# *THE DETERMINANTS OF JOB SATISFACTION OF MALE AND FEMALE BUSINESS ADMINISTRATION FACULTY*

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**ABSTRACT**

This study builds on previous research that examines the differences in job satisfaction and attitudes toward the job between male and female faculty members. In this paper, the determinants of job satisfaction of faculty members in several areas of business are analyzed. These areas include economics, accounting, banking and finance, business administration and management, and marketing. Satisfaction with five aspects of the job is used as dependent variables: the job overall, workload, opportunities for advancement, job security, and salary. Ordered probit is used to examine job satisfaction using explanatory variables such as salary, teaching loads, rank, tenure status, experience, type of employing institution, marital status, gender and race. Separate equations are estimated for males and females and it is found that the variables significantly affecting job satisfaction differ between the genders. This conclusion supports the existing literature on job satisfaction in other labor markets.

**INTRODUCTION**

Much of the economic research concerning gender differences in the academic labor market concentrates on the determinants of salary while most of the research on job satisfaction does not deal with gender differences nor do the studies on job satisfaction look specifically at the academic labor market. There are several exceptions to this generalization. Three previous studies look at differences in job satisfaction across genders: Jackson, Keavenly, and Fossum [16], Dalton and Marcis [9], and Clark [8]. All three find significant differences between male and female workers in reported measures of job satisfaction yet these studies are not specific to the academic labor market. Looking specifically at the issue of job satisfaction in the academic labor market are the following papers: Campbell et al. [7] who look at job satisfaction of academic accountants at Southern Business Administration Association schools, Lillydahl and Singell [21] who do a comprehensive study of job satisfaction and salaries for faculty in the arts and sciences to determine the effects of being a union member, and Rankin and Christensen [24, 25] who tests for differences in the proportion of male and female economists who are satisfied with various aspects of their academic job.

The purpose of this study is to expand upon the existing literature by examining the determinants of job satisfaction for faculty in the areas of accounting, banking and finance, business administration and management, economics, marketing, and other business areas, allowing for both differences in what these determinants are across the genders and \for the determinants to have different effects on job satisfaction across the genders. These differences may be due to actual discrimination, perceived discrimination, or differences in

how males and females value their job and their expectations about their jobs. The literature on faculty salaries seems to indicate that wage discrimination did exist in the academic labor market but that over time it has diminished[1] yet wage is not the only determinant of job satisfaction. Gender discrimination, other than salary, might exist that favors one gender over the other in terms of teaching loads, course assignments, or committee assignments. Females in the academic labor market might also have lower job satisfaction levels due to isolation from other females in the workplace since males still dominate most academic departments, especially in the areas of business that are included in this study.

Two recent papers on academic economists have examined gender differences in other aspects of the labor market. McMillen and Singell [23] look at the choice of first-jobs for male and female economists and find that □men may be better able than women to obtain positions that match their skills□ [23 , p. 713] which might suggest that females are in jobs that they find less satisfying. Another recent study by Kahn [20] investigates the differences in the length of time to tenure and promotion between male and female academic economists. His findings suggest that female economists have to wait longer for tenure than do their male colleagues, but the length of time to promotion is not significantly different across genders. This would also lead one to believe that females might be less satisfied with at least some aspects of their jobs such as job security.

The existing literature also suggests that the variables that affect job satisfaction differ for males and females. In a study using the 1980 youth cohort of the National Longitudinal Surveys, Dalton and Marcis [9] find that the factors that affect job satisfaction are different for males and females. Human capital variables are more important in determining satisfaction levels for males while factors related to the workplace are more important for females. Clark [8] using the 1991 British Household Panel Survey also finds significant differences in the determinants of and their effects on job satisfaction. Among the differences he observes in his study, marital status, hours of work, union membership, and managerial status are significant determinants of job satisfaction for females but not for males. These previous studies, although not applied to the academic labor market, suggest that the variables that affect job satisfaction, as well as their effects, differ across gender.

Using data from the 1993 National Survey of Postsecondary Faculty (NSOPF), the present study will examine job satisfaction levels to determine if, for academics in the areas of accounting, banking and finance, business administration and management, economics, marketing, and other business areas, there are differences in job satisfaction across genders and what variables play the most important roles. Five different measures of job satisfaction are used: satisfaction with the job overall, satisfaction with workload, satisfaction with advancement opportunities, satisfaction with job security, and satisfaction with salary. In the next section, the previous literature concerning job satisfaction in the academic job market will be discussed. The third section of the paper explains the methodology used and the data followed by a presentation and discussion of the empirical results. Conclusions and implications are in the final section.

## PREVIOUS STUDIES ON JOB SATISFACTION FOR ACADEMICS

There have been four previous papers that deal specifically with job satisfaction in the academic labor market. Campbell et al [7] look at job satisfaction of academic accountants at schools that are members of the Southern Business Administration Association. Their data are from surveys of 159 accounting faculty at 53 schools of which they received only 90 usable responses. An index measure of job satisfaction is developed that includes satisfaction with work, pay, opportunities for advancement, supervision and co-workers. They use MANOVA and ANOVA analysis to test for differences in job satisfaction due to academic rank, gender, university enrollment, and public versus private

institutions. Their findings indicate that university enrollment is positively related to satisfaction with pay, and it is also related to satisfaction with supervision and co-workers although the direction is indeterminate. They also find that at public schools there is higher level of satisfaction with work. No significant differences are observed in job satisfaction due to rank or gender.

Lillydahl and Singell [21] do a comprehensive study of job satisfaction and salaries of academics to determine the effects of being a union member. They use the 1988 NSOPF data and include faculty at four-year institutions who are assistant professors or of higher rank and include only those in the arts and sciences. Two-staged least squares is used to estimate a wage equation and a job satisfaction equation. The explanatory variables used to explain job satisfaction are age, age squared, the log of salary, and dichotomous variables equal to one for union members, males, married faculty, those at research institutions, chairpersons of departments, and whites. Separate equations are estimated for full professors, associate professors and assistant professors. Age, union membership, and being male have negative and significant effects on job satisfaction in at least one of the three equations and age squared, being white, being chairperson of the department, and the log of salary have positive and significant effects on job satisfaction in at least one of the equations.

Lillydahl and Singell also compare responses for 26 different aspects of job satisfaction that test for significant differences in the proportion of faculty members satisfied between unionized and nonunionized faculty members. They find that union members are significantly more satisfied with wages, benefits and job security, but are significantly less satisfied with all other others aspects of the job. Gender differences are not the focus of their paper yet by including the gender dichotomous variable they allow for job satisfaction to differ for males and females and find that for full professors males are less satisfied than their female colleagues and for other ranks there is not a significant difference. They do not allow for the variables to have different effects on job satisfaction for males and females.

In two recent papers, Rankin and Christensen [24, 25], examine measures of job satisfaction for gender differences for academic economists using the same data set that is used in this paper. In the first paper, satisfaction with seventeen different aspects of the job is analyzed to determine if there is a significant difference based on gender. The aspects of the job used in their analysis include authority to decide course content, authority to make other job decisions, authority to decide courses taught, time available to advise students, workload, job security, advancement opportunity, time to keep current in field, freedom to do outside consulting, salary, benefits, and the overall job. In addition, the respondents were asked to what degree they agreed with the following statements: female faculty are treated fairly, minority faculty are treated fairly, and they would choose an academic career again. Both $\square^2$ and two-tailed z-tests are used to test for differences across genders. The females in the study were found to be less satisfied with their workload, job security, opportunities for advancement, and the time available to keep current in their field. Females are also found to be less likely to agree that female faculty are treated fairly. These results do not control for any other factors that might affect the level of job satisfaction.

In a subsequent study, Rankin and Christensen [25], Wilcoxon Rank Sum tests are used to see if the median level of satisfaction for males and/or females is affected by the following variables: institutional control, education, tenure status, union membership, race, academic rank, and Carnegie classification of the employing institution. Five areas of job satisfaction are used: workload, job security, opportunity for advancement, the amount of time available to keep current in field, and the job overall. The results indicate that institution control (private versus public) affects the level of overall satisfaction for males

and not females but has no effects on satisfaction in the other aspects of the job. Having a Ph.D. affects job satisfaction for both males and females in the area of advancement opportunities but does not affect satisfaction levels in any other area. Tenure status affects satisfaction for males only in the areas of advancement opportunities and time to keep current and it affects the level of satisfaction with the job overall for both genders. Unionization affects satisfaction with workload for both genders and affects females' satisfaction with job security and males' satisfaction with advancement opportunities. Race affects satisfaction with job security, advancement opportunities, and time available to keep current for males, and it affects the level of satisfaction for females only in the area of advancement opportunities. Academic rank affects satisfaction with job security and opportunity for advancement for both genders, and it affects females' satisfaction with time to keep current and males' satisfaction with the job overall. The Carnegie classification of the institution has no effects on any area of satisfaction for either gender.

This study is an extension of the previous ones in that more observations covering more academic disciplines are included so that more rigorous statistical techniques can be employed. An explanation of the methodology follows.

**METHODOLOGY AND DATA**

The methodology used here follows that which has been used extensively in the literature on job satisfaction.[2] Job satisfaction is assumed to be a function of the worker's full wage. A faculty member's full wage (FW) is the sum of the money wage (MW) and the nonpecuniary aspects of the job expressed in monetary terms (NP):

$$FW = MW + NP \tag{1}$$

The nonpecuniary aspects of the job depend on the individual's utility function. The common assumption in the literature is that tastes and preferences are the same for all workers and may be represented by a monotonic transformation of the characteristics of the worker (X). Hence job satisfaction (JS) may be expressed as

$$JS = \alpha_0 + \alpha_1 MW + \alpha_2 X \ . \tag{2}$$

In order to estimate the job satisfaction equation, data for professors in the areas of accounting, banking and finance, business administration and management, economics, marketing, and other business from the 1993 NSOPF survey are used.[3] The 1993 NSOPF is sponsored by the U.S. Department of Education□s National Center for Education Statistics and includes data for 25,780 respondents from 817 postsecondary institutions.[4] Only full-time employees having faculty status and holding rank of instructor or higher in the areas listed above are included in this study which yields a total of 1205 observations. The variables used in the estimations that follow are defined in Table I and the means (proportions) and standard deviations of these variables for the whole sample and for the two subsamples (males and females) are in Table II

**Table I**
**Variable Definitions**

| Variable | Definition |
|---|---|
| OVERALL | 1, if respondent is very satisfied with their job overall: 0, otherwise |
| WORKLOAD | 1, if respondent is very satisfied with their workload: 0, otherwise |
| ADVANCEMENT | 1, if respondent is very satisfied with their advancement opportunities: 0, otherwise |
| SECURITY | 1, if respondent is very satisfied with their job security: 0, otherwise |
| SALARY | 1, if respondent is very satisfied with their salary: 0, otherwise |
| RESDOC | 1, if respondent teaches at a research or doctoral institution: 0, otherwise |
| COMP | 1, if respondent teaches at a comprehensive institution: 0, otherwise |
| LIBARTS | 1, if respondent teaches at a liberal arts institution: 0, otherwise |
| TWOYR | 1, if respondent teaches at a two-year institution: 0, otherwise |
| PRIVATE | 1, if the respondent teaches at a privately owned institution; 0, otherwise |
| INSTR | 1, if the respondent has a rank of instructor; 0, otherwise |
| ASSIST | 1, if the respondent has a rank of assistant professor; 0, otherwise |
| ASSOC | 1, if the respondent has a rank of associate professor; 0, otherwise |
| FULL | 1, if the respondent has a rank of full professor; 0, otherwise |
| TENURED | 1, if the respondent is tenured; 0, otherwise |
| PERTEACH | percentage of the time the respondent spends teaching |
| U | 1, if the respondent is a member of a union; 0, otherwise |
| LNSALARY | the log of the respondents nine-month salary |
| EXPER | the number of years the respondent has held current job |
| EXPERSQ | the number of years the respondent has held current job squared |
| FEMALE | 1, if the respondent is a female; 0, otherwise |
| WHITE | 1, if the respondent is white; 0, otherwise |
| MARRIED | 1, if the respondent is married; 0, otherwise |
| OTHERINC | other household income |
| ACCOUNT | 1, if the respondent□s primary field is accounting; 0, otherwise |
| BANKFIN | 1, if the respondent□s primary field is banking and finance; 0, otherwise |
| BSADMIN | 1, if the respondent□s primary field is business administration and management; 0, otherwise |
| ECON | 1, if the respondent□s primary field is economics; 0, otherwise |
| MARKET | 1, if the respondent□s primary field is marketing; 0, otherwise |
| OBUSN | 1, if the respondent□s primary field is in any other business area; 0, otherwise |

**Table II**
**Means And Proportions Of Variables**
**With Standard Deviations In Parentheses**

| Variable | ALL (N = 1205) | Males (N = 861) | Females (N = 344) |
|---|---|---|---|
| OVERALL | .3220 (.4674) | .3263 (.4692) | .3110 (.4636) |
| WORKLOAD | .3087 (.4622) | .3275 (.4696) | .2616 (.4402) |
| ADVANCEMENT | .3178 (.4658) | .3391 (.4737) | .2645 (.4417) |
| SECURITY | .4647 (.4990) | .4948 (.5003) | .3896 (.4884) |
| SALARY | .1212 (.3265) | .1301 (.3366) | .0988 (.2989) |
| RESDOC | .2531 (.4350) | .2846 (.4515) | .1744 (.3800) |
| COMP | .4299 (.4953) | .4321 (.4957) | .4244 (.4950) |
| LIBARTS | .0880 (.2834) | .0732 (.2606) | .1250 (.3312) |
| TWOYR | .2091 (.4069) | .1905 (.3929) | .2558 (.4370) |
| PRIVATE | .3261 (.4690) | .3078 (.4618) | .3721 (.4841) |
| INSTR | .1552 (.3622) | .1196 (.3247) | .2442 (.4302) |
| ASSIST | .3104 (.4629) | .3008 (.4589) | .3343 (.4724) |
| ASSOC | .2622 (.4400) | .2578 (.4377) | .2733 (.4463) |
| FULL | .2722 (.4453) | .3217 (.4674) | .1483 (.3559) |
| TENURED | .5411 (.4985) | .5772 (.4943) | .4506 (.4983) |
| PERTEACH | 57.95 (25.16) | 56.12 (25.07) | 62.55 (24.82) |
| U | .2282 (.4199) | .2207 (.4149) | .2471 (.4320) |
| LNSALARY | 10.64 (.3549) | 10.69 (.3430) | 10.50 (.3487) |
| EXPER | 9.07 (8.32) | 9.49 (8.48) | 8.02 (7.82) |
| EXPERSQ | 151.47 (258.55) | 161.89 (246.96) | 125.40 (284.21) |
| FEMALE | .2855 (.4518) | | |
| WHITE | .8050 (.3964) | .7828 (.4126) | .8605 (.3470) |
| MARRIED | .7967 (.4026) | .8397 (.3671) | .6890 (.4636) |
| OTHERINC | 37,370.74 (44,171.28) | 35,804.55 (44,340.57) | 41,290.76 (43,562.04) |
| ACCOUNT | .2224 (.4160) | .1916 (.3938) | .2994 (.4587) |
| BANKFIN | .0846 (.2785) | .0941 (.2921) | .0614 (.2398) |
| BSADMIN | .2490 (.4326)) | .2555 (.4364) | .2326 (.4231) |
| ECON | .2241 (.4171) | .2509 (.4338) | .1570 (.3643) |
| MARKET | .1087 (.3114) | .1138 (.3178) | .0959 (.2949) |
| OBUSN | .1112 (.3145) | .0941 (.2921) | .1541 (.3615) |

Of the 1205 observations, 861 or 71.45% of the observations are males leaving 334 or 28.55% females. While this is not equal representation of the genders, it is probably fairly close to the percentage of faculty members in these areas of business who are male and female. Thirty-two percent of the total sample is very satisfied with their job overall while 33% of the males and 31% of the females are. Males have a higher percent very satisfied for the other four measures of job satisfaction also. A larger percent of the males are at research/doctoral and comprehensive institutions, as defined by the Carnegie classifications, than females while a larger percent of females are at the other two types of institutions. A larger percent of the females in the sample are at privately owned institutions than are males. As for the rank variables, females have larger percentages at all ranks except full professor for this sample. The percentage tenured is smaller for females than for males. The percentage of the samples in the fields of accounting and other business areas are higher for females than males while the male sample has higher percentages in the areas of banking and finance, business administration and management, economics, and marketing.

The females in the sample spend a larger percent of their time teaching and a larger percent of females are members of a union. Average salaries are higher for the males in the sample. Males have an average nine-month salary of $46,566 while females have an average salary of $38,697. The females have higher household income other than their basic salary from the academic institution for which they work full-time. For females the average other household income is larger than their own basic nine-month salary whereas for males it is reversed. The average number of years in the job currently held is greater for males and a larger percent of the females are white while a larger percent of the males are married.

## EMPIRICAL RESULTS

The data described above are used to estimate five job satisfaction equations. Ordered probit is the method of estimation used since the dependent variable is the result of a question for which the responses are on a scale of one to four with one being very dissatisfied and four being very satisfied. The control group is comprised of unmarried, non-white, nontenured faculty members holding a rank of instructor at public, comprehensive institutions whose primary field is economics and who are not union members. Regressions are run for the whole sample including the variable FEMALE to see if gender makes a difference in the probability of being very satisfied with each of the aspects of the job. Additionally, separate regressions are estimated for the males subsample and the female subsample in order to allow for the variables to have different effects on job satisfaction across genders.

For many of the independent variables there are not clear expectations for the signs of the coefficients.[5] Those with higher rank might be expected to be more satisfied as will those with tenure, especially in the case of satisfaction with job security. Previous research has generally shown that union membership has a negative effect on job satisfaction when income is held constant, see Lillydahl and Singell [21]. This is explained by the fact that those dissatisfied are more likely to join a union in the first place. Salary is expected to be positively related with all aspects of job satisfaction. Lillydahl and Singell found age to be negatively related to job satisfaction and age squared to be positively related so EXPER might be expected to have a negative coefficient and EXPERSQ to have a negative effect. If gender discrimination exists, females are expected to be less satisfied and if racial discrimination exists whites are expected to be more satisfied. It is unclear how type of academic institution, institution control, percent time spent teaching, marital status, other household income, and areas of primary teaching are related to overall job satisfaction.

Percent of time spent teaching might be expected to negatively affect one□s satisfaction with workload.

Table III has the results using satisfaction with the job overall as the dependent variable. Examination of these results using the entire sample of 1205 faculty members shows that faculty at two-year institutions are significantly more likely to be very satisfied with their overall job than those at comprehensive institutions while those at research/doctoral schools are less likely to be satisfied. Faculty at private institutions are more likely to be satisfied. Assistant, associate, and full professors are all less likely to be satisfied than are instructors. Having tenure tends to significantly raise the probability of being satisfied. The larger the percent time spent teaching, the less likely a faculty member is to be satisfied. The log of salary has a large, significant effect on job satisfaction while the length of time at current job has a significant negative effect but it diminishes over time. Other household income has a positive and significant effect on job satisfaction as does being married. Faculty whose primary field is either accounting or business administration and management are more likely to be satisfied than are those in economics. No other area of business is significantly different from economics in terms of the likelihood of being very satisfied with the job overall. The only really surprising results are that union members are not significantly less likely to be very satisfied and gender has no effect.

For the male subsample the results are similar to those for the entire sample with the following differences. The Carnegie classification of the employing institution has no significant effect for the male subsample and neither does marital status. Everything else has the same effect as previously stated for the whole group.

The female equation though has many differences from the equation for the entire sample. Only five of the variables are significant in predicting the probability of a female being very satisfied with their job overall. The significant factors for females that are also significant for males are being an assistant professor which lowers the probability of being very satisfied with the job overall and experience which has a negative effect. Being married has a positive significant effect for females whereas in the all male equations its effect is not significant. Other household income has no effect for females while it does for males. None of the specific areas has a significant effect for the female subsample. The fact that rank, being tenured, percent time spent teaching, experience squared, and other household income are not significant for females, yet are for males, illustrates the point that the variables that affect job satisfaction do differ across gender.

Looking at Tables IV-VII for the results using satisfaction with the other aspects of the job as dependent variables and combining males and females, the FEMALE variable is significant in only one case: satisfaction with workload. In this case, it has a negative sign which implies that females are less likely to be satisfied with their workload than are males, holding the other variables constant. Being a union member has a significant and negative effect, as expected, in only two cases: satisfaction with workload and job security. Being white has a significant and positive effect for satisfaction with the opportunities for advancement and salary. Being married has a positive and significant effect for only one other measure of satisfaction, salary. The rank variables are significant sometimes but not always. Assistant and associate professors are less likely to be satisfied with workload and salary, in addition to the job overall. Full professors are more likely to be satisfied with advancement opportunities. Faculty at two-year institutions are more likely to be satisfied with advancement opportunities, job security, and salary. Those at liberal arts institutions are more likely to be satisfied with advancement opportunities.

Being tenured has a positive and significant effect for workload, advancement opportunities, and job security. The percent time teaching does not affect the probability of satisfaction in any of the other areas while the log of salary has a significant and positive

effect for all the other areas. Other household income has a positive and significant effect for workload. Experience and experience squared have significant and as expected signs for workload, advancement, and salary. Faculty in the area of accounting are more likely to be satisfied with workload and salary and less likely to be satisfied with advancement opportunities. Business administration faculty are more likely to be satisfied with workload, banking and finance faculty are less likely to be satisfied with job security, and those in the area of other business are less likely to be satisfied with advancement opportunities and job security.

Separating the males and females, the results for satisfaction with the other aspects of the job are similar to those for the job overall in that there are notable differences in the significant determinants of job satisfaction for males and females. By looking at Table VIII, the differences can be easily seen. Some of the most obvious differences are that being tenured and the log of salary are more often significant factors for males than females. Males' probabilities of being satisfied are not affected by the Carnegie classification of the employing school whereas for females, it often plays a significant role. The race variable is also significant for males more often than for females while being married is more often significant for females than for males. The specific area of business makes a difference more for the males subsample than for the female subsample.

## CONCLUSIONS AND IMPLICATIONS

In this paper, two hypotheses are examined. The first is whether or not female business faculty are more or less satisfied with their jobs and the second is whether the variables that affect job satisfaction are the same for males and females. Using the whole sample and a dichotomous variable to control for gender it is found that gender does not effect job satisfaction when the other variables that affect job satisfaction are controlled for except in the case of satisfaction with workload, and females are less likely to be satisfied in this area. Yet, when the variables that affect job satisfaction are allowed to be different and to have different effects for each gender, there are significant differences. The implication from these results is that males and females derive satisfaction from a different set of variables and that studies that assume the variables affecting job satisfaction are the same for both genders are incorrectly specifying the relationships. Merely using a dummy variable for gender does not allow one to see these different effects. Separate equations are needed to detect these different effects and to gain a better understanding of the variables that affect job satisfaction.

**Table III**
**Results Of Ordered Probit Estimation Dependent Variable: Overall**

| Variable | All Coefficient(P-Value) | Male Coefficient (P-Value) | Females Coefficient (P-Value) |
|---|---|---|---|
| RESDOC | -.1463 (.0933)* | -.0899 (.3703) | -.3851 (.0365)** |
| LIBARTS | .1442 (.2804) | .2200 (.1990) | .1006 (.6517) |
| TWOYR | .2383 (.0205)** | .0898 (.4740) | .5210 (.0058)*** |
| PRIVATE | .1965 (.0167)** | .2488 (.0112)** | .0236 (.8813) |
| ASSIST | -.4913 (.0000)*** | -.5404 (.0003)*** | -.3355 (.0762)* |
| ASSOC | -.3799 (.0029)*** | -.4876 (.0027)*** | -.1641 (.4544) |
| FULL | -.2287 (.0845)* | -.3788 (.0217)** | .1724 (.4779) |
| TENURED | .3028 (.0017)*** | .3222 (.0057)*** | .2716 (.1262) |
| PERTEACH | -.0042 (.0037)*** | -.0047 (.0073)*** | -.0003 (.2446) |
| U | -.1047 (.2201) | -.0632 (.5366) | -.2415 (.1341) |
| LNSALARY | .4201 (.0004)*** | .4969 (.0007)*** | .2567 (.2335) |
| EXPER | -.0449 (.0016)*** | -.0418 (.0146)** | -.0478 (.0522)* |
| EXPERSQ | .0016 (.0009)*** | .0016 (.0045)*** | .0013 (.1148) |
| FEMALE | .0174 (.8221) | | |
| WHITE | .1101 (.1942) | .0810 (.4095) | .1420 (.4292) |
| MARRIED | .1732 (.0413)** | .0745 (.4902) | .4087 (.0059)*** |
| OTHERINC | .000002 (.0328)** | .000002 (.0138)** | .0000002 (.9071) |
| ACCOUNT | .1811 (.0724)* | .2247 (.0627)* | -.0040 (.9838) |
| BANKFIN | -.0741 (.5787) | -.1382 (.3596) | -.1020 (.7341) |
| BSADMIN | .2588 (.0090)*** | .2865 (.0112)** | .1448 (.5090) |
| MARKET | .0762 (.5334) | .1385 (.3260) | -.1174 (.6518) |
| OBUSN | .1249 (.3048) | .1748 (.2454) | -.0944 (.6837) |
| N | 1205 | 861 | 344 |
| LR STAT (P-VALUE) | 135.24 (.0000)*** | 105.05 (.0000)*** | 53.59 (.0001)*** |
| Pseudo- $R^2$ | .0528 | .0576 | .0729 |

* significant at the .10 level ** significant at the .05 level ***significant at the .01 level

**Table IV**
**Results Of Ordered Probit Estimation Dependent Variable: Workload**

| Variable | All Coefficient (P-Value) | Males Coefficient (P-Value) | Female Coefficient (P-Value) |
|---|---|---|---|
| RESDOC | .0153 (.8570) | .0469 (.6317) | -.1053 (.5498) |
| LIBARTS | .0576 (.6531) | .1017 (.5344) | .0685 (.7495) |
| TWOYR | .0868 (.3815) | -.0466 (.7017) | .3738 (.0372)** |
| PRIVATE | .0076 (.9239) | -.0148 (.8757) | .0297 (.8453) |
| ASSIST | -.3145 (.0044)*** | -.2404 (.0937)* | -.3704 (.0419)** |
| ASSOC | -.4031 (.0010)*** | -.3891 (.0131)** | -.3407 (.1012) |
| FULL | -.1781 (.1637) | -.2101 (.1876) | -.0988 (.6669) |
| TENURED | .2112 (.0222)** | .2621 (.0198)** | .1790 (.2852) |
| PERTEACH | -.000004 (.9980) | .0008 (.6454) | -.0016 (.5441) |
| U | -.1681 (.0411)** | -.1525 (.1230) | -.1963 (.2030) |
| LNSALARY | .2347 (.0403)** | .2859 (.0425)** | .1410 (.4922) |
| EXPER | -.0215 (.0422)** | -.0422 (.0101)** | -.0205 (.2243) |
| EXPERSQ | .0008 (.0135)** | .0017 (.0025)*** | .0004 (.3044) |
| FEMALE | -.2477 (.0009)*** | | |
| WHITE | .0883 (.2818) | .1489 (.1170) | -.1428 (.4137) |
| MARRIED | -.0199 (.8100) | -.0737 (.4843) | .0312 (.8268) |
| OTHERINC | .000003 (.0005)*** | .000002 (.0074)*** | .000004 (.0250)** |
| ACCOUNT | .2347 (.0159)** | .1539 (.1868) | .4186 (.0281)** |
| BANKFIN | .1343 (.3033) | .0256 (.8625) | .4082 (.1643) |
| BSADMIN | .2398 (.0119)** | .2126 (.0510)* | .3279 (.1168) |
| MARKET | .1197 (.3119) | 0.0933 (.4926) | .1998 (.4260) |
| OBUSN | .2082 (.0772)* | .2716 (.0638)* | .1346 (.5431) |
| N | 1205 | 861 | 344 |
| LR STAT<br>(P-VALUE) | 81.39<br>(.0000)*** | 57.75<br>(.0000)*** | 34.15<br>(.0349)** |
| Pseudo- $R^2$ | .0275 | .0280 | .0387 |

* significant at the .10 level ** significant at the .05 level ***significant at the .01 level

**Table V**
**Results of Probit EstimationDependent Variable: Advancement**

| Variable | All Coefficient (P-Value) | Males Coefficient (P-Value) | Females Coefficient (P-Value) |
|---|---|---|---|
| RESDOC | .0875 (.3056) | .1203 (.2198) | -.0001 (.9995) |
| LIBARTS | .2502 (.0527)* | .1138 (.4873) | .5551 (.0113)** |
| TWOYR | .1873 (.0585)* | .0453 (.7084) | .4573 (.0109)** |
| PRIVATE | -.0103 (.8972) | -.0200 (.8325) | -.0139 (.9281) |
| ASSIST | .0118 (.9134) | -.1255 (.3731) | .2227 (.2209) |
| ASSOC | .0888 (.4639) | -.1286 (.4047) | .5027 (.0165)** |
| FULL | .5370 (.0000)*** | .3417 (.0307)** | .8517 (.0003)*** |
| TENURED | .3480 (.0002)*** | .3731 (.0009)*** | .2268 (.1892) |
| PERTEACH | -.0001 (.9151) | .0004 (.8014) | -.0011 (.6747) |
| U | -.1014 (.2202) | -.0803 (.4176) | -.1253 (.4201) |
| LNSALARY | .3779 (.0011)*** | .4153 (.0033)*** | .3264 (.1244) |
| EXPER | -.0644 (.0000)*** | -.0555 (.0008)*** | -.0789 (.0020)*** |
| EXPERSQ | .0019 (.0001)*** | .0017 (.0021)*** | .0019 (.0331)** |
| FEMALE | -.0691 (.3531) | | |
| WHITE | .2281 (.0056)*** | .2104 (.0268)** | .2071 (.2409) |
| MARRIED | .0706 (.3899) | -.0031 (.9765) | .2225 (.1214) |
| OTHERINC | -.0000002 (.7678) | .0000002 (.8290) | -.0000001 (.5379) |
| ACCOUNT | -.1746 (.0755)* | -.2910 (.0132)** | .0584 (.7630) |
| BANKFIN | -.1886 (.1495) | -.2542 (.0859)* | .0646 (.8265) |
| BSADMIN | -.0216 (.8228) | -.0540 (.6230) | .1476 (.4869) |
| MARKET | -.1114 (.3515) | .0117 (.9325) | -.3835 (.1305) |
| OBUSN | -.1958 (.0975)* | -.2523 (.0829)* | -.0213 (.9247) |
| N | 1205 | 861 | 344 |
| LR STAT<br>(P-VALUE) | 166.61<br>(.0000)*** | 122.54<br>(.0000)*** | 58.46<br>(.0000)*** |
| Pseudo-$R^2$ | .0526 | .0551 | .0630 |

* significant at the .10 level ** significant at the .05 level ***significant at the .01 level

**Table V**
**Results of Probit Estimation Dependent Variable: Security**

| Variable | All Coefficient (P-Value) | Males Coefficient (P-Value) | Females Coefficient (P-Value) |
|---|---|---|---|
| RESDOC | -.1231 (.1753) | -.1409 (.1820) | -.0263 (.8875) |
| LIBARTS | -.0453 (.7360) | -.1195 (.4846) | .1354 (.5478) |
| TWOYR | .2203 (.0363)** | .0924 (.4757) | .4754 (.0116) |
| PRIVATE | .1011 (.2312) | .1499 (.1424) | -.0085 (.9569) |
| ASSIST | -.0230 (.8387) | -.0968 (.5106) | .1493 (.4254) |
| ASSOC | .1098 (.3892) | -.0314 (.8478) | .4003 (.0647)* |
| FULL | .2110 (.1164) | .0492 (.7686) | .6035 (.0140)** |
| TENURED | .9653 (.0000)*** | 1.01 (.0000)*** | .9092 (.0000)*** |
| PERTEACH | -.0018 (.2241) | -.0006 (.7357) | -.0040 (.1374) |
| U | -.1990 (.0231)** | -.1670 (.1146) | -.2889 (.0739)* |
| LNSALARY | .3656 (.0029)*** | .5106 (.0008)*** | .0711 (.7439) |
| EXPER | -.0130 (.3684) | -.0104 (.5573) | -.0163 (.4788) |
| EXPERSQ | .0007 (.1398) | .0007 (.2487) | .0007 (.3502) |
| FEMALE | -.1035 (.1845) | | |
| WHITE | .0016 (.9850) | -.0737 (.4631) | .2216 (.2181) |
| MARRIED | .0553 (.5226) | -.0197 (.8595) | .2121 (.1516) |
| OTHERINC | .0000009 (.2738) | .000001 (.1344) | .0000002 (.9179) |
| ACCOUNT | -.1164 (.2694) | -.1583 (.2121) | -.0689 (.7355) |
| BANKFIN | -.2622 (.0573)* | -.3353 (.0322)** | -.1397 (.6539) |
| BSADMIN | -.0863 (.4019) | -.1456 (.2162) | .0562 (.8005) |
| MARKET | -.0614 (.6343) | -.0221 (.8833) | -.1742 (.5111) |
| OBUSN | -.2695 (.0311)** | -.2525 (.1047) | -.3698 (.1152) |
| N | 1205 | 861 | 344 |
| LR STAT<br>(P-VALUE) | 351.44<br>(.0000)*** | 251.83<br>(.0000)*** | 100.50<br>(.0000)** |
| Pseudo- $R^2$ | .1244 | .1294 | .1164 |

* significant at the .10 level ** significant at the .05 level ***significant at the .01 level

**Table VII**
**Results Of Probit Estimation Dependent Variable: Salary**

| Variable | All Coefficient (P-Value) | Males Coefficient (P-Value) | Females Coefficient (P-Value) |
|---|---|---|---|
| RESDOC | -.0033 (.9688) | .0422 (.6595) | -.1476 (.4063) |
| LIBARTS | -.0775 (.5438) | -.0707 (.6621) | -.0204 (.9248) |
| TWOYR | .2714 (.0057)*** | .3450 (.0041)*** | .0555 (.7556) |
| PRIVATE | .2026 (.0099)*** | .3174 (.0007)*** | -.1210 (.4292) |
| ASSIST | -.2202 (.0433)** | -.2594 (.0659)* | -.1151 (.5245) |
| ASSOC | -.2541 (.0349)** | -.3440 (.0250)** | -.0127 (.9510) |
| FULL | -.1514 (.2267) | -.2564 (.0999)* | .1480 (.5160) |
| TENURED | .0393 (.6685) | .0584 (.5971) | .0060 (.9719) |
| PERTEACH | -.0014 (.3174) | -.0014 (.4122) | -.0009 (.7384) |
| U | .0297 (.7163) | .0156 (.8732) | -.0715 (.6432) |
| LNSALARY | .9811 (.0000)*** | 1.08 (.0000)*** | .7561 (.0003)*** |
| EXPER | -.0329 (.0039)*** | -.0227 (.1221) | -.0548 (.0069)*** |
| EXPERSQ | .0010 (.0069)*** | .0007 (.1404) | .0014 (.0241)** |
| FEMALE | -.0045 (.9513) | | |
| WHITE | .2143 (.0090)*** | .1701 (.0719)* | .2908 (.0974)* |
| MARRIED | .1690 (.0386)** | .0901 (.3859) | .3485 (.0152)** |
| OTHERINC | .0000003 (.6541) | .00000005 (.9529) | -.0000008 (.5996) |
| ACCOUNT | .1622 (.0928)* | .1234 (2831) | .2599 (.1741) |
| BANKFIN | -.0396 (.7587) | -.0454 (.7556) | -.1401 (.6311) |
| BSADMIN | .1537 (.1033) | .1282 (.2314) | .2728 (.1936) |
| MARKET | .0032 (.9841) | .0413 (.7585) | -.0565 (.8237) |
| OBUSN | -.1193 (.3059) | -.1444 (.3114) | -.0370 (.8691) |
| N | 1205 | 861 | 344 |
| LR STAT<br>(P-VALUE) | 144.90<br>(.0000)*** | 108.67<br>(.0000)*** | 49.75<br>(.0004)*** |
| Pseudo- $R^2$ | .0464 | .0487 | .0562 |

* significant at the .10 level ** significant at the .05 level ***significant at the .01 level

**Table VIII**
**Summary Of Results For Males And Females: Significant Variables**

| **Dependent Variable** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Overall** | | **Workload** | | **Advancement** | | **Security** | | **Salary** | |
| INDEPENDENT VARIABLE: | M | F | M | F | M | F | M | F | M | F |
| RESDOC | | □ | | | | | | | | |
| LIBARTS | | | | | | □ | | | | |
| TWOYR | | □ | | □ | | □ | | | □ | |
| PRIVATE | □ | | | | | | | | □ | |
| ASSIST | □ | □ | □ | □ | | | | | □ | |
| ASSOC | □ | | □ | | | □ | | □ | □ | |
| FULL | □ | | | | □ | □ | | □ | □ | |
| TENURED | □ | | □ | | □ | | □ | □ | | |
| PERTEACH | □ | | | | | | | | | |
| U | | | | | | | | □ | | |
| LNSALARY | □ | | □ | | □ | | □ | | □ | □ |
| EXPER | □ | □ | □ | | □ | □ | | | | □ |
| EXPERSQ | □ | | □ | | □ | □ | | | | □ |
| WHITE | | | | | □ | | | | □ | □ |
| MARRIED | | □ | | | | | | | | □ |
| OTHERINC | □ | | □ | □ | | | | | | |
| ACCOUNT | □ | | | □ | □ | | | | | |
| BANKFIN | | | | | □ | | □ | | | |
| BSADMIN | □ | | □ | | | | | | | |
| MARKET | | | | | | | | | | |
| OBUSN | | | □ | | □ | | | | | |

## END NOTES

1. See, for example, Gordon, Morton, and Braden [1974], Johnson and Stafford [1974a and 1974b], Hoffman [1976], Tuckman and Hagemann [1976], Jusenius and Scheffler [1981], Hirsch and Lappel [1982], Weiler [1984 and 1990], Rickman [1984], Hansen [1985], Raymond, Sesnowitz, and Williams [1988], Becker and Goodman [ 1991], Ashraf [1992], Formby, Gunther, and Sakano [1993], Ransom and Megdal [1993]. Bellas [1993], Lillydahl and Singell [1993], Rankin and McKinney [ 1998].

2. See, for example, Borjas [1979], Bartel [1981], and Lillydahl and Singell [1993].

3. The data is for the 1992 academic year.

4. All the data used in this study are from this source and are therefore self-reported data. Self-selection bias is a possibility. NSOPF-93 used a two-stage stratified clustered probability design to select the sample and follow-up telephone interviews were conducted. The response rate for faculty was 86.6%.

5. Multicollinearity is a potential problem since one would expect many of the independent variables to be strongly correlated, yet the only correlation coefficients higher than 0.50 are between TENURED and EXPER, and between EXPER and EXPERSQ.

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