Rhodes, S.R.
1983 Age-related differences in work attitudes and behavior: a review and conceptual analysis. *Psychological Bulletin* 93:328-367.
- Stafford, F.P.
1980 Women's use of time converging with men's. *Monthly Labor Review* 103:57-59.
- Treiman, D.J. and H.I. Hartmann, Editors

1981 Women, Work, and Wages: Equal Pay for Jobs of Equal Value.
Washington, D.C.: National Academy Press.

Walster, E., G.W. Walster and E. Berscheid

1978 Equity: Theory and Research. Boston: Allyn and Bacon.

Requests for ordering copies of this paper should be submitted to:

Working Papers

Institute for Social Science Research

UCLA

Box 951484

Los Angeles, CA 90095-1484

or email: issr@issr.ucla.edu