學術獎酬制度中性別差異之研究

——以台灣地區大學教師之收入爲例*

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摘　要

　　本研究旨在探討國內男女大學教師之收入是否有所差別。研究結果發現男女教師的收入確實存有差異現象。本文並進一步探討造成該差異存在之可能原因。

　　本研究資料主要根據教育部電算中心所提供之大學教師電腦檔案而來，以全國抽樣方式來實施問卷調查，輔以深入訪問，來尋求男女教師收入不同之可能原因。

　　研究發現包括：①女性收入較低；②學術界中的社交網路對男性的收入有正面作用；③家事負擔對男性收入的負面效果比女性收入來得大；④從訪問中發現男性對於學術界中的性別差異及不公平現象較女性不敏感。

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* 本文摘錄自作者博士論文之部分內容。

Gender Differences in the Academic Reward System: A Case Study of Faculty Income in Taiwan

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ABSTRACT

This study examined the total income for university faculty members in Taiwan. Gender differences were found and further research was conducted to identify reasons for the discrepancies in the academic reward system.

The research project was based on a national sample provided by the Computer Center of the Ministry of Education in Taiwan. Data were collected through survey questionnaires and in-depth interviews with university professors and associate professors in Taiwan. Multiple regression analyses were implemented to determine the influence of gender on income. In-depth interviews were conducted to collect possible explanations for gender differences in the academic reward system.

The major findings of this research study are as follows:

1. Compared to male faculty members, women academics tend to earn a lower total income.

2. Social networking in academe tends to result in a higher income for male than for female faculty.

3. Domestic duties have more negative impacts on male income than that of females.

4. Interviews revealed that the male faculty tend to be less aware of gender differences and inequities in the academic reward system.

Introduction

As a result of affirmative action in the United States during the 1960s and 1970s, one might expect that women had made substantial progress in achieving equity in academe (Finkelstein, 1984a; Simeone, 1987). While there has been an increase in hiring new femal doctorates as faculty members, women still hold only about 28 % of all faculty positions, tend to be concentrated in "traditionally female" fields, earn approximately $6,000 less than men, hold positions one fourth or one fifth of a step lower in rank, and play a lesser role in administration and governance than their male counterparts in all universities (Finkelstein, 1984b; Chamberlain, 1988; Watkins, 1990; Strohm, 1990; Astin, 1991).

In Taiwan, women make up the largest proportion of teachers from kindergarten to senior high school, while men hold higher administrative positions. In 1990, for example, women constituted approximately 55 % of the teacher population in middle and elementary schools, but made up only 28 % of university faculty members (see Table 1). More specifically, they accounted for 9 % of the professors, 18 % of the associate professors, 40 % of the instructors, and 53 % of the teaching assistants (Ministry of Education, 1991). This rank distribution for female faculty indicates that: 1) academe is still a male-dominated occupation; 2) the higher the rank, the fewer women at that rank (Yao, 1983).

In fact, the Taiwan government has enforced policies such as "equal pay for equal work" and a centralized and fixed salary system across all fields of specialty (Ministry of Education, 1991). Nevertheless, gender bias still exists within universities in Taiwan (Sha, 1987). For example, with respect to total income, female faculty members earn about $120,000 in New Taiwan dollars (or $4,000 in U.S. dollars) less per year than their male counterparts regardless of field, rank, degree, or administrative position (Lin, 1987). Female faculty members also hold very few administrative positions in Taiwan. Women do not head any university; they comprise 3 % of treasury directors, 1 % of college deans, 5 % of graduate deans, and 9 % of department chairs (Hsu, 1990).

One may speculate that as a result of having so few women in administrative positions, the issue of gender differences in the academic reward system

continues to be neglected and rarely discussed despite Taiwan's great efforts and emphasis on social equity and equal opportunities in the development of human resources.

TABLE 1. Female Teachers at All Levels, 1990-91

Educational Level	N	%
Universities, Colleges, & Junior Colleges	8,586	31*
Senior High Schools & Junior High Schools	43,364	51
Elementary Schools	49,148	59
Kindergarten	14,258	98

* At universities and four-year colleges, women faculty comprise approximately 28 %.

Source: *Statistical Indicator of Education The Republic of China (1991)* and *Educational Statistics of The Republic of China* (1991), Taipei: Ministry of Education.

Review of related literature

Research on the Academic Reward System

According to Tuckman (1979), the academic reward system consists of at least four categories of rewards and leads to increasing monetary compensation, social prestige, and career opportunities. These four categories are: 1) the institutional salary; 2) the non-material rewards of personal satisfaction (such as feedback from students and recognition from peers); 3) promotion to a higher rank due to professional merits and accomplishments in research, teaching, and service; and 4) optional access to career advancement in administration, to research grants and private consulting, and to opportunities of recruitment by pri-

vate corporations or by the government. These four forms of rewards are by no means mutually exclusive, although some of them are difficult to verify and measure.

Among these rewards, salary is the most frequently investigated. For example, prior research found that years of experience, along with years of schooling, productivity, and gender, are signiicant predictors of faculty salary (Finklestein, 1984b). With years of schooling and experience held constant, female faculty earn 15 to 25% less than males with the same characteristics (Reagan & Maynard, 1974; Hoffman, 1976;). An unconscious devaluation of women's role in the academic market is found to contribute to the salary discrepancies between men and women. As Finklestein reports, over fifty major studies conducted during the last decade come to the same conclusion: the salary structure in the United Stated differs significantly for men and women. The latter are paid less even after partialling out the effects of rank, type of institution, and field of study. This income disparity between men and women academics continues to increase throughout their academic career (Finklestein, 1984a).

Theoretical Framework for Gender Differences in the Academic Reward System

In order to construct a theoretical framework to account for reward differentials between male and female faculty, the investigator summarized prior research findings into the following two categories: 1) overt discrimination as a result of gender; and 2) differential performance between men and women.

1. Overt Discrimination Based on Gender:

The following studies argue that academe has a double standard, which underestimates women's performance and rewards them less favorably than men (Kahn & Robbins, 19850).

1) Gender Role Stereotypes and Lack of Comparable Worth:

Many employers assume that women will be inconsistent participants in the labor force due to family obligations. As a result, they tend to reward women less than they do men in salary, rank and promotion (John & Stafford, 1974;

Farber, 1977). In a study of faculty salaries at the University of Michigan, Fox (1981) incorporates an "ideology of achievement" framework into her analysis. Since American society emphasizes "achievement" to a great extent, people are supposed to be rewarded according to their ability and performance at work regardless of gender. However, while achievements are the income indicator, a dual reward structure between men and women legitimated by achievement ideology exists. Consequently, men and women do not receive "comparable income" for comparable achievement in academe.

2) Institutional Discrimination:

Academe, like other professions, has its hierarchical arrangements, culture, and credentialism. Since male faculty have been the majority in this profession, their work constitutes the main body of the literature, their access to resources is greater, and the current academic reward system has evolved over time according to their needs in the community (Finkelstein, 1984a). As a result, academic structure reinforces men's predominant culture, and under-estimates women's contributions to the profession.

3) The Oldboy Network and Interpersonal Relationships:

The "oldboy network" is a term referring to informal interaction among peers (Mitchell, 1987). In academe, this network provides information exchange, collaboration, career planning, strategizing and assistance. It also provides professional and psychological support, and access to visiblity and upward mobility (Welch, 1980; Green, 1982). Research reveals that both male and female faculty members tend to include more colleagues/friends of the same gender in their informal networks. Since male faculty members constitute the majority, they have greater access to the oldboy network, they have greater access to the oldboy network, and benefit from information exchange. Whereas, famale faculty members are relatively disadvantaged in this regard (Lewis, 1975, Simeone, 1987).

2. Differential Performance Between Men and Women:

Differential performance between man and women can be attributed to three main sources: 1) different early socialization; 2) different educational background and training; and 3) different social and cultural constraints on career

pursuit between men and women.

1) Personal Choice:

Prior studies suggest that women's status in academe is more or less a matter of choice (Bernard, 1964; Johnson & Stafford, 1979). Most women choose family life over career as their first priority, and reduce job participation during the child-rearing years. As a result, they tend to have a shorter career, a lower average productivity, and lower salaries compared to men (Johnson & Stafford, 1979).

2)Different Educatioinal Background and Training:

Women are socialized to be mroe oriented to the teacher's than the scholar's role. Females are taught to be more concerned with socio-emotional (nurturing) aspects such as working with students rather than on research and publication (Bayer, 1973; Finkelstelin, 1985b). Bernard (1964) calls this reward gap women's "status channel inconsistency." That is, although there are many channels for upward mobility in academe, women tend to emphasize channels which are not highly valued and hard to justify, such as teaching or working with students rather than research and publication.

In addition, women appear to be less involved in off-campus professional or social activities (Bayer, 1973; Morlock, 1973; Cameron, 1978). This lack of outside campus professional and social participation results in women's lower rate of colleagueship, collaboration, and authorship. Moreover, with respect to paid-consulting, women academics are only two-thirds of the number of men who engage in such activities (Bayer, 1973).

3)Different Social and Cultural Constraints Over Women's Career Pursuit:

Marriage and family obligations are considered two major constraints which influence women's pursuit of academic careers. Married female faculty members experience mroe role conflicts between work and family than male and unmarried female faculty (Herman & Gyllstrom, 1977; Koester & Clark, 1980). Many academic women complain about the tensions of time management. Studies show that female faculty members are found to spend 50 to 100 % more time in home maintenance (Gappa, et.al., 1979), and 40 % less time in academic work than their male counterparts (Herman & Gyllstrom, 1977).

The Academic Reward System for Taiwan's University Faculty

Total income is selected as the only indicator of academic reward in this study. Specifically, the remuneration for full-time university teachers is divided into two parts: salary and allowances. The former differs in accordance with positions, concurrent administrative work, and professional experience. The latter includes research, food, and housing allowances. In addition, a research subsidy fund has been set up under the National Science Council of the Executive Yuan for those who wish to conduct specific research projects. The pay scale for public university teachers is fixed according to the salary scale for public functionaries, and based on twelve-month employment (Lu, 1986; Ministry of Education, 1991). Each rank has at least ten different salary levels (see the Appendix). The higher the rank, the greater the difference between each point on the scale. For example, professrs in the highest scale somethimes receive 3-4 times as much as the incoming teaching assistants (Lin, 1987).

It is believed that in addition to the fixed institutional salaries, outside income is also an important indicator of academic rewards. Since Taiwan is actively recruiting experts and professionals, many faculty members are offered paid-consultations by outside business enterprises. It is very difficult to track down the amount of outside income since most people will not release this information. Nevertheless, the accumulation of institutional and outside income serves as the basis for this variable.

According to a nation-wide survery on the appointment and compensation of the university and college faculty members in Taiwan (Lin, 1987), institutional income differences are found to be associated with type of institution, rank, higher level administration, degree, age, seniority, and gender.

Another field study on Taiwan's female faculty (N=100) indicates that no discrimination was found among university teachers with respect to the formal academic structure, such as, employment, salary, and promotion (Hsu, 1988). However, subtle forms of gender discrimination do exist and continue to affect people in every work setting. In order to overcome gender's negative impact, female faculty need to excel by upgrading their personal qualifications through

degress, research publications, and in-service training (Chang, 1988).

Research design

All the data in this study were collected through survey questionnaires and in-depth interviews.

Sample Description

Subjects were all full and associate university professors from a national date-set in Taiwan. This data-set collected by the Computer Center of the Ministry of Education (MOE) in Taiwan included 2,649 professors, and 3,153 asscoiate professors in 1990. The total number of full and associate professors was 5,802. Female faculty account for 14 % of this population.

Since the target population in this study is current professors and associate professors, all females were drawn from the data-set (N=827), and a comparable number of males (N=827) were also selected from the same data-set by stratified sampling based on their institutions. The two waves of mailing to 1654 faculty returned 740 valid questionnaires with a response rate of 45 % . According to a conversation with Dr. Lin, the chairman from the Psychology Department at Chengchi University, who has also conducted many surveys among university faculty in Taiwan, the typical response rate is approximately 20 % . Another national survey on university and college faculty members also received a response rate of 42 % ——or 32 % valid survey response in two mailings (Lin, 1987). Therefore, the response rate of this survey research (45 %) is considered adequate for analysis.

In addition, twenty-three faculty members took part in in-depth interviews. Nine men and 14 women form nine campuss throughout the country were recommended by other faculty for interviews.

Study Variables

The dependent variables used in this study was the total monthly income combining the institutional salary and outside payment. The former is presumed

to be fixed (Lin, 1987). The latter derives from sources such as outside paid-consultations, off-campus research grants, and so forth.

The independent variables are as follows:

a) Demographic characteristics consist of gender, age, family origin, father's education, marital status, spouse's occupation, and number of children.

b) Educational background include the highest degree earned, the field of study, and the country where the highest degree was earned.

c) Work activities and experiences deal with academic rank, administrative position, career interruptions due to family responsibilities, seniority (years of experience in academe), primary research endeavor, community service, time spent on teaching per week; time spent on research per week, time spent on household duties per week, research productivity, and the type of current institution.

Supplementary information regarding personal experiences and opinions was obtained by in-depth interviews.

Research Questions and Hypotheses

The study was an attempt to answer the following question: Does the total income differ between male and female faculty members when their demographic characteristics, educational background, and work/activity experience variables are controlled?

A specific hypothesis based on the preceding question is: After controlling for the demographic characteristics, educational background, and work activities and experiences, female faculty members receive a lower total income than their male counterparts.

Results

Determinants for Total Income

In this study the dependent variable, total income, was a continuous variable, combining one's on- and off-campus income. As mentioned before, the institutional income was regulated and fixed according to different ranks. As a result, other income genetated from individual off-campus sources or projects con-

tributed to income discrepancies among people of the same rank.

The stepwise multiple regression procedures for the entire sample were carried out in the following manner. Twelve independent variables, as described below, were entered into the analysis to determine which factors were significantly (at p<.05) related to the amout of total income. In order to control for (or partial out) the effects of other predictors, gender was forced last into the regression equation. The independent variables were entered in stepwise fashion:

> spousal occupation (in academe or not, dichotomous)
> highest degree earned (Ph. D. or not, dichotomous)
> academic rank (professor or not, dichotomous)
> higher level administration (yes or no, dichotomous)
> years of experience (seniority, continuous)
> working alone (yes or not, dichotomous)
> community service (yes or no, dichotomous)
> time spent on teacing (continuous)
> total number of books and articles (continuous)
> type of institution (public or not, dichotomous)
> gender (female or not, dichotomous, last entered)

The above variables were selected because they had been reported to be associated with the dependent variable accordinng to the literature and had higher zero-order correlation coefficients.

Predictors were grouped into two blocks. Beginning with the first block, a stepwise selection was applied entering the preceding ten independent variables. When the first stage is completed, the analysis proceeds to the second stage where only the gender variable was entered (Padhazur, 1982). Gender was entered last in stepwise fashion in order to determine what its additional predicting power would be once the effect of all other independent variables had been partialled out.

Table 2 showed the results of the analysis for total income. Of the twelve predictor variables selected for the analysis, ten entered the multiple regression at the statistically significant level (p<.05). The final R- square of .36 indicated that 36% of the variance in total income could be explained by the variables

TABLE 2. Significant Variables of Total Income for All Faculty Members

Variable	Step at Entry	Beta *	r**	R2	t
Rank: professor	1	.38	.47	.22	9.54
Spousal Occupation	2	-.11	-.19	.25	-3.23
Administration	3	.13	.28	.27	3.34
Books & Articles	4	.10	.32	.29	2.70
Years of Experience	5	-.11	.12	.30	-2.73
Type of Institution	6	.10	.13	.32	2.91
Working Alone	7	-.11	-.12	.33	-3.25
Teaching Hours	8	-.08	-.18	.33	-2.30
Community Service	9	.09	.17	.34	2.71
Gender:female	10	-.14	-.32	.36	-3.65

R = .60, N = 579

Note: All the predictors were statistically significant at p < .05.

* Beta at the last step.

**Zero-order correlation between the dependent variable and each of the independent variables.

that entered the equation.

What factors predicted for a higher total income? The most significant predictors for both genders were: a higher rank (professor), a non-academic spouse, higher administrative positions, number of publications, shorter employment, employed in a public institution, not working alone, teaching less, and engaging in community service. After partialling out the effects of all other significant predictors, gender (female) entered the regression as a negative predictor (t = -3.65, p < .01). Gender which had a negative correlation with total income (r = -.32) had an added 2% in variation change after the effects of all other preceding variables were held constant.

Specifically, the common method of income determination in academe involved the use of salary levels within ranks. Even though the outside income comprised a certain proportion of the income differences in this study, rank

served as a basis for the institutional salary. Both of them have been shown to be highly correlated (Folger, et. al., 1970; Astin & Bayer, 1972 and 1979; Gordon, et. al., 1974; Astin and Snyder, 1982). As expected, the most significant predictor of income was the professor rank (beta=.38), which accounted for 22% of the variance in income (p<.01) indicating that the higher the rank (professor), the higher the total income.

It is interesting to see that having a spouse who also worked in academe did not enhance one's income (beta=-.11). The results were quite opposite to Astin's findings which indicates that women faculty who marry an academic spouse will benefit from information exchange and networking; thus, they will have more access to resources for mobility and higher incomes (Astin & Bayer, 1979). However, this was not the case in this study, in part because academic mobility was relatively rare compared to the United States. Both husband and wife as academics might be more interested in teaching and research rather than engaging in off-campus activities or administrative positions which would contribute to more monetary rewards. The other possibility was that within this two-income family (spouse was also working as an academic), one might be less motivated to work for extra money since both were working. However, this assumption could not be further justified given the lack of information about the working or non-working spouse.

In addition, being in a higher level administrative position enhanced one's income (r=.28, beta=.13). Because of the position, faculty members would not only get extra payment from the job, but also had access to decision making and more resources.

Prior studies have reported that research productivity is associated with salary (Carnegie Commission, 1973; Astin & Bayer, 1979; Astin & Snyder, 1982; Bouillon, 1987; Astin & Snyder, 1992). However, in this study, the total number of books and articles were grouped together to increase the variability of the sample since many subjects did not have any publications. In the analysis, the total number of books and articles was entered as a significant predictor of toal income (r=.32, beta=.10). It added 2% of the R-square change indicating that the higher the total number of publications, the higher the total income.

The zero-correlation between years of experience (seniority) and total income is positive and moderate (r=.12). However, seniority entered the regression as a negative predictor in the regression equation (beta=-.11). In other words, higher seniority in academe did not necessarily result in higher income in Taiwan. Why is this the case? After examining the regression table, the answer was quite obvious. Seniority became negative (partial r=.10) once rank (professor) entered the regression equation. In other words, those who did not advance to the professor rank did worse in total income. Those people tend to be around for a long period of time, but never achieved the professor rank. This is probably the reason seniority entered as a negative predictor of income after the effect of rank was taken into consideration.

Furthermore, faculty members currently employed in a public institution tend to have a higher total income (beta=.10). Salarywise, faculty members both from public and private universities are supposed to have comparable institutional income. However, public universities in Taiwan are sponsored by the government. They are not only considered more prestigious but are also financially better-off. The private institutions, on the other hand, can rely only on their limited resources, such as tuition and private donations. Consequently, faculty from public institutions tend to have more opportunities and access to resources and extra income.

As expected, the estblishment of networking was critical to information exchange and opportunities. In the analysis, working alone entered the regression as a negative predictor (beta=-.11). People who worked alone without any social network would have a lower income (r=-.12). On the other hand ,working with colleagues rather than in isoltion facilitated one's networking procedure; hence, it would empower one with more opportunities, including having a higher total income.

The correlation between hours spent in teaching and total income was moderately negative (r=-.18). The more hours one spent on teaching per week, the less likely he/she would earn more. Nevertheless, though this variable entered into the regression equation, it did not contribute much to the variation change of the total R-square.

Engagement in community service (including paid-consultations) is a method of increasing one's income. Since engagement in community service entered as an important predictor (beta=.09), those who dealt with community service were more likely to have a higher income.

One of the major purposes of this study is to examine whether gender differences continue to exist after the impact of other variables are partialled out. In the analysis, gender entered the regression with a negative coefficient (beta=-.14) and contributed a 2% variation change to total income after all other independent variables to total income after all the other independent variables were held constant. Since female was codified as 1 and male as 0, females, as hypothesized earlier, tend to have a lower total income than their male counterparts after controlling for the effects of variables such as academic rank, spousal occupation, supervisory administrative position and so forth.

In the analysis above, time spent in household duties was not included because it was highly correlated with gender (r=.52). It is reasonable to say that women spent more time in domestic work. In another analysis, time spect in household duties was included and entered the regression equation as a significant predictor (beta=-.13, t=-3.5, p<.01). However, once gender was entered in the regression analysis, the effect of hours of household duties no longer reached significance (t=-1.28, t>.05). As a matter of fact, for both genders, the income trade-off existed between fulfilling domestic obligations and academic engagement. Above all, being a woman was a more signifficant variable at predicting a lower income. There is no doubt that gender's effect would take off and suppress the household influence on income.

It is interesting that variables such as a doctoral degree and natural sciences did not make significant additional contributions in the regression equations because the correlations of both variables were very minimal (r=.09 and .11 respectively).

In summary, the results indicate that those who were in a higher academic rank, assumed higher level administrative positions, published more books and articles, worked in a public institution, or engaged in community service were more likely to have a higher total income. On the other hand, those who mar-

ried an academic spouse, stayed longer in academe, worked alone, or taught more would have a lower total income. Above all, female faculty members had a lower total income than their male counterparts even after demographic, educational, and work variables were taken into consideration. The hypothesis then was supported and gender differences in total income still prevailed in Taiwan's academic reward system.

Since gender differences in total income have been confirmed, it is worth investigating how women differ from their male counterparts. In other words, what variable predicts income within each population (men and women). Two stepwise multiple regression analyses were carried out separately for each sex as follows. The same set of independent variables as in the preceding analysis plus hours in househould duties excluding gender were entered in the analysis (see Table 3).

TABLE 3. Significant Variables of Total Income by Gender

Variable	Men				Women			
	Step at Entry	Beta *	R^2	t	Step at Entry	Beta *	R^2	t
Rank: professor	1	.40	.18	6.09	1	.40	.20	7.48
Work alone	2	-.20	.22	-4.01				
Spouse's Occup.	3	-.12	.25	-2.32				
Teaching Hours	4	-.15	.26	-2.81				
Yrs. of Experiences	5	-.22	.28	-3.75				
Book & Article	6	.14	.31	2.53				
Community Service	7	.13	.32	2.55	2	.13	.23	2.60
Household Hours	8	-.11	.33	-2.17				
Book & Article					3	.13	.24	2.33

R = .57 and R^2 = .33 for male, N = 284.

R = .49 and R^2 = .24 for female, N = 295.

Note: All the predictors were statistically significant at $p < .05$, and were listed by order entered in the regression.

* Beta at the last step.

In predicting one's total income, a final R-square of .22 for males and .24 for females was obtained. In order to earn a higher salary, certain characteristics were critical for males as well as for females (see Table 3). A higher rank, community service, and publications were all significant variables for both genders.

Working alone without a social network affected men's income negatively (beta = -.20). In other words, working with colleagues rather than individual engagement on research was very crucial for men. Men were more likely to broaden their social network and to increase their income through team work.

The fact that hours spent on teaching and household duties entered the analysis for man but not for women had some interesting implications. In other words, these two variables had less variability within the female sample than the male one. Men received more negative impacts from taking on more teaching and household responsibilities. It appears that women's engagement in thses two activities were usually taken for granted and the impact was not as easily visible. Furthermore, women, on the average, spent more time in teaching (19 hours) and house work (18 hours) compard to men (15 and 7 hours respectively) per week. Since most men engaged less in thest two activities, those who were more involved would become more visible. These male faculty might be more concerned for their family and students, and less ambitious in making money. Or they might feel sufficient in family income since their wife was also working (as an academic). Above all, the trade-off for these men was that they had less time for research, administration, and other community services; as a consequence, they earned less.

For men, the variable, years of experience (seniority), entered as a negative predictor of income (beta = -.22). For them, the longer employment in academe did not necessarily render a higher income. Again, seniority became negative (partial r = -.15) only after rank (professor) entered the regression eguation. Those men who stayed for a longer time in the current level were less likely to advance to the professor rank and did worse in total income.

Publication of books and articles contributed 3 % of the variation change; it indicates that research productivity was very important to facilitate men's total income. Engaging in community service, on the other hand, entered the regression equation with a minimal influence on the R-square change.

Finally, there was moderate correltion between women's income and their administrative positions (r = .18), though this variable did not enter the equation as a significant predictor.

In summary , it was more likely for both genders to obtain a higher salary through a higher academic rank, higher number of publication records, and by engaging in community service. Participating in team work rather than individual dedication to research was essential for men to enhance social networking and income. In general, women tend to work on their own and remained isolated from the "old-boy network." Above all, family obligations affected both men's and women's income to some extent, but the impact on men was far more visible.

Interviews

According to the interviews, gender differences are found to exist in Taiwan's academic reward system within which institutional salary is fixed and the equal opportunity for employment and promotion is regulated by the government. The reward system itself seems to be fair and objective; however, in practice, different attitudes toward men and women derived from cultural constraints have rooted in people's mind and distorted the fair implementation of the system. This is how women's careers in academe are affected by subtle gender discrimination. Another point is that women's lives are very much shaped by forces from different directions, the family influence in particular. In this regard, the present study seems to confirm the existing Western theories which account for such gender differences in academe from overt discrimination (as a result of gender) and different performance (as a result of life priority) between men and women.

As the interviews indicated, men and women actually experience differential treatments in academe which supports the survey finding. In addition to the gender factor, marriage is considered to facilitate men's academic career, while inhibiting women's achievement in academe.

The interviews further explained why men tend to have better opportunities than women of comparable qualifications in this profession because: 1) as cul-

tural constraints in history, men entered academe first and became the dominant group; 2) gender stereotypes prevail and continue in the real job setting; 3) the lack of comparable worth provides men with more legitimate opportunities for rewards; 4) women are less aggressive and confined by social roles due to different socialization; 5) as a minority group, women are more likely to be excluded from the social network; 6) men and women have different life priorities, career for men and family responsibility for women; 7) the academic structure is equal in its written forms except for its short of constructive guidelines and valid feedbacks; and 8) personal decision affects individual career development.

Based on the preceding findings, men in general are found to be less sensitive to gender differences in academe and experience no inequality in rewards. They seem to believe that the system is equal and gender-free. On the other hand, women are not united in their opinions; some criticize the male-dominant culture; others attribute the gender inequality in the academic world to personal choice. It is natural that these diverse comments are based on personal experience and deserve interprettion with caution. In summary, the academic reward structure is fair in its written rules; however, in reality, women generally experience inequality due to various reasons.

Conclusions

The current study suggested that many questions remained to be answered. According to the study, male and female faculty members in Taiwan were rewarded differently in their total income. Men and women differed from each other with respect to background characteristics. People may argue that male and female faculty members were not rewarded the same as a result of the preceding differential. However, afetr controlling for individual factors which affect salaries (such as rank, administration, publication, seniority, type of institution, and working alone), it is possible to predict that being a woman means a lower total income.

Some research studies argue that the salary differentials can be explained in part by women's shorter time on the professional ladder (Chang, 1988).

However, according to the study, there is no significant difference between men and women in terms of their seniority though women are two years younger than men on the average. Others may argue that the gender differentials are a result of fewer female doctorates (Astin, 1979). In this study, women faculty were found to have fewer doctorates than their male counterparts, and yet when the impact of the doctoral degree is partialed out in the multiple regression analyses, women are still less rewarded in salary. Thus, seniority and the highest degree (doctorate) seem to be less the issue in explaining why men and women are rewarded differently in the study. In addition, one may argue that the reason women on the average have a lower income is because they are in the lower rank. However, after the effect of rank is eliminated in the analysis, female faculty still earn less than their male counterparts.

As the interview results suggest, men tend to have more access to higher administrative positions, to community services (though this was not confirmed by statistical data), and to social networks. Consequently, unlike the women, men are more visible in the field, receive more recognition and allowances from institutions, and have more presence in the decision-making process.

However, many interviewees in the study were reluctant to admit that the gender differentials are a result of sex discrimination in academe. Is this because as high achievers and successful applicants, these faculty members were less likely to experience any discrimination; or because it was too sensitive for them to relate to any forms of discrimination since many of them were in administrative positions? The answer is unknown.

Whether or not there is gender discrimination in Taiwan's academic reward system is still a question to be answered. Nevertheless, the fact that women, on the average, earn less is obvious. One thing that deserves attention is that the variable, total income, in the study represents the accumulative amount of salaries from institution and outside sources. Since the latter constitute a certain proportion of one's income (unfortunately the percentge varies and remaines unknown) as a result of individual activities beyond institution, it is difficult to draw andy conclusion on the inequality of income rewards within the system. Despite this, according to the interviews, it is fair to conclude that gender dif-

ferentials in the academic reward system are attributable to the general social context due to the following phenomena: the uneven distribution of resources and opportunities between the majority and minority groups in academe, the different social expectations and cultural constraints between men and women, and personal decisions and preferences for life priorities.

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APPENDIX

Salary Scale of the University Faculty in Taiwan
Salaries in Cash (monthly)

(Unit: NT$)

Year: 1991

Scale	Professor	Associate Professor	Lecturer	Teaching Assistant
770	74,000			
740	73,550			
710	73,100			
680	71,740	65,030		
650	70,840	64,130		
625	69,935	63,225		
600	69,030	62,320		
575	68,125	61,415	50,175	
550	67,220	60,510	49,270	
525	66,320	59,610	48,370	
500	65,415	58,705	47,465	
475	64,510	57,800	46,560	
450		55,090	44,750	
430		55,315	44,075	37,335
410		54.635	43,395	36,655
390		53,960	42,720	35,980
370		52,280	42,040	35,300
350		52,600	41,360	34,620
330			40,685	33,945
310			40,005	33,265
290			39,330	32,590
275			38,650	31,910
260			37,970	31,230
245			37,295	30,555
230				29,875
220				29,425
210				28,970
200				28,520

Source: *Education in the Republic of China (1991),* Taipei: Bureau of Statistics Ministry of Education, p. 24.