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## An Exploratory Study of Gender and the Process of Negotiating Academic Contracts Among Sociologists

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**AN EXPLORATORY STUDY OF GENDER AND THE PROCESS OF  
NEGOTIATING ACADEMIC CONTRACTS AMONG SOCIOLOGISTS**

by

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B.S. August 1993, Old Dominion University

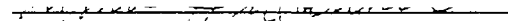
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Old Dominion University and Norfolk State University  
in Partial Fulfillment of the Requirement for the Degree of


MASTER OF ARTS

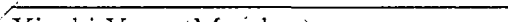
APPLIED SOCIOLOGY

OLD DOMINION UNIVERSITY AND NORFOLK STATE UNIVERSITY  
May 1996

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## **ABSTRACT**

### **AN EXPLORATORY STUDY OF GENDER AND THE PROCESS OF NEGOTIATING ACADEMIC CONTRACTS AMONG SOCIOLOGISTS.**

Miriam M. Newton

Old Dominion University and Norfolk State University, 1996

Director: Dr. Mona J. E. Danner

Ample evidence supports the existence of the gender wage gap. One explanation for the gender wage gap in academia may be men's and women's different experiences of the process of negotiating academic contracts. Past literature on gender differences in negotiation suggests that males are more likely to initiate negotiations and are more successful in negotiations than women. This study investigates the process of negotiating academic contracts through a survey of recent PhD graduates in sociology. The research is guided by two questions: (1) What are the experiences of new faculty regarding the process of negotiating academic contracts; and (2) What differences, if any, exist in the negotiating experiences of women and men?

For My Mother and Father

June Newton and John Newton

Who have always believed in me, no matter what path  
I chose, and whose unconditional love, patience,  
and understanding have provided the guidance  
and strength to grow into my own person.

For Dr. Mona J. E. Danner

For the support, guidance, and extreme patience,  
above and beyond the call of duty, both  
personally and professionally; and for giving me  
the best example of what it means to be a woman.  
I stand in admiration.

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Finally, I would like to thank my mother and father, who provide the kind of moral support and love that only parents can. Thank you for teaching me to follow my dreams, and not settling for any one else's, and for showing me that I can do anything I set my mind to. Thank you for the support through both the tears and the laughter. I know that they are as proud of this project as I am. I am very lucky to have two of the best parents that a daughter can ask for, and although I may not say it nearly enough, let it be published forever that I love you both dearly.

I owe the completion of this project to many people. Not only do I dedicate this thesis to Dr. Danner and my parents, I would also like to dedicate my degree to them. Thank you from the bottom of my heart.

## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION .....	1
II. REVIEW OF THE LITERATURE ON NEGOTIATIONS .....	8
EMPIRICAL RESEARCH ON NEGOTIATIONS .....	12
III. METHODOLOGY .....	15
HYPOTHESES .....	15
RESEARCH DESIGN .....	17
MEASUREMENT OF VARIABLES .....	20
CODING AND ANALYSIS OF DATA .....	21
LIMITATIONS .....	23
IV. RESULTS .....	24
SAMPLE CHARACTERISTICS .....	24
RESULTS OF HYPOTHESES TESTING .....	26
SUMMARY .....	34
V. SUMMARY AND IMPLICATIONS .....	36
REVIEW OF THE RESULTS .....	36
IMPLICATIONS, CONTRIBUTIONS, AND FUTURE DIRECTIONS .....	38
REFERENCES .....	41
APPENDICES .....	45
SURVEY INSTRUMENT .....	45
COVER LETTERS AND POSTCARD .....	58
VITA .....	63

## LIST OF TABLES

	Page
Table 1. Demographic Characteristics of the Sample. ....	25
Table 2. Expected Salary. ....	27
Table 3. Initial Salary Offer by Institution. ....	28
Table 4. Gender and Counteroffer Made. ....	29
Table 5. Why No Counteroffer was Made ....	31
Table 6. Dollar Amount of Counteroffer. ....	32
Table 7. Final Salary. ....	33
Table 8. Means of Presentations, Publications, Chapters, and Books Written by Respondents. ....	35



## CHAPTER I

### INTRODUCTION

Despite legislation mandating equal opportunity in employment and pay, women continue to earn less than men as demonstrated by statistics assembled over the years. In 1984, the median weekly earnings of women employed on a full-time basis were only 65% as much as similarly employed males (Mellor 1984), and according to 1993 data, women are earning only 70% of that of their male counterparts (IWPR 1993). In fact, on average women having four or more years of college earn a lower salary than men whose education stopped at the high-school level (Heiberger and Vick 1992). This pay differential, or wage gap, has been documented within the most prestigious professions such as engineering and science, as well as in higher-education (National Research Council 1994; Ekstrom 1979). Data collected in 1990 shows that female scientists with doctorates earn 88% of males with the same credentials (National Research Council 1994). In 1978, full-time women academicians' salaries were just 83% of those for men, and in 1980 they were 82% (National Center for Education Statistics 1993). 1991-1992 data indicates that female academics are still only earning 82% of the salaries of their male associates (National Center for Education Statistics 1993).

Statistics and empirical evidence establish that a wage gap in higher education does indeed exist. However, what explanations are given for this phenomenon? In the

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The style used for this thesis follows the *American Sociological Review*.

discussion that follows, theories that attempt to explain the gender pay gap, which may be applied to the academy, will be reviewed.

Human capital represents one possible explanation for the gender wage gap. A theory of occupational choice, the human capital model rests on the premise that women make certain investments in themselves in terms of education and skill in order to gain employment and maximize life-time earnings (Becker 1985). Thus, it is up to the individuals to choose the skills which they will develop. The main focus of human capital is on the supply side, suggesting that the gender wage gap exists because women do not make the same investments as do men, and consequently, receive lower rewards for their skill in terms of salary (Becker 1985).

The human capital model has served as one explanation for the disparities in academic women and men's salaries. In terms of education, scholars have shown that men are more likely to hold a doctorate than women, and that women's graduate study is more often interrupted than that of men's, although they tend to complete their degrees at the same rate as men (Eckert 1971; Finkelstein 1984). The doctorate is an extremely important factor associated with teaching in a university setting.

Women are also found to be less experienced in certain skills required for academic employment. Eckert (1971) stated that academic women do not have publication experience comparable to men, and also have less experience in committee work and off-campus projects, both of which are valuable to a potential employer. Centra (1974) concluded that women were half as likely as men to have held a research assistantship position, and two-thirds less likely to have held a teaching assistantship

position. These graduate positions provide the means for possible early publications and valuable research and teaching experience.

How does human capital affect academic salaries? Bayer and Astin (1975) discovered that males received higher rewards for the prestige of their doctorate, while women gained higher rewards for holding a doctorate. They also concluded that males received higher rewards for publications and administrative experience.

However, studies showing significant differences between women and men in human capital variables are twenty years old. More recent research suggests that human capital cannot provide a full explanation for the gender wage gap in academia. Even when analyses control for academic rank and type of institution, women academicians' salaries still lag significantly behind those of men's (National Center for Education Statistics 1993).

A second explanation for the gender wage gap is that of occupational sex segregation. Sex segregation occurs because employers exclude women from applying for and obtaining those positions they deem as men's work (Sorensen 1994). Due to the gender limitations placed on men's work, women are crowded into other jobs that are traditionally considered women's work, and are lower paid.

Even though more women have entered the labor force, jobs remain segregated, and this also holds true for academia (Finkelstein 1984). Ekstrom (1979) suggests that one reason for the salary gap in academia is that there are more women faculty in two and four year colleges than there are in research institutions, where higher salaries are found. In addition, the percentage of women is small in fields like medicine where salaries are high; more women are found in liberal arts where salaries tend to be low.

Women are less likely than men to hold the position of associate or full professor, thus academic women seem to be concentrated in the lower ranking positions (Eckert 1971). Women spend more time teaching undergraduate students, which is seen as less prestigious (Centra 1974). Bayer and Astin (1975) found that gender task differences exist, but were less prevalent at the prestigious institutions. Generally, however, men spend more time doing research, while women spend more time teaching in the classroom. This alludes to the fact that this disparity may be due to the reality that women tend to be employed at those universities that are not research oriented. Academic women have been reported to spend less time doing research (Eckert 1971), and also spending little or no time in administrative positions (Centra 1974). Perhaps sex segregation explains why men are more concentrated at prestigious universities.

Gender discrimination provides a third explanation for the gender-wage gap. Even though the Civil Rights Act of 1964 prohibited employment discrimination against women, the phenomena still exists. Fidell (1970) reported evidence of discrimination when he found that employers preferred males over females, and when female employees were offered a position, it was less likely to be tenure-track, and more likely to be a lower rank. Sandler (1973) asserts that women academicians earn less in part because of the obstinence of those in the profession who believe that women are not as qualified as men, and that women faculty members (whether married or single) simply do not need as much money as do male faculty members. Unfortunately, the myths about needs and qualifications of applicants continue to plague women in terms of the salaries offered to them.

Differences in hiring practices also transcend into the area of salary (Finklestein 1984). In fact, Bayer and Austin (1975) controlled for research productivity, academic rank, and experience (all human capital variables), only to find that women still earn less than men. They also concluded that in 1973 there were significant differences in male and female salaries. These findings suggest that criteria for salary are applied differently in terms of gender and that discrimination exists to the detriment of women's salaries.

Koch (1982) agrees with sex discrimination and segregation theories but also points out that salary differentials may exist because of the way colleges and universities apply legal statutes. The Equal Pay Act of 1963 and Title VII of the Civil Rights Act of 1964 are the two primary pieces of legislation enacted to ensure pay equity. However, many colleges and universities use faculty evaluations to skirt the statutes. By claiming that the evaluations are methodical and the result of a clearly defined process, institutions argue that pay differentials are the result of women's lower qualifications as revealed in the evaluation process (Koch 1982).

Although pay schedules no longer explicitly differentiate between the sexes as they once did, women and men academicians generally do not earn equal salaries. Research suggests that colleges and universities operating under firm salary schedules may be less discriminatory than those governed by fixed guidelines (Beaumont 1978, cited in Koch 1982). Individuals who encounter fixed salary guidelines are unable to bargain. Thus, defined pay schedules minimize the possibilities of bargaining which contributes to pay differentials. However, many, perhaps most, institutions are not governed by such guidelines, and although we are not sure as to what extent negotiation

occurs, we know that it does happen. Thus, differences between women and men in the negotiation process may provide insight to the academic wage gap.

Anecdotal evidence indicates that negotiating salary and other conditions of employment is a common, though not an openly discussed practice in academia. Books on how to conduct career searches within academia contain a wealth of information on the job search, but minimal discussion of the process of negotiating salaries and contracts. For example, Career Guide for Women Scholars (Rose 1986) and The Academic Job Search Handbook (Heiberger and Vick 1993) contain much of the pertinent information one would need to conduct an academic job search, but out of a combined total of 366 pages, only five pages address salary and contract negotiations. Both books give a vague description of the negotiation process but fail to illustrate what one should or can negotiate for, or how one goes about negotiating. This seems odd, based on the assumption that salary and contract terms would be one of the most important decision factors for an applicant.

Therefore, with all this considered, salary negotiations may represent a partial explanation for the gender wage gap in academia. Unfortunately, little, if any, research specifically addressing negotiations surrounding faculty employment currently exists. This present study is important not only because it addresses serious voids in the literature about academia, negotiations, and the gender pay gap, but also because it points to key implications about negotiation and the pay gap. This exploratory study is primarily descriptive in nature and is guided by two general research questions: (1) What are the experiences of new faculty regarding the process of negotiating academic

contracts; and (2) What differences, if any, exist in the negotiating experiences of women and men?

## CHAPTER II

### REVIEW OF THE LITERATURE ON NEGOTIATIONS

This chapter reviews the theoretical and empirical literature concerning negotiations. Literature pertaining to negotiation and faculty employment is virtually non-existent. However, researchers, as well as popular authors, have addressed the process of negotiating in business, interpersonal, and professional relationships (Karass 1985; Cohen 1980; Rubin and Brown 1975; Hall 1993). Contained within this literature are references that target women, to help them to maximize the benefits of negotiation (Nierenberg and Ross 1985; Kolb and Cooledge 1991; King 1993; Siress 1994).

Becker (1985) defines negotiation as a process that occurs when two parties seek to reach an appropriate agreement in a matter of concern. Research on negotiating salary and conditions of employment is found in the disciplines of psychology, business, and education, as well as in sociology (Stevens, Bavetta, and Gist, 1993; Gerhart and Rynes, 1991; Dreher, Dougherty, and Whitely 1989; Martin 1989). The vast majority of the research reveals that the success of the negotiation process differs for women and men.

Watson (1994) describes three key explanations that have been advanced to explain gender differences that occur in negotiating behaviors: gender socialization, situational power, and gender plus power. Watson (1994) states that society expects different behaviors from men and women, and thus the gender-role socialization explanation of negotiation posits that men and women will behave according to their prescribed gender roles. She also states that because women are expected to be nurturing and compliant, they should be more cooperative and "softer" negotiators than men.



Others assert that women simply do not know how to negotiate or do not do it well; that women tend to negotiate under certain limitations (Nierenberg and Ross 1985; Kolb and Cooledge 1991). These handicaps may include socialization, lower self-esteem, and lack of training in bargaining.

Women have also been socialized to be more cooperative, fair, and nurturing (Renard 1992). Early bargaining studies, such as coalition formation, investigated gender differences (Chertkoff 1970). Women were found to form triads in order for everyone to get something out of the negotiation, which can be perceived as cooperative and nurturing. Chertkoff (1970) also found that women were competitive in the bargaining process, though they were not as competitive as men. Because women are socialized to be less competitive, they may have lower self-esteem in a competitive situation such as bargaining (Renard 1992). Therefore, another possible reason for sex differences in negotiated salaries may stem from women's lower self-confidence in salary negotiations.

Research suggests that women have less faith in their ability to execute unfamiliar tasks (McCarty 1986). In fact, Renard (1992) found that women are most likely to respond to a competitive negotiating situation by not becoming competitive themselves. Thus, it is viable to assume that if women perceive the negotiation process as too competitive, aggressive, or simply unfamiliar, they may not exert sufficient effort to become successful in a negotiating situation.

However, women's lower success ratio in the negotiation process cannot be explained by technique alone. In a study of full-time MBA students, Stevens et al. (1993) established that even after training in salary negotiation tactics, women still

achieve less success in terms of salary increases than do men. Although women and men improved their salaries after training, men's salaries were still higher.

Research also suggests that women may have lower pay expectations than men. In a study using a job-simulation model, it was found that applicants who conveyed lower pay expectations were actually offered less pay than those equally qualified applicants who had higher pay expectations (Major, Vanderslice, and McFarlin 1984). In fact, Major and Konar (1984) found that male management students expected to earn about \$2,600 more than their female counterparts. Jackson, Gardener, and Sullivan (1992) surveyed college seniors planning to enter a variety of occupational fields in order to measure their pay expectations. Results confirm that regardless of occupational field, women had lower pay expectations than did men. This may be because they perceive the starting point differently. In turn, this may lead them to not view the offer as too low, or they may not ask for as much as men. Since women expect lower pay than men, they may be less likely to bargain for a higher salary.

The situational power explanation argues that the negotiating party that has more bargaining power will be more competitive and be more successful than those who do not come to the negotiating table as an equal (Watson 1994). If there are alternate job offers, the person will have more bargaining power and thus will have a greater tendency to negotiate (Mannix, Thompson, and Bazerman 1989). Little research, if any, addresses the situational power explanation as it relates to job negotiation.

Human capital variables such as experience, education, and publications can also affect the amount of bargaining power of an individual. If individuals in the applicant

pool are equal in human capital perhaps the gender plus power model, discussed below, can provide an explanation for women not fairing well in salary negotiations.

Incorporating gender socialization and situational power ideology results in predicting that power and gender intersect. The gender-plus-power model states that the amount of power that a person has does not necessarily negate the effects that gender may have. While women may negotiate less successfully than men generally, the greater their power, the more successful they become. On the other hand, if the females do not hold the power in the situation their negotiation attempts will be less rewarding.

Unfortunately, the effects of gender, for women, are essentially sex discrimination. This type of discrimination creates negative stereotypes about women, and it is such discrimination that hinders women in their negotiation attempts.

The problem of sex discrimination is one that is always hard to address, because it is somewhat subjective. The issue of gender pervades the professional world. Negative stereotypes are attached to women because of their gender, and it is of little surprise that these stereotypes are held by a male dominated world. These stereotypes hinder women in their negotiation attempts. Gender socialization links to gender discrimination, such that women expect to earn less than men, and their negotiation efforts are diminished or thwarted.

Because of sexual bias, employers may thwart, or not respond to negotiation attempts by women. Women and men may be evaluated differently, primarily due to their being perceived differently. Thus, a refinement of Watson's (1994) gender plus power explanation may lie within the concept of sex stereotyping. This explanation

states that, no matter how much power a person has, this does not negate the effects of gender.

In a study by Rosen and Jerdee (1978), 884 male supervisors employed in public and private industries were asked to compare men and women on 64 vocationally relevant characteristics such as aptitude, skills, knowledge, motivation, and work habits. Results indicate that men were ranked higher in having favorable work traits such as leadership, coping with stress, and decision making skills, while women were ranked higher in unfavorable work traits such as absenteeism, propensity to quit, being too emotional, and sensitivity to criticism.

Myths and sexist beliefs, such as that women quit their jobs upon marriage or pregnancy, and that a woman's place is in the home, provide a partial foundation for the sex discrimination which still persists within the job market. Myths regarding academic women's salary needs identified by Sandler in 1973, can also be found in other employment situations and may interfere with women's attempts at negotiating. Many people believe that women, married or single, simply do not need as much money as do men, and that when women work, it is generally for pin or luxury money. Sandler's discussion of the myths that stigmatize women in academia are echoed in the results of Rosen and Jerdee's (1978) study of how male supervisors rate males and females.

## EMPIRICAL RESEARCH ON NEGOTIATIONS

The outcomes of negotiation can be adversely affected by the initial offer. The literature reveals that there are substantial differences in the initial offers made to women and men (Ayers 1991; Gerhart and Rynes 1991). In a study of car sales, Ayers (1991)

found statistically significant differences in the initial offers made by sales associates to men and women. White men received lower initial quotes than did white women and minority persons. Experimental simulations of various retail buyer-seller interactions confirm that men reap lower prices and higher profits than do women (Neu, Graham, and Gilly 1988). Research on salary offers to hypothetical job applicants found that male prospects were assigned higher starting salaries than females, even when they had the same qualifications and pay expectations (Major et al. 1984).

Beliefs that women are willing to work for less pay than men remain common among supervisors and administrators who use these notions as an explanation of the gender pay gap (Rynes, Rosen, and Mahoney 1985). In one of the few non-laboratory studies, Gerhart and Rynes (1991) surveyed graduating MBA students about results of their salary negotiations. Results of this study indicated that 56% of the students who bargained for a higher salary actually obtained increases. Although there was no difference between the frequency with which men and women initiated salary negotiations, women still received lower rewards than men in terms of lower salaries.

Differences in bargaining behavior may also affect the negotiating process. It has been stated that men and women exhibit different negotiating styles, and may be perceived differently. Dreher, Dougherty, and Whitley (1989) surveyed employed MBA graduates to assess tactics and salary attainment. The results indicate that women who use exchange tactics (e.g., reminding supervisors of favors, offering personal sacrifices), rather than influence tactics (e.g., logic and rationality) received higher monetary gains. However, regardless of the negotiating style exhibited, men still reaped higher salaries than women.

In summary, empirical research gives testament to the fact that men fair better in negotiations than do women. Men not only receive more attractive initial offers, they also receive higher salaries. Regardless of who initiated the negotiations, or what style they exhibited in salary negotiations, women had fewer benefits.

The current study addresses a void in the literature regarding negotiation and academic salaries, and how negotiation may provide a partial explanation for the existence of this wage gap. The research was guided by the questions: (1) What are the experiences of new faculty regarding the process of negotiating academic contracts; and (2) What differences, if any, exists in the negotiating experiences of women and men?

## CHAPTER III

### METHODOLOGY

This chapter describes the research design used to investigate the relationship between gender and academic salary negotiations. It investigates the research questions: What are the experiences of new faculty regarding the process of negotiating academic contracts; and, What differences, if any, exists in the negotiating experiences of women and men? The study utilized descriptive statistics, chi square analysis, and t-tests as the means of testing five hypotheses regarding gender and salary negotiations. The description of the research design includes the following: statement of hypotheses and their justification for inclusion, description of the research design, justification and description of the sample, data collection, variables of interest, data adjustments, explanations of the statistical procedures of data analysis, and the discussion of the limitations of the research design.

#### HYPOTHESES

Five hypotheses were proposed to examine the effects of gender on salary negotiations. The hypotheses, and their justifications, are provided below.

H1: Women expect to earn less than men.

Simulated studies report that female management students expect to earn about \$2,600 less than their male counterparts (Major and Konar 1984). Also, female college seniors in a wide range of college majors expected to earn less than men (Jackson et al.

1992). Thus, I hypothesize that women will also have lower pay expectations than their male colleagues in academia.

H2: Colleges and universities extend higher initial salary offers to men.

In a study of MBA students, Gerhart and Rynes (1991), found that men were extended higher initial offers in terms of salary. Thus, it is likely that these differences in initial offers will also occur in academia.

H3: Men more often initiate negotiations by making a specific salary counteroffer than do women.

Research suggests that men are more likely than women to initiate negotiations by proposing a counteroffer, and to be more persistent in the negotiation process (Major and Konar 1984). Thus, this study expects to find that men will be more aggressive and initiate the negotiation process by making a counteroffer.

H4: Men make higher counteroffers than women.

Studies have also shown that men fair better in the negotiation process due to the fact that they are more competitive than women (Dreher et al. 1989). Gerhart and Rynes (1991) found that men make higher counteroffers than women, and this may be a partial explanation for the reason men attain higher salaries in negotiation. Their study also reported that men obtained higher increases than women in salary when they negotiated. Based on the existing research, I expect to find that men make higher counteroffers than women.



H5: There are significant differences between women and men in their final salary.

Research suggests that after negotiations, men receive higher salaries than women. Rynes et al. (1985) report that there are persistent beliefs among administrators and supervisors that women are willing to work for less pay than men. In fact, Gerhart and Rynes (1991) found that even after negotiation attempts, women still received lower final salaries than their male counterparts. Thus, it is reasonable to hypothesize that women's final salaries are less than men's.

## RESEARCH DESIGN

The following discussion details the rationale and the processes involved in formulating the design to answer the research questions and to test the five hypotheses. This discussion is divided into two parts: the discussion of the survey instrument and a description of the population, sample, and data collection.

### *Survey Instrument*

As a part of a larger study regarding negotiation in academia, quantitative data were collected using a self-administered mail-back survey instrument designed to assess recent sociology PhD graduates' experiences negotiating their first full-time academic contract. The questionnaire solicited information pertaining to respondent's professional status and experience at the time of contract negotiations, experience of the negotiating process, and basic demographic data. Specifically, the questionnaire was divided into five parts: 1) graduate school experiences (e.g., funding and awards received),

2) academic and professional record at time of the job offer to which they were appointed (e.g., research, publications, and relevant employment background), 3) the process of negotiating the job offer (e.g., salary expected, offered, counteroffer made, and salary finally agreed upon; demographic information about the institution's negotiator), 4) negotiation experience outside of academia and knowledge about academic negotiations, and 5) demographic information. The survey is found in Appendix A.

### *Population, Sample, and Data Collection*

The sample comes from 6,186 recent (1992-1994) PhD graduates whose dissertations subject category was listed as sociological in the January 1995 Dissertation Abstracts CD-ROM database. Current addresses were obtained for 5.5% (N=342) of the initial sample from the National Faculty Directory (Gale Research Inc. 1994). Inclusion in the National Faculty Directory confirms that sample members have accepted a position in academia.

The mailing sample of 196 (57%) included only those faculty whose departments listed in the National Faculty Directory were in the social sciences thereby increasing the likelihood that the respondents would be sociologists. Sociology was chosen for the study due to my familiarity with the field.

Questionnaires were administered in accordance with Dillman's (1978) 3 wave Total Design Method for mail respondents between February 15-May 10, 1995. Respondents were notified that their participation was voluntary and were assured of confidentiality. The project and the survey instrument were approved in February 1995

by the Old Dominion University Institutional Review Board for the Protection of Human Subjects In Research.

The first mailing occurred February 15, 1995 and contained a cover letter, survey, and stamped envelope. One week after this mailing (February 22, 1995), a postcard reminder was sent to everyone. This postcard served a dual purpose: thanking all respondents and offering friendly reminder for those who had not yet responded (all cover letters and the postcard can be found in Appendix B). Two weeks after that, on March 8, 1995, the second mailing with a letter, replacement copy of the questionnaire, and return envelope was sent to non-respondents. The cover letter was similar to the first, with the exception that it was shorter and appealed to non-respondents for the return of their questionnaire. The final mailing, taking place on April 5, 1995, three weeks after the second wave, contained a letter, replacement survey, and return envelope. All mailings were sent first class to stress the importance of the study and to ensure forwarding or returns of incorrect addresses.

The three wave mailing resulted in a sample of 137. This 70% response rate is comparable to the average response rate (74%) for the Dillman method (Dillman 1978, 21). Twenty-five of the 137 returned surveys were not usable in the final analysis. Respondents were excluded for a variety of reasons including: they either did not have a PhD or they received the PhD in a year other than the target time frame (indicating a mistake in identifying names from the National Faculty Directory), they were employed at the job more than three years before they received their PhD (prior to 1990), they were part-time or adjunct instructors, they did not complete a significant amount of the survey, or they were employed at an institution outside the United States.

Many respondents reported having degrees in disciplines other than sociology (such as history, policy science, social work, business, anthropology, communications, political science, geography, psychology, philosophy, education, social welfare, planning, and behavioral science) and were excluded. Questionnaires were also received with notes from the institution stating the addressee was no longer at that university, or from the respondent stating that they were not the intended person or had never negotiated an academic contract. Of the 112 useable questionnaires, 62 respondents identified their discipline as sociology, the sample of interest here.

## MEASUREMENT OF VARIABLES

The questionnaire was designed to extract information to measure the following dependent variables in accordance with the hypotheses.

### 1) Dollar value of expected salary

The dollar value of the expected salary was measured by the amount the respondent reported that they expected to be paid in answer to the following question: "Before you were actually offered a job, what was the annual base salary you expected to be paid (not including supplements for summer teaching, administration, or research)?"

### 2) Dollar value of initial offer by college/university

The dollar value of the initial offer was measured by the amount of first offer made by the institution in response to the question: "What was the initial/first basic salary offer (not including supplements for summer teaching, administration, or research) made to you by the institution?"

### 3) Frequency of negotiations

The frequency of negotiation was measured by whether or not the respondent initiated negotiations. Questions in Part III and Part IV of the survey instrument were designed to measure this variable. For example, "Did you make a specific salary counteroffer?"

### 4) Dollar value of counteroffers

The dollar value of the counteroffer was determined by the amount of the counteroffer reported and was measured by asking two questions. First, "Did you make a specific salary counteroffer?" and second, "If yes, how much was the counteroffer?" The hypotheses regarding counteroffers were tested using the subset of the sample who answered yes to making a specific counteroffer.

### 5) Final salary

Final salary was measured by the respondent's answer to the question: "What was the final basic salary (not including supplements for summer teaching, administration, or research) which you agreed to accept?"

Questions were also included to measure the variables such as academic rank and research experience, and the independent variable, the respondent's gender.

## CODING AND ANALYSIS OF DATA

All questionnaires were coded and analyzed using STATA, a personal computer statistical program designed to report descriptive data and to test the five hypotheses.

Coding for the salary variables involved several processes. First, all salary data were adjusted for inflation across different years, using the average yearly Consumer Price Index (CPI) for the appropriate year. The CPI index is a measure that adjusts earnings to eliminate the effect of changes in price (Monthly Labor Review 1995). Standardizing salary into constant dollars was accomplished in a series of steps. First, monthly salary data was calculated by dividing the number of months that the respondent reported their contract to be. Contracts reported to be either nine or ten months were calculated as a ten month contract, the standard for the National Center for Education Statistics. Monthly data was then standardized by multiplying by 10 for an annual wage. Annual salaries were then adjusted for inflation, by calculating as follows:

$$\left( \frac{1994 \text{ CPI} - \text{Contract Year CPI}}{100} \times \text{Salary} \right) + \text{Salary}$$

### *Analysis Techniques*

Descriptive statistics (frequencies, percentages, means, etc.) identify the demographic characteristics of the respondents. The statistic used to test the hypotheses depended according to the hypothesis. Chi square analysis was used to test hypothesis 2; whether gender differences occur in the propensity to initiate negotiations. Chi Square is an inferential statistic that is used to test the significance of relationships between two nominal level variables. This method entails comparing the collected data to hypothetical data; the hypothetical data represent the null hypotheses (Jendrek 1985).

T-tests were used to assess whether the two sample means, women and men, are significantly different in order to test hypotheses 1, 3, 4, and 5. The t-test tells whether

observed differences in the sample are likely to occur in the population and whether they are significantly different from the zero point (Malec 1993). Also, as an inferential statistic, the t-test addresses whether the samples could have been drawn from a population in which the means of the two groups were the same (Jendrek 1985).

## LIMITATIONS

The hypotheses as stated above do not specifically control for human capital variables, which may influence salary offers, counteroffers, and final salary agreed upon. In order to make appropriate statements about the impact of their influence, additional analysis is necessary. Human capital theory suggests that greater investments in these variables pays off in terms of greater skill and candidate desirability, which eventually leads to higher earnings.

A limitation that must be addressed with respect to the academic market is the concern with affirmative action and EEOC issues. Thus, it is important to remember that at certain institutions these issues are pressing, and this allows the marketplace at certain institutions to be in the woman's favor.

## CHAPTER IV

### RESULTS

This chapter presents the results of data analysis exploring the thesis that negotiation may represent a partial explanation for the gender wage gap in academia. In this section, I first review the descriptive statistics that give a picture of the sample. Hypotheses analysis is also reviewed in this section, giving detailed explanations of what occurred.

#### SAMPLE CHARACTERISTICS

The basic demographic characteristics of the sample are presented in Table 1. There are 62 sociologists; 61 having a PhD and one having both a PhD and a JD. The sample is nearly equally distributed between males (52%) and females (48%). The respondents, however, are relatively homogenous. Most respondents are white (79%) and only 8% identify themselves as African-American. Most of the respondents stated that they were married (66%) but most (65%) did not have any children.

While in graduate school, 97% of the sociologists had an assistantship that required them to work. Only 7% reported not having any teaching experience. In terms of academic employment, 77% of the sample stated that they did not have their dissertation completed when negotiating their first academic contract, with 44% being very certain that it would be completed by the time the job was to begin. Approximately, three-fourths of the sample (76%) reports being an assistant professor, with 77% being tenure track.



**Table 1. Demographic Characteristics of the Sample.**

Variable	Sample (N=62)	Women (N=30)	Men (N=32)
Caucasian	79.03%	76.67%	81.25%
African-American	8.06%	3.33%	12.50%
Hispanic	3.23%	6.67%	0.00%
Asian/Pacific Islander	6.45%	13.33%	0.00%
Arab	1.61%	0.00%	3.12%
PhD Completed	22.58%	23.33%	21.88%
ABD	75.81%	73.30%	78.12%
Very Certain PhD would be completed by start of job	52.94%	59.26%	45.83%
Teaching Experience	93.55%	90.00%	96.88%
Married	66.13%	63.30%	68.75%
Children	35.48%	30.00%	40.62%
Instructor	24.19%	20.00%	28.12%
Assistant Professor	75.81%	80.00%	71.88%
Tenure-Track	77.42%	76.67%	78.12%
Temporary	20.97%	20.00%	21.88%

\*All possible categories are not included. Where all categories are included, percentage may not equal 100% due to rounding error.

## RESULTS OF HYPOTHESES TESTING

The following discussion presents the findings to each of the five hypotheses. It should be noted that all salary figures reported below are base salaries (before supplements for administration or summer teaching) adjusted to 1994 dollars and calculated on a 10 month schedule.

H1: Women expect to earn less than men.

Table 2 contains the annual base salary (in 1994 dollars) respondents stated that they expected to be paid; this figure refers to their expected salary prior to their being offered the job which they finally accepted. While the lowest expected salary for both women and men was the same (\$21,580), men expected a higher range (\$45,000) than did women (\$43,160). On average, men reported that they expected to earn \$1,567 more than women. However, the t-test revealed that this difference was not statistically significant

H2: Colleges and universities extend higher initial salary offers to men.

Contained in Table 3 are findings about the amount of the initial salary offered to the respondent by the institution. Although the lowest initial offer for women (\$25,925) was higher than that of men (\$21,850), examination of the mean for both groups revealed that the initial offer for men was \$1,462 more than that for women. Again, the t-test revealed that this difference was not statistically significant.

H3: Men more often initiate salary negotiations by making a counteroffer than do women.

As shown in Table 4, 30% of the women made a specific counter offer, while only 19% of the men did so. However, Chi square analysis reveals that there was no

**Table 2. Expected Salary.**

Statistics	Women	Men
Range	\$21,580 - \$43,160	\$21,580 - \$45,000
Median	\$33,184	\$34,528
Mean	\$32,539	\$34,106
Standard Deviation	\$ 5,020	\$ 4,723
Skewness	-.18	-.30
N	25	27
t-test 1.16, d.f.=50		
p = 0.25		

**Table 3. Initial Salary Offer by Institution.**

Statistics	Women	Men
Range	\$25,925 - \$40,462	\$21,850 - \$47,000
Median	\$32,370	\$32,370
Mean	\$32,298	\$33,760
Standard Deviation	\$ 4,403	\$ 6,149
Skewness	.16	.27
N	28	32
t-test 1.04, d.f.=10		
p = 0.30		

**Table 4. Gender and Counteroffer Made.**

	No	Yes
	(N=47)	(N=15)
Male (N=32)	81.25%	18.75%
Female (N=30)	70.00%	30.00%
Chi-Sq= 1.07, d.f. = 1		
p = 0.30		

statistically significant difference between men and women in terms of counteroffers initiated. When asked why no counteroffer was made (Table 5) the men responded as follows: 25% of them stated they got what they expected, 25% got more than they expected, and 8% thought that more was not possible. Conversely, when women were asked the same question: 14% stated that they got what expected, 5% got more than expected, and 57% thought more was not possible. Also interesting to note is that 4% of the men and 10% of the women did not know it was possible to negotiate. The third hypothesis, that men more often initiate salary negotiations by making a counteroffer-offer, was not supported.

H4: Men make higher counteroffers than women.

Table 6 reflects the findings about the dollar amounts of counteroffers being made by men and women. Of the 62 sociologists, only 6 men and 9 women reported that they made a specific counteroffer. However, only 4 men and 8 women reported the dollar amount. Generally, women made higher counteroffers (\$32,147-\$41,541) than did their male colleagues (\$27,612-\$32,909). In fact, women made an average counteroffer that was \$6,522 higher than that of men. While the t-test revealed that this difference in means was statistically significant at the 0.01 level, the small sample size merits caution.

H5: There are significant differences between women and men in their final salary.

Data analysis reveals that the lowest and highest final salaries went to men. Table 7 shows that the mean salary men reported was \$905 higher than that reported by women. The difference was not statistically significant as measured by the t-test, and the hypothesis was not supported.

**Table 5. Why No Counteroffer was Made.**

Response to Why No Counteroffer was Made.	Men (N=24)	Women (N=21)
Got what they expected.	25%	14%
Got more than they expected.	25%	5%
Thought more was not possible.	38%	57%
Unhappy with salary offer but did not counteroffer.	8%	5%
Did not know that they could negotiate.	4%	10%
Satisfied to have a job offer.	0%	5%
Did not think it appropriate to negotiate.	0%	5%

\* All possible categories are not included. Where all categories are included, percentage may not equal 100% due to rounding error.

**Table 6. Dollar Amount of Counteroffer.**

Statistics	Women	Men
Range	\$32,147 - \$41,541	\$27,612 - \$32,909
Median	\$37,548	\$32,788
Mean	\$38,046	\$31,524
Standard Deviation	\$31,220	\$ 2,610
Skewness	-.56	-1.14
N	8	4
t-test -3.58, d.f.=10		
p = 0.01		



**Table 7. Final Salary.**

STATISTICS	WOMEN	MEN
Range	\$25,925 - \$41,541	\$21,580 - \$47,000
Median	\$32,801	\$32,370
Mean	\$32,797	\$33,702
Standard Deviation	\$ 4,762	\$ 6,041
Skewness	.12	.33
N	28	31
t-test 0.63, d.f.=57		
p = 0.52		

## SUMMARY

No statistically significant differences were found in testing the hypotheses. Although data analysis revealed that women did expect to earn less than men, that colleges and universities did extend higher initial salary offers to men, and men earned higher final salaries, hypotheses 1, 2, and 5 could not be supported because the differences were not statistically significant. Although women did make more counteroffers than did men (hypothesis 3), this difference was also not statistically significant. The study revealed that women were making higher counteroffers than their male colleagues (hypothesis 4), however, the extremely small sample size merits caution.

Performance on certain human capital variables such as presentations, articles, chapters, books, and reports written by the respondent, was also examined. The results are shown in Table 8. On average, men and women were the same in terms of these variables. Men had an average of 3.8 presentations, while women reported having an average of 4.3. Men reported a mean of 1.4 articles, with that of women being 1.1. In terms of chapters and books, women reported having .43 chapters and .06 books, while men reported having 1.4 chapters and .12 books. The data revealed that women and men in this sample had relatively equal experience in terms of human capital variables important to the academic community.

**Table 8. Means of Presentations, Publications, Chapters, and Books Written by Respondents.**

Variable	Men (N=32)	Women (N=30)
Presentations	3.81	4.30
Publications	1.46	1.13
Chapters	.40	.43
Books	.12	.06

## CHAPTER V

### SUMMARY AND IMPLICATIONS

Considerable attention has been given to the academic gender wage gap. The issue of salary negotiations has also received research attention. However, research has not been concerned about how salary negotiations may affect the gender wage gap in academia. The present study identifies the experiences of new faculty concerning negotiating their academic contracts, and the differences, if any, in the experiences of women and men.

The study utilized data collected from a 1995 survey of recent PhD graduates in the discipline of sociology. Data analysis focused on respondent characteristics and the testing of the hypotheses that: (1) the salaries women expect to earn are less than those men expect; (2) colleges and universities extend higher initial salary offers to men; (3) men more often initiate salary negotiations by making a counteroffer than do women; (4) men make higher counteroffers than women; and (5) there are significant differences between women and men in their final salary. For our purposes here, the discussion of the study is divided into those pertaining to salary, i.e. expected salary, initial offer, and final salary, and counteroffers.

### REVIEW OF THE RESULTS

The results did indicate that women expected to earn less than men, as stated in hypothesis one, although the difference was not statistically significant. Analysis of pay expectations revealed that although men and women both expected to earn a low of

\$21,580, men expected a higher range than did women. The median expected salary for women was \$33,184, while the median expected salary for men was \$34,528. On average, male respondents reported that they expected to earn \$1,567 more than women. The small difference was somewhat unexpected. Other research (Major and Konar 1984) implied that there was a larger pay expectation difference between the sexes.

In terms of the college/university's initial salary offers, data analysis revealed that men were offered higher initial salaries. This finding was consistent with the literature review, and studies about initial offers (Neu et al. 1988; Major et al. 1984). Although the lowest initial offer for women was \$25,925, higher than that of men at \$21,850, on average men were offered \$1,462 more than that offered to women. Again, this was consistent with the hypothesis that colleges and universities extend higher initial salary offers to men. However, findings were not statistically significant.

Findings supported the hypothesis that men received higher final salaries than women; the difference, however, was not statistically significant. In fact, the data revealed that men received both the lowest and the highest final salary. This was somewhat surprising considering the amount of literature that reported final salaries to be larger for men than women.

Among those respondents who reported making counteroffers, the analysis revealed that, out of the 62 sociologists, only 6 men and 9 women reported that they made a specific counteroffer. The hypothesis that men more often initiate salary negotiations by making a counteroffer than do women was not supported in terms of statistical significance. When asked why they did not make a salary offer, 25% of the men stated that they were offered more, or got what they expected, while only 14% of

women reported they were offered more than they expected, and only 5% got what they expected.

Generally, women made higher counteroffers (\$32,147-\$41,541) than did men (\$27,612-\$32,909). Interestingly, women made an average counteroffer that was \$6,522 higher than that of men. Although this salary difference was statistically significant, the small sample size of those making counteroffers, makes the interpretation cautious.

Men reported having both the lowest and highest final salaries. In fact, the data revealed that men received an average of \$905 more than women. This difference was not statistically significant, and the hypothesis was not supported.

## IMPLICATIONS, CONTRIBUTIONS, AND FUTURE DIRECTIONS

Consistently, in past research and in this present study, women continue to earn less than their male colleagues. In the present study, no statistically significant differences were found between males and females when negotiating an academic contract. However, the research offers some important implications and makes contributions that are significant to academicians. How can these findings be interpreted in light of the theories of salary differentials presented in chapter one?

The human capital theoretical model proposes that salary differences occur because women and men make different investments in themselves in terms of education and skill. The present data do not support this prediction. The women and men are equivalent in their professional backgrounds with similar graduate school experiences, and publications and presentations.

Several suggestions are offered for further research of the experiences of men and women, and any existing differences, in negotiating academic contracts. A more detailed data analysis would help to clarify the ever pervasive issue of human capital. Specifically, multivariate analysis incorporating human capital variables, such as publications, and prestige of PhD granting institution, may explain the salary differences between women and men found in this study.

In addition, a larger sample across disciplines will help ascertain whether such differences exist outside of sociology. It will also help investigate sex segregation. This type of research may also need to control for a supply and demand in the academic marketplace. Male dominated fields are being pressured, with good reason, to bring in female scholars. Thus, pay scales may vary, and future research needs to take this into account.

This research makes important contributions to all academics, female and male, who face contract negotiations. It is of particular importance to women. First, it is unique in that it is the first study to investigate the real life experiences of recent PhD graduates in negotiating their first academic contract. Secondly, it provides an important link to previous literature, in that it shows that negotiation works, even in academia. Research has proven that women and men who negotiate receive higher salaries.

This study also reveals that even in the "liberal" discipline of sociology, gender differences in salary can be found. As teachers of gender and equality, sociology departments must practice what they teach. The findings of future research in this area can only benefit the discipline and its members.

To conclude, results indicated that differences do exist between the salary of men and women negotiating their first academic contracts. Though not statistically significant, small salary differences do have an important effect because they grow when both raises and retirement contributions are calculated as a percentage of the base salary. Therefore, the salary differential between the sexes in this study may not appear to be a large amount, but it will get larger over the years. Small salary inequality breeds a larger salary inequality.

This study is exploratory in nature, and a larger study is pending. As the data become available, it will be possible to draw a more complete picture of how these salary differences affect academics.



## REFERENCES

- Ayers, Ian. 1991. "Fair Driving: Gender and Race Discrimination in Retail Car Negotiations." *Harvard Law Review* 104:817-872.
- Bayer, Alan E. and Helen S. Astin. 1975. "Sex Differentials in the Academic Reward System." *Science* 188:796-802.
- Beaumont, M. S. 1978. "Efficiency and Equity: The Single Salary Schedule in Public Higher Education." *AAWP* 19-25.
- Becker, Gary S. 1985. "Human Capital, Effort, and the Sexual Division of Labor." *Journal of Labor Economics* 3:33-55.
- Centra, John A. 1974. *Women, Men and the Doctorate*. Princeton, NJ: Educational Testing Service.
- Chertkoff, Jerome M. 1970. "Sociopsychological Theories and Research On Coalition Formation." Pp. 297-322 in *The Study of Coalition Behavior*, edited by Sven Groennings, E. W. Kelley, and Michael Leiserson. New York, NY: Holt, Rinehart, and Winston, Inc.
- Cohen, Herb. 1980. *You Can Negotiate Anything*. New York, NY: Simon & Schuster.
- Dillman, D. 1978. *Mail and Telephone Surveys: The Total Design Method*. New York, NY: John Wiley & Sons.
- Dreher, G. F., T. W. Dougherty, and W. Whitley. 1989. "Influence Tactics and Salary Attainment: A Gender Specific Analysis." *Sex Roles* 20:535-550.
- Eckert, Ruth, E. 1971. "Academic Women Revisited." *Liberal Education* 57:479-487.
- Ekstrom, Ruth B. 1979. *Women Faculty: Development, Promotion, and Pay*. Princeton, NJ: Educational Testing Service.
- Fidell, L. S. 1970. "Empirical Verification of Sex Discrimination in Hiring Practices in Psychology." *American Psychologist* 25:1096-1097.
- Finkelstein, Martin J. 1984. *The American Academic Profession: A Synthesis of Social Scientific Inquiry Since World War II*. Columbus, OH: Ohio State University Press.
- Gale Research Inc. 1994. *National Faculty Directory*. Washington, DC: Gale Research Inc.

- Gerhart, B. and S. Rynes. 1991. "Determinants and Consequences of Salary Negotiations by Graduating Male and Female MBAs." *Journal of Applied Psychology* 76:256-262.
- Hall, Lavina. 1993. *Negotiation*. Berkeley, CA: Sage Publications.
- Heiberger, M. and J. Vick. 1993. *The Academic Job Search Handbook*. Philadelphia, PA: University of Pennsylvania Press.
- IWPR (Institute for Women's Policy Research). 1993. *The Wage Gap: Women's and Men's Earnings*. Washington, DC: IWPR.
- Jackson, Linda A., Philip D. Gardener, and Linda A. Sullivan. 1992. "Explaining Gender Differences in Self-Pay Expectations: Social Comparison Standards and Perceptions of Fair Pay." *Journal of Applied Psychology* 77:651-663.
- Jendrek, Margaret Platt. 1985. *Through the Maze: Statistics With Computer Applications*. Belmont, CA: Wadsworth Publishing Company.
- Karras, Gary. 1985. *Negotiate to Close: How to Make More Successful Deals*. New York, NY: Simon & Schuster.
- King, Julie A. 1993. *The Smart Woman's Guide to Interviewing and Salary Negotiation*. Princeton, NJ: Career Press.
- Koch, James V. 1982. "Salary Equity Issues in Higher Education: Where Do We Stand?" *AAHE Bulletin* (October). Washington, DC: American Association for Higher Education.
- Kolb, Deborah M. and Gloria Cooledge. 1991. "Her Place at the Table." *Journal of State Government* 64:68-71.
- Major, B. and E. Konar. 1984. "An Investigation of Sex Differences in Pay Expectations and Their Possible Causes." *Academy of Management Journal* 27:777-793.
- Major, B., B. Vanderslice, and D. B. McFarlin. 1984. "Effects of Pay Expected on Pay Received: The Confirmatory Nature of Initial Expectations." *Journal of Applied Social Psychology* 14:399-412.
- Malec, Michael A. 1993. *Essential Statistics for Social Research*. Boulder, CO: West View Press.
- Mannix, E. A., L. L. Thompson, and M. H. Bazerman. 1989. "Negotiation in Small Groups." *Journal of Applied Psychology* 74:508-517.

- Martin, B. A. 1989. "Gender Differences in Salary Expectations when Current Salary Information is Provided." *Psychology of Women Quarterly* 13:87-96.
- McCarty, P. A. 1986. "Effects of Feedback on the Self-Confidence of Men and Women." *Academy of Management Journal* 29:840-847.
- Mellor, E. F. 1984. "Investigating the Differences in Weekly Earnings of Women and Men." *Monthly Labor Review* 107:17-28.
- Monthly Labor Review. 1995. "Notes on Current Labor Statistics." *Monthly Labor Review* 109:82-87.
- National Center For Education Statistics. 1993. *Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty Survey*. Washington, DC: National Academy Press.
- National Research Council. 1994. *Women Scientists and Engineers in Industry*. Washington, DC: Office of Higher Education.
- Neu, J., J. Graham, and M. Gilly. 1988. "The Influence of Gender on Behaviors and Outcomes in a Retail Buyer-Seller Negotiation Simulation." *Journal of Retailing* 64:427-451.
- Nierenberg, Juliet and Irene S. Ross. 1985. *Women and the Art of Negotiating: Techniques for Achieving Success in Your Business and Personal Relationships*. New York, NY: Simon & Schuster.
- Renard, M. K. 1992. "Salary Negotiations and the Male-Female Wage Gap." PhD dissertation, Department of Business Administration, University of Maryland College Park, College Park, MD.
- Rose, S. 1986. *Career Guide For Women Scholars*. New York, NY: Springer Publishing Company.
- Rosen, Benson and Thomas H. Jerdee. 1978. "Perceived Sex Differences in Managerially Relevant Characteristics." *Sex Roles* 4: 837-843.
- Rubin, Jefferey Z. and Bert R. Brown. 1975. *The Social Psychology of Bargaining and Negotiation*. New York, NY: Academic Press.
- Rynes, S. L., B. Rosen, and T. A. Mahoney. 1985. "Evaluating Comparable Worth: Three Perspectives." *Business Horizons* 28:82-86.
- Sandler, Bernice. 1973. "The Academic Women: Why Women Need Less Pay (and Other Myths)." *The Chronicle of Higher Education* 12:12.

- Sireess, Ruth Herrman. 1994. *Working Woman's Communications Survival Guide: How to Present Your Ideas with Impact, Clarity, and Power and Get the Recognition You Deserve*. Princeton, NJ: Prentice Hall.
- Sorensen, Elaine. 1994. *Comparable Worth: Is It A Worthy Policy?* Princeton, NJ: Princeton University Press.
- Stevens, C., A. Bavetta, and M. Gist. 1993. "Gender Differences in the Acquisition of Salary Negotiation Skills: The Role of Self-Efficacy and Perceived Control." *Journal of Applied Psychology* 78:723-735.
- Watson, Carol. 1994. "In Theory: Gender versus Power as a Predictor of Negotiation Behavior Outcomes." *Negotiation Journal* 10:117-127.

**APPENDIX A**

**SURVEY INSTRUMENT**

## NEGOTIATING IN ACADEMIA

Please answer all questions on this survey by marking the boxes provided or filling in the requested information. Feel free to add additional comments at any point throughout the survey. If you have any questions or concerns, please contact:

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### PART I. GRADUATE SCHOOL

The following questions ask about your graduate education.

Which doctoral degrees have you received?

☐ PhD ☐ JD ☐ EdD ☐ Other (specify \_\_\_\_\_)

When did you complete your doctoral degree?

month \_\_\_\_\_ year \_\_\_\_\_

In what discipline did you receive your doctoral degree?

☐ Sociology  
☐ Criminology / Criminal Justice  
☐ other (please specify \_\_\_\_\_)

What is the name and city/state of the university from which you received your degree?

\_\_\_\_\_  
 \_\_\_\_\_

When you were in graduate school, did you receive any of the following? (check all that apply)

- ☐ funding received from the university which required you to work (e.g., assistantship)
- ☐ funding received from the university which carried no work requirements (e.g., merit fellowship or scholarship)
- ☐ funding received from an external source on the basis of a proposal you submitted (e.g., dissertation grant or fellowship)
- ☐ award for excellence in teaching from the university or a professional association
- ☐ award for excellence in research from the university or a professional association
- ☐ none of the above

## PART II. YOUR FIRST FULL-TIME ACADEMIC JOB OFFER

The questions below pertain to the time of the interview and job offer surrounding your first full-time academic appointment; by this we mean the academic position you accepted and reported to. (This position may have been tenure track or temporary, and may have been prior to the completion of your doctoral degree.) The questions reflect information that was generally known to yourself and to the institution offering you the job, as well as information that may have been on your vitae at the time.

When did you receive the job offer for your first academic appointment?

month \_\_\_\_\_ year \_\_\_\_\_

When was the position to begin?

month \_\_\_\_\_ year \_\_\_\_\_

What is the name and city/state of this institution?

\_\_\_\_\_  
\_\_\_\_\_

At the time you received the job offer, was your PhD completed?

☐ yes ☐ no

If no, what work remained to be done? (check all that apply)

- ☐ dissertation
- ☐ dissertation proposal
- ☐ 1 comprehensive/qualifying exam
- ☐ 2 or more comprehensive/qualifying exams
- ☐ 1 course
- ☐ 2 or more courses
- ☐ other (specify \_\_\_\_\_)

How certain were you that all work on the PhD would be completed by the time the position actually began?

- ☐ very certain
- ☐ somewhat certain
- ☐ not at all certain
- ☐ I knew for certain that the PhD would not be completed

In your opinion, how certain was the hiring institution that all work on the PhD would be completed by the time the position actually began?

- ☐ very certain
- ☐ somewhat certain
- ☐ not at all certain
- ☐ they knew for certain that the PhD would not be completed

At the time you received the job offer, what was the extent of your teaching experience? (check all that apply)

- ☐ no teaching experience
- ☐ teaching assistant to a professor
- ☐ taught 1 course one time only as a graduate student
- ☐ taught 1 course two or more times as a graduate student
- ☐ taught 2 or more different courses as a graduate student
- ☐ adjunct instructor at a different institution
- ☐ other (specify \_\_\_\_\_)

At the time you received the job offer, what was the extent of your research experience, outside of that required for coursework and dissertation? (check all that apply)

- ☐ no research experience outside of that required for coursework and dissertation
- ☐ worked on a faculty member's research project or grant (including work that was part of an assistantship)
- ☐ worked on my own research project that was not coursework or dissertation related
- ☐ professional employment as a researcher
- ☐ other (specify \_\_\_\_\_)

At the time you received the job offer, what was the extent of your experience with research grants?

- ☐ no experience with research grants
- ☐ worked on a faculty member's grant
- ☐ assisted a faculty member in writing a grant to the university
- ☐ assisted a faculty member in writing a grant to an external agency
- ☐ I wrote and submitted a grant to the university
- ☐ I wrote and submitted a grant to an external agency
- ☐ other (please explain \_\_\_\_\_)

At the time you received the job offer, did you have any relevant work experience?

- ☐ no    ☐ yes

If yes, please give details of this experience:

---



---

At the time you received the job offer, did you have any experience serving on a professional committee (check all that apply):

- ☐ at the department level
- ☐ at the college or university level
- ☐ in a regional or national professional association
- ☐ other (specify \_\_\_\_\_)



At the time you received the job offer, about how many of each of the following had you presented, published, or had accepted for publication?

Type of Presentation / Publication	Number at Time of Job Offer
Presentations at professional conferences	
Articles published or accepted for publication in refereed journals	
Chapters published or accepted for publication in edited volumes	
Books published or accepted for publication	
Monographs, research or technical reports	
Other publications or presentations, please explain: _____ _____ _____	

In your opinion, were there factors in addition to your basic qualifications for the position that helped you get the job offer? (check all that apply)

- ☐ No other factors
- ☐ some department faculty members (at the hiring institution) knew me fairly well
- ☐ some department faculty members (at the hiring institution) knew some of my professors (in my graduate program) fairly well
- ☐ I had previously taught at the institution as an adjunct or temporary instructor
- ☐ the institution employed or was attempting to employ my spouse/partner
- ☐ Affirmative Action/Equal Employment Opportunity concerns
- ☐ other (please explain \_\_\_\_\_)

At the time you received the job offer, how interested were you in that particular position?

- ☐ very interested
- ☐ somewhat interested
- ☐ not interested

In your opinion, how interested was the institution in hiring you specifically?

- ☐ very interested
- ☐ somewhat interested
- ☐ not interested

At the time you received the job offer, had you gone on any other interviews?

☐ no   ☐ yes

At the time you received the job offer, did you have other interviews scheduled?

☐ no   ☐ yes

If no, how confident were you that you would have other interviews?

☐ very confident  
☐ somewhat confident  
☐ not at all confident

At the time you received the job offer, did you have any other academic job offers?

☐ no   ☐ yes

If no, how confident were you that you would have other academic job offers?

☐ very confident  
☐ somewhat confident  
☐ not at all confident

At the time you received the job offer, did you have any non-academic job offers?

☐ no   ☐ yes

At the time you received the job offer, were you married or in a marriage-like relationship?

☐ no   ☐ yes

Did the hiring institution know your marital status?

☐ no   ☐ yes   ☐ don't know

Did you have children?

☐ no   ☐ yes

Did the hiring institution know your child status?

☐ no   ☐ yes   ☐ don't know

Why did you accept the position?

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**PART III. NEGOTIATING THE JOB OFFER**

The questions below pertain to the discussions between the hiring institution (at which you accepted and reported to your first full-time academic appointment) and yourself regarding appointment rank, salary, and other items.

What was the rank offered to you?

- ☐ Instructor
- ☐ Assistant Professor
- ☐ Associate Professor
- ☐ Full Professor
- ☐ Other (specify \_\_\_\_\_)

Was the position:

- ☐ temporary
- ☐ tenure-track
- ☐ tenured

Before you were actually offered a job, what was the annual base salary you expected to be paid (not including supplements for summer teaching, administration, or research)?

\$ \_\_\_\_\_

What was the initial/first base salary offer made to you by the institution (not including supplements for summer teaching, administration, or research)?

\$ \_\_\_\_\_

How many months were covered by this base salary?

- ☐ 9 months
- ☐ 10 months
- ☐ 11 months
- ☐ 12 months
- ☐ other (specify \_\_\_\_\_)

Did you make a specific salary counteroffer to the institution?

☐ no    ☐ yes

If you did not make a specific salary counteroffer, why didn't you?

- ☐ the salary offer was approximately the amount I expected
- ☐ the salary offer was more than I expected
- ☐ it was clearly communicated to me that a higher salary was simply not possible
- ☐ I did indicate that the salary was not what I expected but I did not make a specific salary counteroffer
- ☐ I did not know that it is possible to negotiate academic salaries
- ☐ other, please explain \_\_\_\_\_

If you did make a specific salary counteroffer, how much was it?

\$ \_\_\_\_\_

On what basis did you request a higher salary?

\_\_\_\_\_

—

\_\_\_\_\_

—

\_\_\_\_\_

—

What was the institution's response to your request for a higher salary?

\_\_\_\_\_

—

\_\_\_\_\_

—

\_\_\_\_\_

—

What was the base salary which you and the institution finally agreed upon (not including supplements for summer teaching, administration, or research)?

\$ \_\_\_\_\_

How many months were covered by this base salary?

- ☐ 9 months
- ☐ 10 months
- ☐ 11 months
- ☐ 12 months
- ☐ other (specify \_\_\_\_\_)

At the time you received the job offer, what other items were offered to you by the institution, what other items did you request, and what other items were finally agreed upon? (check all that apply)

Item	Initially Offered by Institution	Requested by You	Finally Agreed Upon
no items other than salary were offered by the institution, requested by me, or finally agreed upon			
reduced teaching load			
guaranteed graduate student assistance			
time toward tenure			
higher rank			
computer			
printer for computer			
other office equipment (e.g., answering machine, modem, networking a computer)			
guaranteed summer money (for teaching, research, etc.)			
moving expenses			
other extra monies (e.g., for research, travel, etc.)			
other items, please explain: _____ _____ _____			

How much time elapsed from the institution's initial job offer until agreement was reached and you accepted the position? \_\_\_\_\_

Were faculty at the institution unionized?

☐ no    ☐ yes

Who at the institution most directly negotiated with you about salary and other items pertaining to the job offer?

- ☐ Department Chair  
☐ Search Committee Chair  
☐ College/School Dean  
☐ other (specify \_\_\_\_\_)

Was this person:

☐ male      ☐ female

- |  |   |
|--|---|
| <input type="checkbox"/> White/Caucasian         | <input type="checkbox"/> Asian/Pacific Islander |
| <input type="checkbox"/> Black/African American  | <input type="checkbox"/> Native American        |
| <input type="checkbox"/> Hispanic/Latin American | <input type="checkbox"/> Other (specify _____)  |

approximate age \_\_\_\_\_

Was this person actually responsible for making final decisions about salary and other items pertaining to the job offer?

☐ no    ☐ yes

If the person above (whom you most directly negotiated with) was not actually responsible for making final decisions about salary and other items pertaining to the job offer, who was?

- ☐ Department Chair  
☐ Search Committee Chair  
☐ College/School Dean  
☐ other (specify \_\_\_\_\_)

Was this person:

☐ male      ☐ female

- |  |   |
|--|---|
| <input type="checkbox"/> White/Caucasian         | <input type="checkbox"/> Asian/Pacific Islander |
| <input type="checkbox"/> Black/African American  | <input type="checkbox"/> Native American        |
| <input type="checkbox"/> Hispanic/Latin American | <input type="checkbox"/> Other (specify _____)  |

approximate age \_\_\_\_\_

How did you feel during the negotiating process?

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How satisfied with the negotiating experience were you as soon as the process was completed?

- ☐ very satisfied  
☐ satisfied  
☐ unsatisfied  
☐ very unsatisfied

Why?

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How satisfied with the negotiating experience were you approximately one year later?

- ☐ very satisfied  
☐ satisfied  
☐ unsatisfied  
☐ very unsatisfied

Why?

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In your opinion, were there factors which helped you during the negotiation process?

Please explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

In your opinion, were there factors which hindered you during the negotiation process?

Please explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Was this your first experience negotiating an academic contract?

- ☐ no    ☐ yes

Since the time you have told us about in this survey, have you had any other experiences negotiating an academic contract?

- ☐ no    ☐ yes

**PART IV. YOUR NEGOTIATION EXPERIENCE IN GENERAL**

The questions below ask about your experience in negotiations in general. They pertain to the time period surrounding the first full-time academic job offer you accepted and reported to.

At the time of the job offer, how much would you say you knew about negotiating in general?

- ☐ a lot
- ☐ something
- ☐ nothing

In what areas of life had you previously engaged in negotiations? (check all that apply)

- ☐ I had no experience in any kind of negotiations
- ☐ buying a car
- ☐ buying another retail item (e.g., computer, refrigerator, washer/dryer, etc.)
- ☐ renting a house or apartment
- ☐ buying a house or condo
- ☐ salary for a non-academic job
- ☐ other terms of employment for a non-academic job (e.g., time off, duties)
- ☐ other (specify \_\_\_\_\_)

How competent did you feel about your ability to negotiate in general?

- ☐ very competent
- ☐ competent
- ☐ incompetent
- ☐ very incompetent

At the time of the job offer, how much did you know about negotiating an academic contract?

- ☐ a lot
- ☐ something
- ☐ nothing

At the time of the job offer, did you know that it is possible to negotiate salary for an academic position?

- ☐ no    ☐ yes

Did you know that it is possible to negotiate other terms of employment for an academic position (e.g., additional monies, reduced teaching load, etc.)?

- ☐ no    ☐ yes



Had you ever read, heard about, or discussed negotiating an academic contract in any of the following situations? (check all that apply)

- ☐ during a workshop at a professional meeting
- ☐ during a course or workshop in graduate school
- ☐ conversations with mentor(s)
- ☐ conversations with other graduate school faculty
- ☐ conversations with other students in graduate school
- ☐ conversations with other students or professors outside of graduate school (e.g., at professional meetings)
- ☐ I had read some books or literature
- ☐ other, (please explain \_\_\_\_\_)
- ☐ No, I had never read, heard about, or discussed negotiating an academic contract

## PART V. ABOUT YOU

Are you: ☐ male ☐ female

In what year were you born? \_\_\_\_\_

Do you consider yourself to be mainly:

- |  |   |
|--|---|
| <input type="checkbox"/> White/Caucasian         | <input type="checkbox"/> Asian/Pacific Islander |
| <input type="checkbox"/> Black/African American  | <input type="checkbox"/> Native American        |
| <input type="checkbox"/> Hispanic/Latin American | <input type="checkbox"/> Other (specify _____)  |

What is your current rank?

- ☐ Instructor
- ☐ Assistant Professor
- ☐ Associate Professor
- ☐ Full Professor
- ☐ Other (specify \_\_\_\_\_)

Is your current position:

- ☐ temporary
- ☐ tenure-track
- ☐ tenured

Are you still employed at the institution you told us about in this survey?

- ☐ no ☐ yes

**THANK YOU!** We want to hear anything else you wish to share about your experiences negotiating academic contracts or about the process of negotiating academic contracts in general. Please feel free to include additional pages in the envelope provided or in a separate envelope.

**APPENDIX B**

**COVER LETTERS AND POSTCARD**

## OLD DOMINION UNIVERSITY

College of Arts and Letters  
Department of Sociology and Criminal Justice  
Norfolk, Virginia 23529-0090  
804-683-3791

February 15, 1995

Dear Colleague,



Whenever faculty look for an academic job, we soon find ourselves discussing the terms of work with our prospective employer. Often, part of this process involves negotiating the conditions of the academic contract. Yet, we have no systematic knowledge about negotiating in higher education. Knowing the extent and scope of negotiating can aid faculty by opening up a process now shrouded in secrecy.

You have been selected because you are a recent PhD whose dissertation subject is sociological, as identified in Dissertation Abstracts. Your participation assures that the results represent the negotiating experiences of new faculty.

We designed the survey with busy professors in mind. Most of the questions can be answered by simply checking the appropriate box. We also resisted the temptation to reduce the print size. The questions ask about graduate school, your professional record at the time of the first job offer, your experiences discussing the conditions of employment and your negotiating experience in general, as well as demographic information. You may hesitate to answer some questions thinking them too personal but we request only information that is absolutely necessary. For instance, we ask the name of your graduate institution and the hiring institution in order to understand how institutional prestige affects negotiating. We ask about salary expectations, salary offered and salary accepted in order to see how these change during negotiations. Please answer all questions to the best of your ability.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. Your name will be checked off when the questionnaire is returned. I will maintain and secure the only list matching numbers and names and will destroy the list before data are coded. Results will be reported only in the aggregate.

Please return the questionnaire in the envelope provided. If you would like a copy of the results, please send your request in a separate envelope so that we can maintain confidentiality.

I am happy to answer any questions you have. My office phone number is (804) 683-5931. Thank you for your assistance.

Sincerely,

Mona J.E. Danner, Ph.D.

February 22, 1995

Last week a questionnaire asking about your experiences negotiating your first academic contract was mailed to you.

If you have already completed and returned it to us please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small sample of relatively new academics it is extremely important that yours also be included in the study if the results are to accurately represent faculty experiences.

If by some chance you did not receive the questionnaire, or if it has been misplaced, please call me (804-683-5931) and I will mail another one to you immediately.

Sincerely,

Mona J.E. Danner, Ph.D.

## OLD DOMINION UNIVERSITY

College of Arts and Letters  
Department of Sociology and Criminal Justice  
Norfolk, Virginia 23529-0090  
804-683-3791

March 8, 1995

Dear Colleague,



About three weeks ago I wrote to you asking about your experiences negotiating your first academic contract. As of today we have not yet received your completed questionnaire.

The conditions of employment agreed upon during the hiring process continue to affect us after we start the job. Salaries and working conditions (e.g., computers, reduced teaching loads, graduate assistants) do matter in how well we are able to carry out our responsibilities. Yet, we have no systematic knowledge about the extent and scope of negotiations in the academy. I undertook this research to learn how frequently new academics request higher salaries and specific conditions, and how successful they are in these negotiations. My goal is to make this information available to faculty to assist them in their dealings with academic institutions.

I am writing to you again because of the significance each questionnaire has to the usefulness of this study. You were selected because you are a recent PhD and a new faculty member. Your response will help ensure the reliability of the results.

In case your questionnaire has been misplaced, a replacement is enclosed along with a return envelope. The survey requests only information that is absolutely necessary. For instance, institutional prestige may affect negotiations and so we request the name of your graduate institution and the hiring institution. We ask about salary expectations, salary offered and accepted in order to see how these change during negotiations. Please answer all questions on the survey.

Your responses are totally confidential. The identification number on the questionnaire is for mailing purposes only. I will destroy the list matching names and numbers before data are coded.

Please contact me if you have any questions. My office phone number is (804) 683-5931. Your cooperation is greatly appreciated.

Sincerely,

Mona J.É. Danner, Ph.D.  
Assistant Professor

# OLD DOMINION UNIVERSITY

College of Arts and Letters  
 Department of Sociology and Criminal Justice  
 Norfolk, Virginia 23529-0090  
 804-683-3791



April 5, 1995

Dear Colleague,

I am writing to you about our study of faculty experiences negotiating their first academic contract. We have not yet received your completed questionnaire.

The large number of questionnaires returned is very encouraging. But, we need your response in order to complete the study.

This is the first national survey of faculty negotiating experiences that has ever been done. The salaries and working conditions (e.g., computers, reduced teaching loads, graduate assistants) negotiated during the hiring process continue to affect us after we start the job; they determine our ability to be successful. Thus, the results of this study are of particular importance to the many academics and graduate students who may soon find themselves on the job market. The usefulness of the results depends on how accurately we are able to describe the experiences of recent PhDs such as yourself.

It is for these reasons that I am writing you once again. In case the questionnaire has been misplaced, enclosed is a replacement and a return envelope.

Please contact me if you have any questions. My office phone number is (804) 683-5931.

Your contribution to the success of this study is greatly appreciated.

Sincerely,

^

Mona J.E. Danner, Ph.D.  
 Assistant Professor

## VITA

### MIRIAM M. NEWTON

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#### EDUCATION

- M.A. Applied Sociology: Criminal Justice Emphasis  
Old Dominion University, Norfolk, Virginia 1996
- B.S. Major in Criminal Justice with a Minor in Psychology  
Old Dominion University, Norfolk, Virginia 1993

#### EXPERIENCE

"An Exploratory Study of the Process of Negotiating Academic Contracts: Whither Gender?" Old Dominion University 1995-1996.

Project funded by the Old Dominion University Faculty Research Fellowship Program and the College of Arts and Letters Faculty Grants Program.

Presented at American Sociological Association, Washington, D.C. (1995)

- Served as Research Assistant on the project.
- Responsible for survey administration, data entry and data analysis using STATA (a PC statistical package).

Research Assistant, Old Dominion University (August 1993-January 1995).

Assistant to Dr. Mona J.E. Danner, Dr. Susan Kent, and Dr. Helen T. Greene.

- Responsible for conducting CD-ROM and on-line searches.
- Involved in writing grant proposals.
- Conducted extensive literature searches on policing, gender studies, African-American studies, anthropology, social stratification, and deviance.
- Transcribed, proof-read, and coded data used in field research.

Intern, Norfolk Commonwealth's Attorney Office, Norfolk, Virginia (August 1992-May 1993). First Old Dominion Student Selected for this Position.

- Responsible for implementing a tracking system for habitual offenders in the city of Norfolk.
- Analyzed criminal records to identify patterns of weapon use in drug related offenses.

Automated Reference Assistant, Old Dominion University Library (August 1990-August 1993). Received Outstanding Student Assistant Award in 1991, 1992, and 1993.

- Instructed patrons in the use of various CD-ROM databases.
- Performed on-line and CD-ROM searches.
- Answered ready reference questions.