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Patterns of retirement of college professors and related institutional policies

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PATTERNS OF RETIREMENT OF COLLEGE PROFESSORS AND
RELATED INSTITUTIONAL POLICIES

by

Lyndon Thomas Thompson

A Thesis Submitted to the
Graduate Faculty in Partial Fulfillment of
The Requirements for the Degree of
MASTER OF SCIENCE

Major Subject: Economics

Signatures have been redacted for privacy

Iowa State University
Ames, Iowa

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CHAPTER I. INTRODUCTION

The post World War II period has witnessed a great amount of interest in retirement and its associated aspects and problems. Evidence that this interest is relevant is provided by the growing numbers of people reaching retirement age. Now, more than ever before, people are living to the age of retirement and many more are finding themselves able to afford it financially. Most of the previous work and studies on retirement have dealt with the problems of the average American citizen. Few have dealt with retired professional people; consequently, this study will concentrate on a subgroup of these professionals--the college professors.

The objectives of this study are to determine: (1) what the existing policy for retirement is in the colleges of this six state region, (2) what policies the professors desire and in what areas existing policy could be made more consistent with this, (3) what the financial provisions and problems of the professors are, (4) what the retirement activities of the professors are, and (5) the extent of their willingness to accept further work in areas such as community activities and peace corp work.

In any study of retirement, a review must be made of some of the problems likely to be experienced by the retirees in their transitional period from employment to full retirement. Despite some major differences in their type of work, nearly every retiree experiences problems that are common to all no matter what their work role was while still employed. Nearly everyone experiences the problems of having to learn to live on a reduced income, of learning new ways of using leisure time, and of learning how to get new

satisfactions to replace the ones that went with work (10, p. 188).

The financial problems initially brought on by the reduced income are increased by the effects of inflation upon the retirees relatively fixed income. Compounded with this, is the frustration experienced in watching the younger generations enjoy ever increasing standards of living while the retiree has to remain at his static reduced position. Feelings of uselessness, of being left out, and subsequent resentment often develop because of these financially compromising conditions. College professors are, perhaps, more fortunate than the average retiree with regard to financial provisions but, like other retirees, they experience the reduction in income and accompanying decline in their living standards. The decline in status and living conditions may easily be as great, relatively, for them as for anyone else.

The problem of having to find new ways of using increased leisure time can be one of the greatest adjustment problems of all. Friedmann and Havighurst, in a study of the positive meanings of work to different people in different occupations, found that one of the benefits of work was that it helped fill up the day and provided a standard routine (10, pp. 188-190). They point out that the passing of time may be a very important value and that the work day customarily fills this need. In addition, some may have become so accustomed to their work day routine that it is only with great difficulty that they are able to establish new ones. It could well be, as Friedmann and Havighurst point out, that Americans have to learn the arts of leisure. They stress greatly the need for shifting to and incorporating leisure as a meaningful substitute for work (10, p. 194). Professors

probably have a distinct advantage in accomplishing this. Their past work experiences have exposed them to one of the widest possible arrays of ideas and potential interests which they may be able to follow up on in retirement. When compared to some of the more confining jobs, such as manual or blue collar-work, this could easily be a sizeable advantage for adjustment.

Closely related to the problem of finding new leisure time activities is the problem of replacing satisfactions formerly obtained from work with satisfactions from new sources. Some of the benefits that Friedmann and Havighurst associate with work that provide sources of satisfaction that have to be replaced include the following: (1) Work offers a set of meaningful experiences in that it is the source of contact with new people and with new ideas and experiences (10, p. 4). Upon retirement these old contacts are broken and need to be replaced with new ones which may or may not be as satisfactory. (2) The job provides the worker with a social status that the community usually associates with his occupation (10, p. 4). This association may be continued after retirement but as time passes people tend to forget and, in the case of professors, the individual may become just another aged person. (3) The job tends to maintain the worker in his group giving him a definite place and role in society (10, p. 3). With retirement his former role is destroyed and he must replace it with new ones. Often these new roles will not be as self-fulfilling and rewarding (10, p. 4). (4) The job determines when, where, and how the worker is going to spend a major part of his life (10, p.3). If the individual enjoys his work and work setting he may have a difficult time in replacing the satisfactions that he

obtained from them. On the other hand if he dislikes his work the release of retirement may be a true blessing.

In essence, the entire problem of adjusting to retirement may depend, as Friedmann and Havighurst have concluded, on what the individual's work has meant to him. If he can get equal or greater satisfaction out of retirement as compared to his former work, retirement will be a rewarding experience for him (10, p. 187).

A national conference on retirement found that one of the major problems of retirement comes from the unique values that our society places on work. Because of this retirement comes to mean emptiness, boredom, and a generally devalued existence for many (21, p. 66). A study by Kutner and others found a similar phenomenon. They found that the feeling of being useful was the paramount factor in influencing a person's attitude towards retirement. In fact, they found it to be much more important than financial considerations (18, p. 89). For some the answer to this need to feel useful can be satisfied by further employment or volunteer work for community projects. For others there is no apparent answer.

Super narrows the problem of retirement into a basic need for the aging person to change his self-concept. He states that the older person is living in an ever contracting world, having fewer roles, engaging in fewer activities, having fewer resources (both financial and physical) and having a smaller circle of friends (29, p. 158). He feels that people should begin to prepare for this as early as their forties when they first begin to experience decline. By doing this they should be able to find new

interests so that they can keep their activities at a maximum for as long as possible (29, p. 160).

Super points out that the problems of the male in adjusting to retirement will often times be greater than that of the female (29, p. 159). He states that the male has always had a primary role as a wage earner and little else, while women have had at least a secondary role as a homemaker and that they can continue or expand that role quite easily. Even for the large number of female professors that are single, the possibility of increasing household tasks offers a large area for expanding activity when compared to the possibilities for the male professor in this area. If nothing else, the tradition of the female in a homemaker role will help her now to adjust to the problems of retirement with greater ease.

The problems associated with adjusting to decreased income, increased leisure time, and decreased work satisfactions present a challenging task for any group. These three basic problems can be seen to underly most of the problems or adjustments that have to be made by any individual facing retirement--including the college professor. Consequently, aspects of these problems will tend to reappear throughout this study as the analysis is continued.

CHAPTER II. DESIGN AND PROCEDURE

Collection of the Data

A mail questionnaire was used to collect the data for this study. This questionnaire was constructed with the assistance of Dr. Edward Jakubauskas and others. A sample is included in Appendix B. The area studied consisted of the six state region of North and South Dakota, Nebraska, Kansas, Missouri, and Iowa. Our Industrial Relations Center had established previous contacts with a number of the colleges in this area and we asked all of these to supply us with a listing of their retired professors and also with information about their present retirement policy. This does not constitute a perfectly random sample. However, it should be reasonably unbiased and representative of the group involved so that the assumption of a random sample will be used.

From the resulting lists of names, questionnaires were sent out to 725 professors. Thirty of these were either undelivered or the addressee was deceased or otherwise unable to participate. This left a total sample of 695, of which 345 responded with usable questionnaires for a response rate of about 50 percent. A total of 38 schools cooperated with us by supplying the requested information.

Analysis of the Data

Basic to determining how certain problems or aspects are to be dealt with, is the need to know which individuals a particular observation applies to most. In most cases a Chi Square test (χ^2) will be used to determine if

there are significant differences. The Chi Square test is a rather general test which evaluates the probability that observed frequencies differ significantly from expected or theoretical frequencies (1, p. 212). The assumptions necessary are that the scales contain nominal data and that the samples are independent and random (1, p. 214). It is customary to use the Chi Square test only when none of the expected values is less than five (8, p. 134). In cases where the expected frequency is less than 5, the categories will be regrouped or combined whenever feasible.

The formula to be used for the tests with a two by two contingency table is:

$$X^2 = \frac{n (|ad-bc| - \frac{n}{2})^2}{(a+b)(c+d)(a+c)(b+d)} \quad (24, p. 131)$$

For tests with larger contingency tables the formula to be used is:

$$X^2 = \sum_{i=1}^r \sum_{j=1}^c (O_{ij} - E_{ij})^2 / E_{ij} \quad (24, p. 130)$$

The 5 percent level of significance will be the level used as an indication of statistically significant relationships. When $X^2 \geq X^2(1-\alpha)[(r-1)(c-1)]$ the null hypotheses is refuted and a significant relationship can be said to exist (24, p. 130).

For cases where an analysis of averages is more meaningful, one-tailed t-tests will be used for determining if the differences between two means is significant. The formula to be used is:

$$t = (\bar{X}_1 - \bar{X}_2) / \sqrt{S_{\bar{X}_1 - \bar{X}_2}^2}$$

$$\text{where } S_{\bar{X}_1 - \bar{X}_2}^2 = \frac{S^2}{n_1} + \frac{S^2}{n_2}$$

$$\text{and } S^2 = (n_1 - 1)S_1^2 + (n_2 - 1)S_2^2 / (n_1 + n_2 - 2) \quad (24, \text{ p.119})$$

As with the Chi Square tests, the level of significance to be used is 5 percent. When $t \geq t(1-\alpha) (n_1 + n_2 - 2)$ the null hypothesis is refuted and a significant relationship said to exist (24, p. 119). The assumptions necessary are that the samples are random and independent and that X_1 and X_2 are distributed normally (20, p. 141).

CHAPTER III. GENERAL CHARACTERISTICS OF THE RETIRED GROUP

Age

This study includes the entire range of retired professors. Some of the respondents are still in their late 50's while others have reached the 90's. For the group as a whole, the mean age is 74.4 years. Since women tend to live longer than men, it could be expected that there will be a relatively larger number of women in the age grouping over 80. It might also be expected that women will retire earlier than men so that there will be relatively more of them in the 70 and under group. This would mean that there should be relatively more men in the middle age groups. To see if this relationship does indeed exist, the hypothesis that there are significant differences in the age groupings according to the sex of the retiree was tested. Stated in the null form: there will be no relationship between the age groupings and sex. The data used to test this are given in Table 1. The computed Chi Square value is 2.15 which is below the critical value of 7.81 at the .05 level of significance. Therefore, the null hypothesis is not refuted. The data do not support the original hypothesis and it can be assumed that the age distribution is independent of sex.

It might be expected that those who are in the two younger groups would be the ones currently facing the greatest adjustment problems. It could probably be assumed that the necessary adjustments to retirement will be partly a function of time and, hence, those who are older will probably have adjusted to their retirement status. Since a part of this study is directed at determining ways and means by which the adjustment process

Table 1. Age groupings by the sex of the retiree

Age group	Male	Female	Total
70 and under	63	42	105
71-75	65	33	98
76-80	45	32	77
81 and over	42	20	62
Total	215	127	342 ^a
	$\chi^2 = 2.15$	C.V.= 7.81 ^b	

^aThere will be a variation in total responses between tables because of unanswered items or incomplete answers.

^bAll of the critical values given are determined at the .05 level of significance.

can be facilitated, it will be of particular relevance for those who are just entering the retirement stage.

Sex and Marital Status

The sample consisted of 128 women and 217 men or 37 and 63 percent, respectively. The marital status of these retired people has important implications for their social life and activities in retirement and also for their economic needs. Therefore, the hypothesis that the tendency to be married will vary according to the sex of the retiree was tested. Stated in the null form: there will be no significant relationship between the tendency to be married and the sex of the retiree. The data used to test this are con-

tained in Table 2. The computed Chi Square value is 240.1 which is above the critical value of 5.99. The null hypothesis is refuted and the original hypothesis holds. Examination of the data show that men retirees are much more likely than women retirees to be married. In percentage terms, 87 percent of the men are still married, while only 7 percent of the women are. This is not to suggest that the rate of marriage for female professors is extremely low. It is probable that some of the difference could be explained by the possible tendency of married women to leave the profession prior to reaching the normal retirement age.

Table 2. Tendency to be married by the sex of the retiree

Marital status	Male	Female	Total
Married	189	9	198
Widowed and divorced or separated	25	27	52
Single	3	92	95
Total	217	128	345
	$\chi^2 = 240.11$	C.V. = 5.99	

At any rate, it appears that the problems of the male and female retirees will vary greatly in retirement. The retired male professor is much more likely to have a mate to look after him in his old age and, in the case of physical disability, to have someone to help care for him. Havighurst and Albrecht, in their studies of older people, point out that worry about physical helplessness affects women much more than men (14, p. 21).

This concern seems to be based on the before mentioned considerations.

From the financial standpoint, men are much more likely to have a spouse to support. However, this can also be a form of financial security since, in many cases, the spouse may still have an income or will at least be eligible for social security benefits to help ease the financial burden. The differences in marital status may also result in different social problems in retirement and may present the need for different adjustments. The breaking off of former contacts with colleagues at retirement could be much more of a problem for the woman since her work contacts may well be her main source of companionship. Conversely, the male is more likely to have a spouse so that he still has a dependable source of companionship. However, this may also be a potential source of friction. When the male has to find new ways of spending his leisure time he is likely to spend more of it around the home and this may lead to increased conflicts between the marital partners.

General Areas of Specialization

The various fields of specialization have been broken down into 10 categories as shown in Table 3. This should be helpful for determining the relative rates of participation in the various fields. As can be seen, the humanities and the physical sciences encompass the largest number of professors having 24 and 15 percent, respectively. From this area breakdown we can in turn assess the possible availability of people in retirement

which possess the various skills of their respective fields. In a later chapter this will be utilized to examine the types of skills that the retirees possess which are interested in additional employment.

Table 3. Area of specialization

Areas of specialization	Men	Women	Total	% of total
Business	21	6	27	8
Education	22	12	34	10
Engineering	22	0	22	6
Home Economics	1	38	39	11
Hamanities	29	45	74	22
Medicine and nursing	10	3	13	4
Physical education	1	6	7	2
Physical sciences	41	11	52	15
Social sciences	23	6	29	9
Agriculture	44	0	44	13
Total	214	127	341	100

Experience and Previous Training

The professors have an average of 35 years of experience in their respective fields. About 8 percent of these have only a bachelor's degree while 48 percent have a master's degree and 44 percent have a Ph.D. It could be expected that there will be significant differences in the level

of educational attainment for men and women. To see if this is true, the hypothesis tested was that level of educational attainment will vary with the sex of the retiree. Stated in the null form: level of educational attainment will not be related to the sex of the retiree. The data used to test this are given in Table 4. The computed Chi Square value is 50.04 which is above the critical value of 5.99. Therefore, the null hypothesis is refuted and the data do support the original hypothesis. Examination of the data show that men have the greater level of educational attainment. Apparently, at the time that these people were obtaining their education, men had either a stronger motivation or a better opportunity to pursue an extended education. The differences may have important implications for those desiring further work and for their ability to find it.

Table 4. Level of education by the sex of the retiree

Level of education	Men	Women	Total
Bachelor's	16	12	28
Master's	75	91	166
Doctor's	126	25	151
Total	217	128	345

$\chi^2 = 50.04$
C.V. = 5.99

Time Spent Teaching Relative to Research

The amount of time spent teaching relative to research is a question of prime importance for further employment and use of job skills and also for the educational system itself. Consequently, the question was asked if the professors spent more time teaching or more time in research, administration, and extension. Of the respondents, 66 percent indicated that they had spent more than one-half of their time teaching while 34 percent indicated that they spent more time in research and related activities.

It is of interest to determine if the proportion of time spent teaching to research varies with sex or educational level. The first of these hypotheses to be tested is: rate of participation in research relative to teaching will vary according to the sex of the retiree. Stated in the null form this is: sex of the retiree and relative rates of participation in teaching as compared to research will not be related. The data used to test this hypothesis are given in Table 5. The computed Chi Square value is 1.55 which is below the critical value of 3.84 and thus the null hypothesis is not refuted.

Table 5. Time spent teaching relative to research by the sex of the retiree

Sex	Primarily teaching	Primarily research	Total
Men	144	65	209
Women	77	48	125
Total	221	113	334
	$\chi^2 = 1.55$	C.V. = 3.84	

The second hypothesis can be stated as follows: time spent teaching relative to research will vary with the level of education. Stated in the null form: educational level and time spent teaching relative to research are not related. The data used to test this hypothesis are given in Table 6. The computed Chi Square value is 8.99 which is above the critical value of 5.99 and therefore the null hypothesis is refuted and the data do support the original hypothesis. Examination of the data reveal that a larger than proportionate percentage of those with bachelor's and master's degrees are engaged in research. This can be explained, in part, by the high numbers of men in the agricultural field and women in the home economics field which have either a bachelor's or master's degree and are engaged in extension work rather than classroom teaching.

Table 6. Time spent teaching relative to research by educational level

Level of education	Primarily teaching	Primarily research	Total
Bachelor's	17	10	27
Master's	96	67	163
Doctor's	108	36	144
Total	221	113	334

$\chi^2 = 8.97$ C.V. = 5.99

Degree of Unionization

The extent of unionization is important because of its possible effects on retirement policies. This effect could come through either direct negotiations with the administration by representatives of the association or through indirect influence on the individual professors which could take the form of offering advice for retirement. The two unions or associations that will be studied are the American Association of University Professors (AAUP) and the National Educational Association (NEA). These were selected because of their dominant position as the main teacher's organizations. Membership in the two unions amounted to about 29 percent of the professors. Of those who belonged to one of these, 64 percent belonged to the AAUP and 36 percent to the NEA.

It might be expected that men would have a higher tendency to join a union because they may have more at stake in negotiations. Usually the male teacher has a family to support and, hence, financial considerations could become relatively more important for him and he may, therefore, be more willing to join a union for bargaining assistance. To test to see if this relationship did exist, it was hypothesized that the propensity to join a union would vary with the sex of the retiree. Stated in the null form: propensity to join a union is not related to the sex of the retiree. The data used to test this are presented in Table 7. The computed Chi Square value is .78 which is below the critical value of 3.84 and therefore the null hypothesis is not refuted.

Table 7. Degree of unionization by the sex of the retiree

Sex	Unionized	Nonunionized	Total
Men	67	150	217
Women	33	95	128
Total	100	245	345

$\chi^2 = .78$ C.V. = 3.84

Type of College Retired From

If the retirees are classified according to the type of school that they retired from, it is found that 56 percent retired from the large state colleges (enrollment over 10,000), 22 percent retired from small state colleges, and another 22 percent retired from private colleges. There is a possibility that there will be a difference in the proportions of men hired as compared to women by the different types of colleges. To test to see if this is true, the hypothesis that type of college retired from will vary with the sex of the retiree was tested. Stated in the null form: type of college retired from is not related to the sex of the retiree. The data used to test this are presented in Table 8. The computed Chi Square value is 10.19 which is above the critical value of 5.99 and therefore the null hypothesis is refuted. Examination of the data show that men have a greater tendency to be from the large colleges. This can probably be attributed to differences in the hiring practices of the types of college when these professors were originally looking for jobs which, in many cases, occurred 50 or more years ago.

Table 8. Type of college retired from by the sex of retiree

Type of college	Men	Women	Total
Large state	136	58	194
Small state	43	34	77
Private	38	36	74
Total	217	128	345
	$\chi^2 = 10.19$	C.V. = 5.99	

In summary, it was found that the mean age of the retired professors is 74.4 years. There are no significant differences between men and women in the age groupings. However, several other differences were found to exist between men and women which may or may not have an effect on their adjustment process. Chief of these differences is that the men are much more likely to be married than the women are. Another potentially important difference is that men are more likely than women to have a Ph.D. It was also found that men are relatively more likely to be retirees of large state schools and women of small state and private schools. To the extent that retirement policy varies between these types of schools, this difference is also potentially important.

CHAPTER IV. POSSIBILITIES IN RETIREMENT POLICY

Prior to an analysis of present policy or desired policy it is important that some of the factors or possibilities be reviewed. One of the first questions facing an administration is the choice between a fixed or flexible policy. After selecting between these, questions still remaining include: When should a professor retire? How can one tell when retirement should occur? and, Should that retirement be gradual or immediate?

Flexible Versus Fixed Policies

It seems that most colleges prefer flexible policies to fixed ones. In a study of the retirement plans used by U.S. four year colleges and universities, Greenough and King found that public institutions were a little more likely to have a fixed age for retirement without extensions than private institutions were (12, pp. 415-416). Of the public institutions, 12 percent were said to have reported a fixed age compared to 8 percent for private institutions. Eighty-four percent of the public institutions and 90 percent of the private institutions had provisions for extensions beyond the stated age. They also found that 70 was the most frequent age of retirement for those under a fixed-age policy and that for those under a flexible policy tenure was normally discontinued at 65 and extensions were then made on a year to year basis.

It is possible that interest in a fixed retirement policy as compared to a flexible policy is responsive to the market demand for and supply of available replacements. A governor's commission studying employment and

retirement in California found that, for workers as a whole, the employer's interest in the type of retirement policy was indeed responsive to market demand and supply (4, p. 109). There seems to be some of this relationship in the teaching field also. In statements on their policy, several colleges indicated that they had either fixed policies or maximum ages for retirement but in cases where replacements were not available, appointments could be continued for the convenience of the college. Unfortunately, statistical data are not available that would permit an accurate analysis of just how responsive the fixed requirements are to the relative difficulty of finding replacements.

In any event, both fixed and flexible retirement have their peculiar advantages and limitations. The most frequently mentioned advantage of a fixed retirement policy is the relative ease of administering it. The structured form leaves little room for varying interpretations and eliminates the need for committees or other arrangements designed to determine who shall be retained. In applying a flexible system, Breckinridge points out that in order to make it equitable selective retirement must be based on objective measures of productivity, physical condition, and psychological status (2, p. 51). These tests would be most difficult to apply in teaching and hence, there would probably be a tendency to rely on more subjective measures which will often lead to grievances and administrative problems. In the absence of objective measures it is quite common that past service is used as the basis for retention rather than current capabilities and hence, the wrong people are often retained (2, p. 52). In addition, with selective retirement there is a possibility of discrimination between employees (23,

p. 580). In the teaching field this presents an area of difficulty for those who hold ideas contrary to those of the administration or whoever else decides on retirement cases. This impairment of academic freedom is perhaps one of the main reasons why the AAUP support a fixed retirement age (26, p. 425).

Tied in with the administrative problem is the additional one of uncertainty that flexible retirement may produce. The individual does not know when his employment will terminate and, therefore, has difficulty in making long range plans. The uncertain date may cause him to put off planning because of the hope that he will be extended and this presents a possibility of his being thoroughly unprepared when he is asked to retire. The fixed retirement date, on the other hand, forces the employee to look ahead and, hopefully, prompts him to plan for it (23, p. 580). In addition to the problems of planning that flexible retirement may produce, it can also create problems of morale. This problem applies to both the retired employee and to his younger colleagues still employed. When someone is retained while another of equal status is asked to retire, it can be quite injurious to the individual who is asked to leave. He, in turn, may spread his dissatisfaction to the younger members of the staff (2, p. 50).

Another aspect of morale concerning the younger teachers involves the opportunities for promotion. With the fixed retirement plans there are, naturally, better promotion and employment opportunities for young people and this can lead to better morale among the staff members (23, p. 580). Along with this need for turnover for promotion and incentive purposes

comes the need to preserve a balanced age structure so that key members of a staff do not become aged all at once (2, p. 52).

Fixed retirement policies do not possess all of the advantages, however. An equally good case can be presented for the flexible retirement policies. The leading advantage that is most often cited is that selective retirement allows the institution to take advantage of individual differences. Chronological age and functional age are seldom the same for different individuals and thus it is desirable to have a plan that can accommodate these differences (25, p. 3). A flexible policy can also be made to harmonize with the wishes of the individual and these wishes can certainly differ as much as the functional ages do. By taking account of these differences and helping the individual meet his needs, his morale is likely to be improved (4, p. 109).

Another aspect of flexible retirement and its ability to conform to the needs of the individual comes in the financial area. Some individuals may continue to have to rely on employment to satisfy their financial needs and to deny them this employment could, in some cases, cause hardship (25, p. 3).

Related to the cost of retirement for the individual is the cost of retirement for the university and the economy. For the college there is the obvious cost reduction in their pension plan whenever a professor proceeds beyond the normal retirement age. In addition, there may also be a loss to the university of some very capable individuals whose accumulated knowledge and experience make them the leaders in their respective departments (4, p. 3). At times when the supply of capable professors is tight,

the university and the nation as a whole will lose if employment policies are used which cause professors to retire before they want to.

Gradual Versus Immediate Retirement

Regardless of the kind of plan that is finally settled on, it is still questionable if that retirement should be gradual or immediate. Havighurst and Shanas have found in their studies of older people that, in general, when an individual has a choice he will choose to taper off his work rather than to retire immediately or rather than take a new, lower scale, less demanding job (15, p. 85). In addition to following the employees preferences, the gradual retirement will also give him a period for adjustment to his new way of life (2, p. 62).

A contrary opinion is expressed by Moore. He states that for those who have had a high standard of living a halfway arrangement may be totally unacceptable. Further, those who have formed other plans for their retirement may be quite frustrated by continued part-time employment. Finally, the necessary adjustments to retirement may be delayed by these halfway arrangements to the extent that a clean break would be best (22, p. 47). It would seem that, because of the individual differences and desires, freedom of choice for the individual should be given the fullest feasible consideration. Kreps states that this freedom of choice should be allowed for not only the degree and time of retirement, but that the individual should also be allowed to regain his position after he has made his initial commitment so that finer adjustments for his individual and social needs can be made (17, p. 161).

When to Retire

Despite the needs and desires of the individual, the university's primary responsibility is not and should not be directed to the individual professor. The quality of the services that the university is offering is of prime importance and the needs and desires of the individual have to be placed under this constraint. Consequently, the question of when a professor should retire and how it is to be determined arises. For those who decide to retire voluntarily there seem to be guides within the individual which can help him to determine the right time. Moore lists some of these as: decline in one's energy reserve, loss of enthusiasm and satisfaction from the job, the inability to do full justice to one's work, and the possible loss of prestige and status should the individual continue (22, pp. 43-45). Unfortunately, one can not rely on the critical powers of self-examination in all cases because the individual will often overestimate his abilities (2, p. 51). A national committee on aging in 1952 found that freedom and the degree of choice in retirement had to be restricted to the extent that effective methods could be worked out for retaining the competent and dismissing the incompetent (21, p. 33). They continued to state that in the final analysis the policy of retirement must be acceptable to both sides. In this case the professor must continue to perform adequately just as further employment must contribute to his welfare. If a worker finds that employment is no longer contributing to his welfare he should, by all means, have the opportunity to retire ahead of the set time (21, p. 33).

With this as a background the next two chapters will deal with its implementation. The first will deal with an examination of the present policies in the colleges as that policy was applied to the individual professors. The second of these chapters will examine the desires of the professors and attempt to analyze the points of difference with the existing policy.

CHAPTER V. PRESENT RETIREMENT POLICY

The Greenough and King study, cited in the preceding chapter, on flexible versus fixed retirement showed that an overwhelming majority of the colleges had some form of a flexible policy. Only 11.4 percent of the total faculty were said to be under a fixed policy (12, p. 415). The results of this study are consistent with the results obtained by Greenough and King. In our survey the colleges were asked to supply a statement on their retirement policy. Of the twelve usable responses, only one has a fixed retirement policy. However, all of the rest listed 65 as the age at which tenure is discontinued. After this, extensions are made on an annual basis. In one-half of the cases this could be continued up to the age of 70. Others reported 68 as the deadline and still others reported that there is no limit on the number of extensions allowed. In some cases the extensions could be on a part time basis.

Flexible retirement does not, of course, imply that the policy is in accordance with the wishes of the professors. Many extensions are made for the convenience of the university and usually extensions are not allowed to go beyond a set age which may be too early for many professors. Consequently, it is necessary to examine the data to see how many of the professors had to retire involuntarily.

Voluntary Versus Involuntary Retirement

Of the total number of respondents, 56 percent indicated that they had been forced to retire involuntarily and 97 percent of these indicated

that retirement rules were the primary reason for their involuntary retirement. Although 56 percent indicated that they had to retire, it does not mean that all were dissatisfied by this arrangement. Only 54 percent of these involuntary retirees indicated that they wanted to work beyond the date of their involuntary retirement. Perhaps this is an indication that many people use the age limit as a cutoff age around which they have planned their retirement. In any event, it could be expected that more men than women would be forced to retire involuntarily because men would probably be more prone to want to work longer and thus, be more likely to come under the involuntary requirements. The willingness of men to work longer than women will be discussed later in this chapter. The hypothesis was tested that the tendency to be involuntarily retired will vary with the sex of the retiree. Stated in the null form; the tendency to be retired involuntarily is not related to the sex of the retiree. The data used to test this hypothesis are given in Table 9. The computed Chi square value is 9.16 which is above the critical value of 3.84 and thus the null hypothesis is refuted. Examination of the data show that men actually do come under the involuntary provisions more often than women. Only 45 percent of the women had to retire involuntarily as compared to 62 percent of the men.

Table 9. Propensity to be involuntarily retired by sex of the retiree

Sex	Involuntary	Voluntary	Total
Men	134	81	215
Women	57	70	127
Total	191	151	342
	$\chi^2 = 9.16$	C.V. = 3.84	

There is also a possibility of differences in the tendency to be involuntarily retired based on the level of educational attainment. A relationship could exist for two reasons. In the first case, professors with a higher level of education might have a stronger attachment to work and may obtain a greater level of job satisfaction because of their usual higher status and prestige and therefore, may be more likely to continue until forced to retire. In the other case, there is a possibility that the colleges would be more willing to retain professors with higher levels of educational attainment so that they would not be forced to retire. These two possibilities would, of course, be offsetting. To determine if one of them has a dominating effect sufficient to cause statistical significance, the hypothesis that forced retirement is related to the level of educational attainment was tested for both men and women. This is to control for the differences in education that were found to be significant previously and for the differences in propensity to be involuntarily retired. The null hypothesis is: educational level and forced retirement are not related. The data used to test this hypothesis are given in Tables 10 and 11. The computed Chi Square values are 2.21 for men and .60 for women, both of which are below the critical value of 3.84. Therefore, the null hypothesis is not refuted.

It is also of interest to see if there is a difference in the number of people retiring under involuntary provisions by the type of college retired from. A governor's commission in California found that large firms are more likely to have involuntary provisions than small firms (4, p. 110). To see if this same relationship holds for the colleges, the hypothesis

Table 10. Propensity to be involuntarily retired by educational level for men

Educational level	Involuntary	Voluntary	Total
Bachelor's + master's	52	39	91
Doctor's	82	42	124
Total	134	81	215
	$\chi^2 = 2.21$	C.V. = 3.84	

Table 11. Propensity to be involuntarily retired by educational level for women

Educational level	Involuntary	Voluntary	Total
Bachelor's + master's	48	54	102
Doctor's	9	16	25
Total	57	70	127
	$\chi^2 = .60$	C.V. = 3.84	

was tested that the number of people retiring under involuntary provisions will vary with the type of college. The null hypothesis is: type of college and involuntary retirement are not related. Once again this will be tested for both men and women to control for the tendency of women to be from small or private colleges which was found to be significant earlier. The data used to test this hypothesis are given in Tables 12 and 13. The computed Chi Square value is 8.24 for the men and 6.97 for the women, which in both cases, is above the critical value of 5.99. Thus,

Table 12. Propensity to be involuntarily retired by type of college for men

Type of college	Involuntary	Voluntary	Total
Large state	94	41	135
Small state	21	21	42
Private	19	19	38
Total	134	81	215
	$\chi^2 = 8.24$	C.V. = 5.99	

Table 13. Propensity to be involuntarily retired by type of college for women

Type of college	Involuntary	Voluntary	Total
Large state	32	24	56
Small state	10	24	34
Private	15	22	37
Total	57	70	127
	$\chi^2 = 6.97$	C.V. = 5.99	

the null hypothesis is refuted and the data do support the original hypothesis. Examination of the data reveal that for both men and women there is a greater tendency to be involuntarily retired among those from the large state colleges. This may indicate that the large state colleges have stringent quality controls or simply that they are less flexible than the small state and private colleges. It may be that the smaller schools feel that they are better able to determine who is fit to be re-

tained. Because of their size it may be possible to deal with retirement cases on a more individual basis and hence, they can allow a greater number of professors to continue until they wish to retire of their own accord.

There are no significant differences between the mean age of retirement for men as compared to women of those that had retired voluntarily. The hypothesis that of the voluntary retirees men would tend to retire later than women was analyzed by the use of a t-test. The null hypothesis is: the mean retirement age of voluntary retirees is not significantly higher for men than for women. The data and results for this test are given in Table 14. The computed value for the t-test is 1.009 which is less than the critical value of 1.661 at the .05 level of significance, and thus the null hypothesis is not refuted. Basically the same hypothesis was tested for involuntary retirees. In this case the results are significant. The t-test had a value of 2.001 which is above the critical value of 1.660 and thus the null hypothesis is refuted. It would appear that men are more likely to seek extensions and/or obtain them than women are.

When the voluntary and involuntary immediate retirees are combined the males also retire later than the females. This was determined by testing the hypothesis that the mean retirement age of males would be significantly greater than for females. Stated in the null form: the mean retirement age of males is not significantly higher than for females. The computed t-test value is 2.633 which is above the critical value of 1.652. Therefore, the null hypothesis is refuted and we can conclude that of those who retire all at once men will retire later than women. This

difference amounts to 1.2 years as male retirees average 67.4 years while females average 66.2 years at retirement.

Although men tend to retire later than women overall, the division between voluntary and involuntary retirees has some important implications. There were no significant differences for the voluntary retirees. These people tended to retire at about 65 with a standard deviation on either side of the mean making the range from 62 to 68. This falls within the traditional retirement age as set up by American society and it would appear that many professors of both sexes have decided to work to this age as a cutoff point. There are proportionately more women than men in this group, however, and this indicates that relatively more men desire to continue working longer and thus, more of them come under the involuntary provisions. Of those who do go on until they are forced to retire, men were able to continue working longer than women and it would appear that some of this might be due to preferential treatment of men over women in the retention practices of the colleges. At any rate, men on the average do continue to work longer than women and this is probably largely due to a stronger work role orientation.

For both men and women, voluntary retirees tend to retire earlier than involuntary retirees. The hypothesis that voluntary retirees would retire earlier than involuntary retirees was tested by the use of a t-test for both men and women. In both cases the null hypothesis is that retirement age of involuntary retirees is not significantly greater than for voluntary retirees. The data used to test this are also given in the Table 14. In both cases the results are significant. For men the computed

Table 14. Tests for differences between voluntary and involuntary retirees

Characteristic tested	Number	\bar{X}	S	t	C.V.
Women voluntary-immediate	55	64.80	2.73	1.009	1.661
Men voluntary-immediate	53	65.38	3.23		
Women involuntary-immediate	46	67.74	3.74	2.001	1.660
Men involuntary-immediate	71	68.90	2.53		
Women voluntary-immediate	55	64.80	2.73	4.555	1.661
Women involuntary-immediate	46	67.74	3.74		
Men voluntary-immediate	53	65.38	3.23	6.806	1.659
Men involuntary-immediate	71	68.90	2.53		
Total men immediate	126	67.36	3.34	2.633	1.652
Total women immediate	102	66.16	3.52		

t-test value was 6.806 which was beyond the critical value of 1.659 and for women the value was 4.555 which is again beyond the critical level of 1.661. Therefore, in both cases the null hypothesis is refuted. Male volunteer retirees had a mean retirement age of 65.4 as compared to 68.9 for male involuntary retirees, or a difference of 3.5 years. The pattern was quite similar for female retirees, volunteers averaged a retirement age of 64.8 while those under involuntary provisions averaged 67.7 for a difference of 2.9 years.

This difference between voluntary and involuntary retirees is important for policy makers, especially those considering fixed retirement provisions. Since the voluntary retirees quit sooner, it is apparent that allowances have to be made for those wishing to retire ahead of the normal retirement age. Forcing a professor to continue beyond the age at which

he would like to retire is not likely to be beneficial to the educational system. This forcing a professor to remain at his post can be accomplished quite easily by requiring that he remain in order to be eligible for his pension benefits.

An additional possible source of variation for age at retirement could occur because of different policies by the different types of colleges. The hypothesis was tested that large state schools will have an earlier retirement age than either the small state colleges or the private colleges. Stated in the null form this is: large state schools will have a mean retirement age greater than or equal to that of small state and private colleges. This hypothesis was tested for men and women separately. The data used to test it are given in Table 15. As can be seen, the only significant result is for men in the large state schools compared to the small state schools. In that test the computed t value is 1.821 which is above the critical value of 1.661 and in that case, the null hypothesis is refuted. Men in the large state schools retired on the average 1.5 years earlier than those in the small state schools.

To explain the difference for men according to the size of the state schools, the data were divided into involuntary and voluntary retiree groups. The hypothesis was tested that in both cases the large state colleges will have an earlier retirement age than the small state colleges. Stated in the null form this is: large state schools will have a mean retirement age greater than or equal to that of the small state schools. The data used to test this and the results obtained are presented in Table 16.

Table 15. Tests for differences in retirement age by type of college

Characteristic tested	Number	\bar{X}	S	t	C.V.
Women					
Large state	45	66.02	4.24	.394	1.665
Small state	28	66.39	3.29		
Large state	45	66.02	4.24	.133	1.667
Private	29	66.14	2.45		
Men					
Large state	83	66.90	3.45	1.821	1.661
Small state	19	68.42	2.36		
Large state	83	66.90	3.45	1.479	1.661
Private	24	68.08	3.44		

Table 16. Tests for differences in retirement age by type of college

Characteristic tested	Number	\bar{X}	S	T	C.V.
Voluntary-men					
Large state	34	64.56	3.36	1.948	1.683
Small state	8	67.00	3.20		
Involuntary-men					
Large state	48	69.29	2.40	.773	1.673
Small state	10	69.90	1.37		

The computed t value of 1.948 for the voluntary retirees is above the critical value of 1.683 and consequently, the null hypothesis for the voluntary retirees is refuted. The results for the involuntary retirees were insignificant and in this case the null hypothesis was not refuted. This leads to the conclusion that the small state colleges may be more lenient in the retention of their professors than the large colleges are. As we saw before, the large state colleges are more prone to have involuntary provisions than the small state colleges; consequently, it seems that many of voluntary retirees of the small schools are allowed to continue longer and, in many cases, may not come under involuntary provisions at all. However, where involuntary provisions do exist they appear to be fairly standardized without fluctuations for the type of school.

The immediate retirees were further broken down by level of education to see if there were any significant differences in this area. The hypothesis was tested that professors with a Ph.D. will, on the average, retire at a later date than will those with a master's or bachelor's degree. The reasoning for this is twofold. Those with the higher educational level may have more advantageous positions and status than those with lesser education and hence be more reluctant to retire because their work satisfaction is greater and secondly, the colleges may be more willing to retain them because of their greater education and alleged skill. The null hypothesis is: professors with a Ph.D. will not have a significantly higher age of retirement. The data used to test this are presented in Table 17. Men and women were tested separately. The computed t-test values were 1.897 for men and .325 for women with critical values of 1.659 and 1.661,

Table 17. Tests for differences in retirement age by educational level

Characteristic tested	Number	\bar{X}	S	t	C.V.
Men					
Bachelor's and master's	56	66.73	3.60	1.897	1.659
Doctor's	70	67.86	3.06		
Women					
Bachelor's and master's	85	66.41	3.55	.325	1.661
Doctor's	17	66.11	3.47		

respectively. Thus the null hypothesis is refuted for men but not for women. Among the men, those with a Ph.D. retired, on the average, about 1.1 years later than those with bachelor's and master's degrees.

Gradual Versus Immediate Retirement

The preceding section has dealt exclusively with those professors who retired immediately; attention in this section will be focused on those who retired gradually. A professor may be enrolled in a gradual retirement policy because of his individual wishes or because of the wishes of the university. In all, 31 percent indicated that, for one reason or another, they had retired gradually. For 63 percent of these gradual retirees some aspect of the process was involuntary. This could have been because of a requirement to go on part-time from full-time or it could have been involuntary because of disagreement with the starting or ending dates.

It was found that men were more prone to retire gradually than women were. The hypothesis that the tendency to retire gradually will vary with the sex of the retiree was tested by Chi Square. The null hypothesis is: sex and propensity to retire gradually are not related. The data used to test the hypothesis are presented in Table 18.

Table 18. Propensity to retire gradually by the sex of the retiree

Sex of retiree	Gradual	Immediate	Total
Men	85	129	214
Women	22	104	126
Total	107	233	340
	$\chi^2 = 17.202$	C.V. = 3.84	

The computed Chi Square value of 17.20 is above the critical value of 3.84 and thus the null hypothesis is refuted. Only 18 percent of the women engaged in gradual retirement as compared to 39 percent of the men. Apparently women are relatively more ready to retire at earlier ages and once the time approaches, are ready to give up their work role status completely. However, not all women give up their work role status earlier than men. Of those who go into gradual retirement, women begin at a later age than men do. The hypothesis that women enter gradual retirement programs later than men was tested by the use of a t-test. The null hypothesis is: age of entry to gradual retirement will not be significantly higher for women than for men. The data and results are given

in Table 19. The computed value of 1.886 is above the critical value of 1.661 and thus the null hypothesis is refuted. Although most women retire earlier than men, apparently those women who go into gradual retirement value their work roles highly as they wait longer than the comparable group of men by 1.6 years before starting gradual retirement and also maintain their gradual retirement status as long as men do.

The hypothesis was tested that they would maintain their gradual status longer than men also. The null form is that they will be equal or less. The data used for testing are given in Table 19 also. The results were not significant. The computed value was .516 which is below the critical value of 1.662 and thus the null hypothesis is not refuted.

Table 19. Starting and ending age for gradual retirement by sex of retiree

Characteristic tested	Number	\bar{X}	S	t	C.V.
Starting age					
Men	84	66.50	3.10	1.882	1.661
Women	21	68.14	5.07		
Ending age					
Men	75	71.95	4.23	.516	1.662
Women	15	72.60	5.62		

Combining the starting and finishing averages for men and women, the average length of gradual retirement turns out to be 5.22 years from start to finish. This figure is somewhat downward biased because many of those in the longer than average programs had not completed their retirement and hence could not be included in this calculation.

There are no significant differences between the voluntary and involuntary groups that retired gradually. It was hypothesized that the retirees who volunteered to retire gradually would have a lower mean age than those who had been forced, as had been the case with the non-gradual retirees. The null hypothesis is: there will be no relationship between involuntary-voluntary status and the starting age for gradual retirement. The data used to test the hypothesis are given in Table 20. A t-test was used to test for differences in the average starting age of gradual retirement and once again, men and women were analyzed separately. The computed t value is 1.479 for men and .487 for women, both of which are below the critical values of 1.665 and 1.729, respectively. The null hypothesis is, therefore, not refuted.

Table 20. Starting age for gradual retirement by voluntary-involuntary status

Characteristic tested	Number	\bar{X}	S	t	C.V.
Men					
Voluntary	27	67.22	4.44	1.479	1.665
Involuntary	57	66.16	2.18		
Women					
Voluntary	12	67.67	6.33	.487	1.729
Involuntary	9	68.78	2.91		

It is of interest to see if there are significant differences in the propensity to be under a gradual retirement provision due to level of education. It was hypothesized that those with a Ph.D. are more likely to be in a gradual program than those with bachelor's or master's degrees.

The reasoning for this is that those with more education may have stronger work role values due to greater prestige and status than the others and also the colleges may be more willing to prolong their careers because of their relative greater experience and skill than those with a lesser education. The null hypothesis is: education and propensity to retire gradually are not related. Men and women were again tested separately. The data used to test this are presented in Tables 21 and 22. The computed value for men is .34 and for women .97, both of which are below the critical value of 3.84 and consequently, the null hypothesis is not refuted.

Table 21. Propensity to retire gradually by educational level for men

Educational level	Gradual	Immediate	Total
Bachelor's + master's	34	57	91
Doctor's	50	74	124
Total	84	131	215
	$\chi^2 = .34$	C.V. = 3.84	

Table 22. Propensity to retire gradually by educational level for women

Educational level	Gradual	Immediate	Total
Bachelor's + master's	17	85	102
Doctor's	5	17	22
Total	22	102	124
	$\chi^2 = .97$	C.V. = 3.84	

Schools were analyzed to see if there is a difference in the propensity of their professors to retire gradually. It was hypothesized that small state colleges and private colleges would tend to have relatively more participating in gradual retirement programs. Since they had previously been found to be more flexible in voluntary provisions, it was felt that this might also apply to gradual retirement. The null hypothesis is that type of college and propensity to retire gradually are not related. Again, differences for men and women were tested separately with the data and results presented in Tables 23 and 24. The computed value for men was 2.47 and for women 1.69, both of which are below the critical value of 5.99. Thus, the null hypothesis is not refuted.

Table 23. Propensity to retire gradually by type of college for men

Type of college	Gradual	Immediate	Total
Large state	51	83	134
Small state	21	21	42
Private	13	25	38
Total	85	129	214
	$\chi^2 = 2.47$	C.V. = 5.99	

Table 24. Propensity to retire gradually by type of college for women

Type of college	Gradual	Immediate	Total
Large state	12	45	57
Small state	6	26	32
Private	4	33	37
Total	22	104	126

$\chi^2 = 1.69$
 $C.V. = 5.99$

Areas of specialization were also tested for possible significant differences. The three major areas used were those of: (1) vocational fields, which included mainly agriculture and home economics, (2) the physical sciences, and (3) the liberal arts, which included everything that could not reasonably be included in the other two areas. It was hypothesized that there would be significant differences according to major area because of the relative greater difficulty of replacing members of the more technical fields than of the others and hence, colleges would be more willing to retain these members on at least a part time basis. The null hypothesis is: areas of specialization and propensity to retire gradually are not related. There was insufficient data to test for differences among women so only men were tested for this difference. The data and results are given in Table 25. The computed value was 1.05 which is below the critical value of 5.99 and thus the null hypothesis is not refuted.

Table 25. Propensity to retire gradually by area of specialization for men

Area of specialization	Gradual	Immediate	Total
Physical sciences	31	39	70
Liberal arts	35	61	96
Vocational	18	28	46
Total	84	128	212
	$\chi^2 = 1.05$	C.V. = 5.99	

Of those who retired gradually, 57 percent were engaged in school plans and the remaining 43 percent had individual plans. It was hypothesized that participation in school plans would vary with the type of college. The null hypothesis is: type of school is not related to the type of plan. The data used to test the hypothesis are given in Table 26. The computed Chi Square value of 18.20 is above the critical value of 5.99 and thus the null hypothesis is refuted. Examination of the data show that the large state schools tend to have relatively more professors in school plans as compared to the individual plans. This seems to be in keeping with the trend of the large colleges to have a more structured policy in that previously they were found to have more under involuntary provisions and now to have the more formalized school plans.

Of those engaged in school plans, 37 percent indicated that they were voluntary and 63 percent that they were involuntary. For those in a school plan the question was asked if the withdrawal progression was

Table 26. Propensity to be under a school plan by the type of college

Type of college	School plan	Individual plan	Total
Large state	36	12	48
Small state	10	12	22
Private	3	14	17
Total	49	38	87
	$\chi^2 = 18.20$	C.V. = 5.99	

standard for other professors of the same status, 85 percent indicated that it was.

A similar question was asked of those in individual plans. Of these, 54 percent indicated that people of their status could retire gradually and 46 percent said that others could not. The individual plans differ from school plans in that they are less structured and probably less likely to have a format to follow or assistance provided for setting them up. Of the gradual retirees using individual plans only 20 indicated that they had assistance in setting them up, 8 indicated that no one had worked with them and an additional 9 did not respond. The most common source of assistance was either the dean or the head of the department. Both had provided assistance to 7 people. In a survey of retired executives, Hall found one of the most common suggestions for improvement was the need for methods for stimulating thorough thinking and planning in advance so that adequate programs could be prepared (13, p. 123). This would seem to hold

true also for retired professors and is one area in which the retirement process could be facilitated quite easily.

In summary, it was found that women are more likely than men to retire voluntarily. Of all of those that did retire immediately, 44 percent retired voluntarily. It was found that the large state schools are the most likely to have involuntary provisions. Considering both involuntary and voluntary immediate retirees, men tend to retire later than women by an average of 1.2 years. There are significant differences for men but not for women in average retirement age according to the level of education and type of school retired from. The men with Ph.D.'s tended to retire later and those from the large state schools to retire earlier.

It was found that men tend to retire gradually more often than women. In all, 31 percent had retired gradually. For these gradual retirees, the average span of the gradual retirement is over 5 years. The gradual retirement process was carried out under school plans in 57 percent of the cases with the large state schools having a relatively higher number engaged in school plans.

CHAPTER VI. RETIREMENT POLICY AS DESIRED BY THE PROFESSORS

From the individual's standpoint an ideal retirement policy would be one that is flexible enough to meet his individual needs. Unfortunately, this policy must be consistent, first, with the needs of the college and its educational standards and, secondly, with the college's ability to administer the plan. An attempt will be made in this chapter to outline some of the aspects that professors would like to have incorporated into their retirement policies and subsequently, to point out reasons why this may or may not be acceptable.

The Ideal Age for Retirement

One of the primary questions involved in establishing a retirement policy concerns the ideal age for retirement. From the analysis of the preceding chapter, the only reasonable conclusion is that it varies greatly from one individual to another. From Table 15 it can be determined that the mean age for retirement is 66.8 for the entire group with a standard deviation of 3.4 years. This means that about two-thirds of the group retired between the ages of 63.4 and 70.2. This still leaves one-third outside the range and, in addition, the range is downward biased from the desired range since many were forced to retire earlier than they had wanted to. Therefore, if a policy is to be consistent with the wishes of a fairly high percentage of the professors it will have to have provisions for retirement available starting, perhaps, at 60 and continuing to 75. It could be expected that women, in general, would tend to be at the lower end of this range since it was found in Table 14 that they

tended to retire earlier than men. Men with Ph.D.'s would probably tend towards the upper end of the range as the test in Table 17 showed that they retired later than those with lesser levels of education.

It should be feasible for colleges to allow enough flexibility in their plans so that professors can retire at ages under their "normal retirement age", which is usually considered to be 65. It seems that there would be little to gain by forcing a professor to remain against his wishes once he feels that he would be better off in retirement. Under these circumstances, his attitude and morale would be likely to be low and, in turn, his contribution to the educational system reduced. To facilitate his withdrawal the provisions of the pension plans have to be considered. Adjustments have to be available for a professor who wants to retire early so that he may do so. This will probably have to entail reduced rates for those who leave earlier, which should certainly be better than forcing them to continue until the normal retirement age to obtain their pension benefits.

The other end of the age scale is much more arbitrary. The question of how long a professor can continue to meet the educational standards of the college is an extremely important one. It is unlikely that the college can rely entirely on the individual to determine the age at which he must quit and hence, some system is needed that will weed out the incompetent. The feasibility of such a selective system is also quite arbitrary as was discussed in Chapter 4. In the final analysis, a cutoff date will probably continue to be needed until more adequate means for judging fitness to continue are developed.

The Desire for Gradual as Compared to Immediate Retirement

Another important aspect of retirement policy concerns the phasing of the withdrawal process. The main question is, Should retirement be gradual or immediate? By combining the retirees who had participated in gradual retirement programs and that had indicated that they were satisfied with the arrangement with those that indicated that they would have liked to retire gradually but could not, it was found that 44 percent favored gradual retirement. This is somewhat contrary to the study by Havighurst and Shanas, cited earlier, which found that individuals, in general, would prefer to taper off their retirement activities (15, p. 85). For the professors, 56 percent still preferred to retire all at once.

The preference for immediate retirement is probably an indication of the professors ability to find satisfactory substitutes for the satisfactions obtained from work. It could be expected that people in their position would be exposed to more alternative sources of satisfaction than the average worker and hence, they should have a better opportunity to find meaningful substitutes for work. This is probably the reason for their being relatively more willing to make a complete break with their job at the time of retirement.

There is a possibility that men will prefer to retire gradually relatively more often than women because, in many cases, the gradual retirement phase is a means of prolonging the work role and as was already discussed, men seem to want to retain their work status longer than women do. The hypothesis tested is that desire to retire gradually will vary with the

sex of the retiree. Stated in the null form: the tendency or desire to retire gradually is not related to the sex of the retiree. The data used to test this are given in Table 27. The computed Chi Square value is 2.58 which is below the critical value of 3.84 and thus the null hypothesis is not refuted. It was found earlier that actual participation in gradual retirement programs occurred relatively more frequently for men than for women (see Table 18). Therefore, it would appear that the opportunities for gradual retirement are somewhat more limited for women than for men and it would probably be beneficial if these opportunities were expanded for women. In addition, the opportunity to retire gradually should probably be expanded for the entire group as several professors indicated that they would have liked to retire gradually had they been given the chance.

Table 27. Professors that retired gradually or wanted to by sex of the retiree

Sex	Retired gradually or wanted to	Immediate	Total
Women	49	58	107
Men	95	78	173
Total	144	136	280
	$\chi^2 = 2.58$	C.V. = 3.84	

It was also tested to see if there were any significant differences in the desire for gradual retirement programs according to the level of education. Only men were tested since there were not sufficient data for women. The hypothesis to be tested is that tendency or desire to retire gradually will vary with the educational level of the retiree. The reason that this relationship might exist is that the professors with the higher level of educational attainment may have a stronger job attachment and subsequently try to prolong it through gradual retirement. The null hypothesis is: tendency or desire to retire gradually is not related to the level of education. The data used to test this are given in Table 28. The computed Chi Square value is 3.59 which is below the critical value of 3.84 and hence the null hypothesis is not refuted. This lack of differentiation for desired gradual retirement is consistent with actual practice as tested in Table 21.

Table 28. Male professors that retired gradually or wanted to by educational level of the retiree

Educational level	Retired gradually or wanted to	Immediate	Total
Bachelor's and master's	35	39	99
Doctor's	60	39	99
Total	95	78	173
	$\chi^2 = 3.59$	C.V. = 3.84	

The desired starting age for gradual retirement is not significantly greater for either sex. It was found in Table 19 of the preceding chapter that the average starting date was later for women than for men. Consequently, it was hypothesized that this same relationship would hold true for those who desired to retire gradually but were unable to do so. The null hypothesis is: desired starting age for men will be greater than or equal to the starting age for women. The data and results are presented in Table 29. The computed t value is -1.064 which is below the critical value of 1.674 and thus the null hypothesis is not refuted.

Table 29. Desired age for starting gradual retirement by sex of the retiree

Sex	\bar{X}	N	S	t	C.V.
Men	66.83	35	7.02	-1.064	1.674
Women	65.10	20	2.31		

The average desired starting age of 66.2 is quite close to the mean age of 66.8 for those who actually did retire gradually and it appears, therefore, that since the gradual programs are starting quite close to the desired age of those who were unable to participate it should be quite easy to extend the program to include them. The standard deviation of the desired age is also quite interesting in this case. It averages out to 5.3 and if two standard deviations are considered on either side of the mean, the range for desired starting age becomes 55.5 to 76.9 .

There are significant differences in desired starting age for the different educational levels. The hypothesis was tested that professors with a Ph.D. would have a later desired starting date than those with a bachelor's or master's degree. The reason for this is the now familiar argument that those with the higher educational level will have the stronger work role values and hence will put off any form of retirement longer than the others. The null hypothesis is: professors with bachelor's and master's degrees will have an equal or greater desired starting age for gradual retirement than those with a Ph.D. The data used to test this are presented in Table 30. The computed t value is 2.017 which is above the critical value of 1.674 and therefore the null hypothesis is refuted. Professors with the highest educational levels do indeed have a higher desired age for starting gradual retirement.

Table 30. Desired starting age for gradual retirement by educational level

Educational level	X	N	S	t	C.V.
Bachelor's and Master's	64.69	29	6.46	2.0173	1.674
Doctor's	67.73	26	4.40		

The area of gradual retirement should be one where a greater degree of flexibility could be instituted. Whenever replacements are reasonably available, it should be possible to allow a professor to retire gradually, starting at almost any age he desires. A completely open ended age may

not be as desirable, however, since some may wish to continue indefinitely. At the opposite extreme, a professor should not be forced to retire gradually against his wishes. For some a halfway arrangement may be quite frustrating, as was discussed in Chapter 4, and there is no apparent reason why a halfway arrangement should be necessary if the professor does not desire it.

Along with the decision to retire gradually comes the question of how large the load reduction should be. This is an area that should probably be left to the individual's discretion as much as possible. It is conceivable that the reduction for teachers could range from having one less class a year all the way to just making guest lecture appearances. The AAUP and the American Association of Colleges (AAC) have recommended that gradual retirement should be undertaken through the individual's own initiative and that the amount of the reduction should be based on his individual desires (16, p. 295). In the final analysis, this is probably a workable solution provided that enough flexibility is allowed in the starting dates which should probably range from 55 to perhaps 70 or more.

Reasons for Retiring

In the previous chapter it was found that 56 percent of the professors had been forced to retire as compared to 44 percent who had retired voluntarily. Of the involuntary retirees nearly all indicated that the reason for their retirement was policy rules. In all, 54 percent of these

involuntary retirees had wanted to continue working longer. The feasibility of extending the age limitations to meet the desires of the professors is a complete value judgement that must continue to be made by the individual colleges. Perhaps all that can be encouraged in this area is the attempt for more objective and satisfactory methods for determining who is competent and can be retained should further extensions be allowed.

The voluntary retirees present a rather interesting group in that they usually retired of their own free will and hence, their motives for retiring can be analyzed. The desire for leisure was the predominant reason for voluntary retirement as 49 percent indicated that this was the primary reason. An additional 19 percent indicated that health was the primary reason and in a closely related area, 15 percent listed job pressures as the main reason. The remaining 18 percent were divided among a number of miscellaneous categories. The high proportion that retired because of a desire for leisure is particularly encouraging since it is probably an indication that they felt they would be able to find suitable satisfactions in retirement to replace the ones that went with work.

It was hypothesized that reasons for retirement would vary with the sex of the retiree. The reason for this is that men would probably experience declining health at an earlier age than women and consequently would have proportionately more in this category. The null hypothesis is: reason for voluntary retirement is not related to the sex of the retiree. The data used to test this are presented in Table 31. The computed Chi Square value is .78 which is below the critical value of 7.81 and thus the null hypothesis is not refuted.

Table 31. Reason for voluntary retirement by sex of the retiree

Reason	Male	Female	Total
Health	18	12	30
Desire for leisure	41	35	76
Job pressures	12	11	23
Other	16	10	26
Total	87	68	155

$\chi^2 = .78$
C.V. = 7.81

Changes the Retirees Would Make in Their Retirement Process

The retirees were asked what changes they would make in their retirement process if they had the opportunity to do it over again. Their answers to this will be influenced both by how well the institution was able to meet their individual needs and also by their ability to make the required adjustments in retirement. It was found that 69 percent would not change their retirement process, that 5 percent would retire earlier, that 13 percent would retire later, and that an additional 13 percent would retire gradually. It might be expected that relatively more men would be in the retire later group and the retire gradually group because of possible greater problems of adjustment for the male that were considered in the third chapter. The hypothesis to be tested is that changes desired by the individual will vary with the sex of the retiree. Stated in the null form: changes desired will not be related to the sex of the retiree.

The data are given in Table 32. The computed Chi Square value is 6.11 which is below the critical value of 7.81 and thus the null hypothesis is not refuted.

Table 32. Changes desired by the sex of the retiree

Changes desired	Male	Female	Total
No change	132	83	215
Retire earlier	7	8	15
Retire later or not at all	38	13	51
Retire gradually	22	19	41
Total	199	123	322

$\chi^2 = 6.11$ C.V. = 7.81

It is perhaps noteworthy that such a high percentage of the professors are satisfied with, or at least would make no changes in, their retirement process. In addition to the 69 percent that are satisfied, it should have been easy to accommodate the 5 percent who wish that they had retired earlier. It should also have been relatively easy to make some allowances for those who wanted to retire gradually, although problems may arise if the primary reason for this desire is to extend their job beyond the fixed limits for full time work. The 13 percent that wish that they had continued longer present the greatest problem area because of usual declining abilities with advancing age and it becomes quite questionable if the age

limits should be extended because of the desires of the individual.

In summary, the retirement policies could probably be a great deal more flexible than they currently are in the areas of starting age and gradual retirement. This is particularly true for those who wish to retire or go into gradual retirement ahead of the "normal" age. For those who wish to continue beyond the specified dates for retirement, the problem becomes much greater and, as yet, there does not appear to be a clear cut solution.

Although several differences were found to exist between men and women and between educational levels, these differences are not large enough to merit special allowances in the retirement policy of the colleges. Despite the differences in means that occur for these subdivisions, the standard deviations are great enough to cause overlapping in the groups and consequently, a policy can not be developed to discriminate for average preferences without hurting some individuals. Instead, the differences should be used to indicate trends in preferences and needs of the subdivisions which can be a guide to understanding the different problems faced in the adjustment process.

In addition to the timing of the retirement process, questions also arise over the types of pension plans that should be used by the colleges and also over the nature of connections that a college should maintain with their retired professors. These problem areas will be dealt with in the next two chapters.

CHAPTER VII. FINANCIAL ASPECTS OF RETIREMENT

Perhaps the greatest potential source of discontentment for any retired person is inadequate financial provisions. Almost regardless of the type of position held, it is still rather difficult to save enough to adequately maintain one's standard of living in retirement. Factors that help account for this difficulty include the inflationary trend, the high rate of individual income taxes, and the pressure to achieve ever higher standards of living (2, p. 17). College professors are probably more fortunate than most retirees in that their relatively high levels of income should have enabled them to save more adequately for their retirement. Still, retirement does cut off their main source of income and adjustments are going to be needed. Some possible sources for taking up the slack include retirement funds, social security, investments, savings, and part time employment.

The school retirement plans are of particular interest. The AAUP and AAC recommend that these plans should be sufficient when combined with social security, to provide a professor with disposable income equal to two-thirds of his former after tax income (16, p. 296). Retirement plans have come to play such an important part in the employee's compensation that for 1967-68 employer payments to retirement and group insurance plans amounted to 8.4 percent of the total compensation (11, p. 413). Of course, the total cost is still greater because of the employee contributions to the plans.

Most colleges have some type of a faculty retirement plan. Greenough and King found that only 5 percent of the U.S. colleges did not have some

type of retirement plan (11, p. 413). An increasing majority of the colleges are using some combination of the Teachers Insurance and Annuity Association (TIAA) and College Retirement Equities Fund (CREF) plans (11, p. 422).

Regardless of the type of plan finally selected, there are several important considerations which need to be kept in mind if a plan is to be equitable. The following items have been suggested by the AAUP and AAC (16, pp. 26-27). They feel a good retirement policy should be: (1) clearly defined and understood by both the individual and the administration, (2) harmonized with social security and medicare, (3) flexible enough to allow mobility between institutions without loss of benefits, (4) revised regularly to meet new conditions as they arise, and (5) invested in the individual so that it is not forfeited with death or withdrawal from the institution. If these basic recommendations are adhered to, the financial adjustments of the professors should be much easier to make when the final time for retirement approaches.

Sources of Income

For purposes of analysis, the professor's sources of income were broken down into five categories: insurance and annuities, employment, investments and savings, social security, and other sources (mainly family assistance or royalties). While it was not possible to determine a mean percentage of income from each of these sources, the percentage of professors receiving income from a given source could be determined. All those that indicated that 10 percent or more of their income came from a

given source are included in the percentages for that item. Social security is the most common source of income for the professors as 95 percent listed it as one of their sources. Investments and savings are second with 88 percent, insurance and annuities third with 80 percent, employment fourth with 24 percent and the miscellaneous category has 16 percent. This ranking is quite similar with a 1963 study on aging in Minnesota. That study involved retired people from urban or metropolitan areas. The only differences in the ranking of sources of income are in the last two categories. They found that the miscellaneous group is a more important source than employment. Otherwise, the ranking is the same (27, p. 98).

It is possible that the importance of a source of income will vary according to the sex of the retiree and according to the retiree's level of education. To test for the first of these possibilities, a Chi Square test was used to test the hypothesis that frequencies of sources of income will vary with the sex of the retiree. The null hypothesis is: frequencies of sources of income will not be related to the sex of the retiree. The data are given in Table 33. The computed Chi Square value is 12.84 which is above the critical value of 9.49 and therefore the null hypothesis is refuted. Examination of the data reveal that men are relatively more likely than women to list employment as a source of income (31 to 12 percent) and that women are more likely to list insurance and annuities, and savings and investments than men are (84 to 77 and 93 to 86 percent, respectively). There is no appreciable difference for men and women between the social security or the miscellaneous categories.

Table 33. Frequencies of sources of income by sex of the retiree

Source	Men	Women	Total
Insurance and annuities	162	103	265
Employment	66	15	81
Investments and savings	180	114	294
Social security	202	113	315
Other	36	18	54
Total	646	363	1009 ^a
	$\chi^2 = 12.84$	C.V. = 9.49	

^aMultiple responses were allowed.

The difference in the frequency of employment is particularly interesting. This could be attributable to either desire for further work or to the ability to find further work. Desire and need for further employment will be dealt with later and the analysis should indicate which of the above mentioned effects is the dominant factor in determining the difference in employment. Further examination of the data reveal that the respondents averaged about three sources of income each. This diversification should be helpful for making adjustments to changing conditions and risk associated with future income should be lessened.

To determine if there are significant differences according to the level of education, the hypothesis that frequencies of the sources of income would vary according to the level of education of the retiree was tested. The null hypothesis is: frequencies of the sources of income are

not related to the level of education of the retiree. The data are given in Table 34. The computed Chi Square value is 8.79 which is below the critical value of 9.49 and thus the null hypothesis is not refuted. It can be concluded that the sources of income are independent of the retiree's level of education.

Table 34. Frequencies of sources of income by level of education of the retiree

Source	Bachelor's + Master's	Doctor's	Total
Insurance and annuities	148	117	265
Employment	31	48	79
Investments and savings	163	131	294
Social security	181	134	315
Other	29	24	53
Total	552	454	1006
	$\chi^2 = 8.79$	C.V. = 9.49	

Financial Needs

Regardless of the sources of income, questions still arise over the adequacy of the total sum. The analysis of this section, therefore, will deal with the adequacy of the professor's financial provisions. One of the factors most certain to influence a retiree's finances is the number of dependents that he has. The division between men and women in this area is fully as sharp as it was for marital status. Only 8 percent of

the women indicated that they had a dependent. This contrasts to 86 percent for men, most of which would be their wives. Of the men only 5 percent had more than one dependent and none of the women indicated that they had more than one. The effect of this will probably vary with the individual. In some cases the dependent may be a true financial burden but in other cases may provide additional sources of income. These additional sources of income could be fairly sizeable, particularly if that dependent is eligible for social security or other pensions. In addition, the tax exemptions allowed for dependents can be quite beneficial. About the only conclusion that can be reached is that the net effect will vary from one family to another.

In considering the adequacy of financial provisions, one area of prime importance concerns the ability of school retirement funds together with social security to meet the financial needs of the professors. Consequently, the respondents were asked if they could live on their school retirement funds and social security alone. It should be emphasized that this is "live" and does not mean that they would maintain their present standard of living. Only 31 percent indicated that it would be possible for them to live on these two sources of income alone. It would appear that the provisions of school retirement funds and social security are falling far short of the goals set by the AAUP and AAC which are that these two sources should amount to two-thirds of the professor's preretirement income. It should be expected that far more professors would be able to live on two-thirds of their preretirement income than 31 percent. To see

if these two sources of income meet the needs of some groups of individuals better than others, tests were run for significant differences based on sex, level of education, and type of college retired from.

There is a possibility of a relationship based on the sex of the retiree because of different needs and also because of the differences in the number of dependents, discussed earlier. The hypothesis was tested that indicated possibility of living on school retirement and social security funds will vary with the sex of the retiree. The null hypothesis is: indicated possibility of living on school retirement and social security funds is not related to the sex of the retiree. The data are given in Table 35. The computed Chi Square value is .062 which is below the critical value of 3.84 and thus the null hypothesis is not refuted.

Table 35. Indicated possibility of living on school retirement funds and social security by the sex of the retiree

Possible	Male	Female	Total
Yes	64	36	100
No	136	84	220
Total	200	120	320
$\chi^2 = .06$	C.V. = 3.84		

The normal differences in salary between a professor with a bachelor's or master's degree and one with a Ph.D. present some interesting implications. According to Milton Friedman's permanent income hypothesis, which implies that consumption will be based on long run income status (9),

professors with the higher preretirement earnings should continue to consume at higher levels in retirement. Therefore, if it is assumed that professors with the higher levels of education have the higher salary those professors should also have the greatest difficulty living on their school retirement and social security income. To determine if this relationship does exist, the hypothesis that indicated possibility of living on school retirement and social security funds varies with educational level was tested. Stated in the null form: indicated possibility of living on school retirement and social security funds is not related to educational level. The data are given in Table 36. The computed Chi Square value is 3.94 which is above the critical value of 3.84 and therefore the null hypothesis is refuted. Of the professors with bachelor's or master's degrees, 36 percent indicated that they could live on their school retirement and social security funds as compared to 25 percent for those with Ph.D.'s.

Table 36. Indicated possibility of living on school retirement and social security funds by educational level of the retiree

Possible	Bachelor's + Master's	Doctor's	Total
Yes	64	36	100
No	113	107	220
Total	177	143	320
	$\chi^2 = 3.94$	C.V. = 3.84	

An additional possible source of variation could come from the type of college retired from. If the adequacy of retirement plans varies with the type of school it should show up in the responses of those who indicate if they can or can not live on those retirement funds. The hypothesis was tested that indicated ability to live on school retirement and social security funds will vary with the type of college retired from. Stated in the null form: indicated ability will not be related to the type of college retired from. The data are given in Table 37. The computed Chi Square value is .53 which is below the critical value of 5.99 and thus the null hypothesis is not refuted. Therefore, it appears that there are no substantial differences in the adequacy of the retirement plans according to the type of college.

Table 37. Indicated possibility of living on school retirement and social security funds by the type of college retired from

Type of college	Possible	Not possible	Total
Large state	57	119	176
Small state	20	52	72
Private	23	49	72
Total	100	220	320

$\chi^2 = .53$
C.V. = 5.99

An important aspect of planning for retirement involves anticipating future retirement needs. If the individual can accurately estimate his financial needs for retirement he can make allowances while still employed and also prepare himself for the adjustments to his style of living that he will have to make. It is encouraging to note that 55 percent of the professors were able to accurately estimate their retirement needs and, in addition, 13 percent indicated that their financial needs were less than they anticipated. However, 35 percent indicated that their needs are greater than anticipated and it could be expected that these people will be among those having the most difficulty adjusting to retirement.

To see if there are any differences influenced by the sex of the retiree, the hypothesis was tested that ability to predict retirement needs would vary with the sex of the retiree. A variation might be expected because of the different needs and different type of family structures for men and women that was discussed earlier. The null hypothesis is: ability to estimate retirement needs is not related to sex of the retiree. The data are given in Table 38. The computed Chi Square value is .57 which is below the critical value of 5.99 and thus the null hypothesis is not refuted. There is no apparent difference in the ability to estimate retirement needs based on the sex of the retiree.

A final indication of how well the professors' incomes meet their retirement needs is provided by the number indicating that they had to find employment for financial reasons. Again it is quite encouraging to note that only 12 percent indicated that they had to go back to work.

Table 38. Ability to estimate financial needs by the sex of the retiree

Needs	Male	Female	Total
Greater	65	38	103
Less	28	14	42
Equal	108	70	178
Total	201	122	323

$\chi^2 = .57$
C.V. = 5.99

It was tested to see if there are significant differences in this need to go back to work based on the sex of the retiree. The hypothesis was tested that financial necessity of continued employment varies with the sex of the retiree. The reason for this is that the differences in family structure and number of dependents may present varying financial needs. The null hypothesis is: necessity of continued employment is not related to the sex of the retiree. The data are given in Table 39. The computed Chi Square value is 3.86 which is above the critical value of 3.84 and therefore the null hypothesis is refuted. Of the men, 15 percent have found it necessary to go back to work as compared to 7 percent of the women. Probably the male's greater number of dependents is the dominating reason for the difference. Referring back to Table 33 where it was found that men were more likely to list employment as a source of income, it now becomes apparent that at least part of this is based on financial need.

Table 39. Employment financially necessary by the sex of the retiree

Sex	Necessary	Not necessary	Total
Men	29	171	200
Women	8	113	121
Total	37	284	321
	$\chi^2 = 3.86$	C.V. = 3.84	

Different levels of education may also influence the need to work for financial reasons. As was shown before, professors with a Ph.D. indicated relatively more often than the others that they could not live on their school retirement and social security funds alone. Therefore, it is possible that they would also feel that they had to work for financial reasons more often. The hypothesis was tested that necessity to continue employment varies with the educational level of the retiree. The null hypothesis is: necessity to continue employment is not related to the sex of the retiree. The data are presented in Table 40a. The computed Chi Square value is 1.51 which is below the critical value of 3.84 and thus the null hypothesis is not refuted. Apparently the differences found earlier have been compensated for by other financial provisions.

Table 40a. Employment financially necessary by the educational level of the retiree

Level of education	Necessary	Not necessary	Total
Bachelor's and master's	18	164	182
Doctor's	19	120	139
Total	37	284	321
	$\chi^2 = 1.51$	C.V. = 3.84	

In summary, it appears that the retired professors are in a fairly good financial position. Only 12 percent indicated that they had to find employment for financial reasons. However, this does not mean that the financial arrangements are entirely satisfactory. It is quite possible that a sizeable number of the professors had to reduce their standard of living upon retirement and this could have been a degrading experience for many. It seems evident that the provisions of social security together with school retirement funds are inadequate. Only 31 percent of the professors indicated that they could live on these sources of income alone and it appears that these two sources do not succeed in supplying the professors with at least two-thirds of their preretirement income, as the statement on retirement goals by the AAUP and AAC indicated it should.

It was found that professors with Ph.D.'s would have a harder time living on just their school retirement and social security funds than those with bachelor's or master's degrees. There is not a significant difference for men as compared to women in the ability to live on these funds. However, men did find it necessary to gain employment for financial reasons more often than women.

CHAPTER VIII. RETIREMENT ACTIVITIES OF THE PROFESSORS

The one thing that a person is likely to have the most of during his retirement is free time. For many retirees, the greatest problem that they will face will be having to find new ways of using this leisure time. This chapter will analyze how college professors have made use of this increase in free time and will also examine some of the changes in activities that retirement brought about.

The adjustment to additional free time can be facilitated greatly if the individual will, while still employed, seek out a variety of avocational skills and activities to absorb his time and interest once his retirement begins (7, p. 149). As was mentioned before, professors are in an ideal situation for following through on this suggestion. Their rather broad background and constant exposure to new ideas should provide them with several alternative interests that they can follow up on in retirement. Besides finding new interests, a retiree may also increase the time he spends in doing his remaining activities. It seems that individuals allow jobs to expand to fill the time available and that the less they have to do the longer they will take to do it (5, p. 23). Consequently, much of their free time can be consumed in this manner.

In addition to the outward adjustments, the individual will often have to make inner adjustments as well. Dixon points out that many individuals develop a defensive mechanism designed to protect their feelings of self-esteem and importance. Through this the retired individual tends to emphasize the importance of his new activities, at least to himself, and this gives him a feeling of usefulness (5, p. 23).

Participation in Community Affairs

One area where retired professors can usually find new opportunities to be useful is in the area of volunteer services and community activities. The satisfactions resulting for the individual who performs these volunteer services can be quite self-fulfilling and rewarding (7, p. 144). Unfortunately, work provides much of the structural support for community involvement and once retirement begins this support is broken down (28, pp. 73-74). Simpson found, however, that status and orderliness of work history were positively related to high involvement in retirement so that the effect of loss of work connections would be largely offset for the college professor (28, pp. 73-74). Doerflinger and Bauder have found similar results in their studies. Their work classified people into five categories: self-employed professionals, salaried professionals, merchants, factory workers, and farmers. They found that the professional workers were the most active in formal association affairs (6, p. 157). They also found that the two professional groups were much more active than the others in participation in the solution of community problems (6, p. 181). Therefore, professors probably do not experience too great a decline in community activities when they retire as compared to other groups.

In order to find out how involvement in community activities is affected by retirement, the question was asked if the retirees experienced a decline in their community activities after they had retired. In all, 37 percent indicated that they had experienced a decline and 63 percent indicated that they had not--in fact many of those in the latter group indicated that their participation had actually increased. It is regret-

table that such a large percentage did experience a decline. It is more than just a loss of possible satisfactions for the retiree; the community is also losing the benefits of their services. There appears to be a failure on the part of the community to take advantage of the abilities of these older people--assuming that they are willing to provide the services. Not only does the retired person have the time to do some of these community activities, but he also is in a unique financial position of having his various retirement funds to support him while he does volunteer work. A person who is not on social security or does not have other automatic benefits coming in can seldom afford to devote much time to volunteer work and consequently, someone in the position of the retiree is needed.

There is a possibility that there are significant differences in the relative decline in community activities based on the sex of the retiree. This difference could result from different motivations for the two sexes or could result from participation in different types of activities which have a variance in their dependence on work connections. The hypothesis was tested that rate of decline of participation in community activities will vary with the sex of the retiree. Stated in the null form: rate of decline is not related to the sex of the retiree. The data are given in Table 40b. The computed Chi Square value is 2.49 which is below the critical value of 3.84 and thus the null hypothesis is not refuted. Decline in participation is independent of the sex of the retiree.

Table 40b. Rate of decline in participation in community activities by sex of the retiree

Sex	Declined	Did not decline	Total
Male	86	116	202
Female	40	81	121
Total	126	197	323
	$\chi^2 = 2.49$	C.V. = 3.84	

The study by Simpson, mentioned earlier, stated that involvement during retirement was positively related to status along with orderliness of work history. Therefore, we could expect that professors with Ph.D.'s would have a lower rate of decline than those with bachelor's or master's degrees because of their usual greater status. To find out if this relationship does exist, the hypothesis that rate of decline varies with the level of educational attainment was tested. The null hypothesis is: rate of decline is not related to educational level. The data are given in Table 41. The computed Chi Square value is 7.29 which is above the critical value of 3.84 and therefore the null hypothesis is refuted. The professors with Ph.D.'s actually do experience a lower rate of decline. Only 30 percent indicated that their participation had declined compared with 46 percent for those with bachelor's and master's degrees. It is probably fortunate for the community that those with the higher levels of education do continue to participate relatively more often as they should have the greater skill levels and hence, be more valuable to the community.

Table 41. Rate of decline in community participation by educational level

Educational level	Declined	Did not decline	Total
Bachelor's and master's	84	100	184
Doctor's	42	97	139
Total	126	197	323
	$\chi^2 = 7.29$	C.V. = 3.84	

Another indication of community involvement is provided by the number working as specialists or advisors in their community. Both those who are volunteering their services and those who are receiving compensation are included in this aspect. Altogether, 26 percent indicated that they are serving in this capacity. This seems to be a fairly high percentage in view of the relative scarcity of these positions. It is also an indication that the community wants people with the skills and education that the professors have for these positions.

It could be expected that the number working in these positions would vary with the sex of the retiree. This variance would probably result from both employer's preferences and from differences in the desire for further work. To see if this relationship exists the hypothesis that the number working as specialists or advisors in the community will vary with the sex of the retiree was tested. Stated in the null form: number working as specialists or advisors to the community is not related to the sex of the retiree. The data are given in Table 42. The computed Chi Square

value is 3.87 which is above the critical value of 3.84 and therefore the null hypothesis is refuted. Examination of the data show that men are more likely to serve as specialists or advisors in the community. Men had a participation rate of 30 percent as compared to only 19 percent for women.

Table 42. Number working as specialists or advisors in the community by the sex of the retiree

Sex	Work	Do not work	Total
Male	58	138	196
Female	23	98	121
Total	81	236	317
	$X^2 = 3.87$	C.V. = 3.84	

There is a possibility that demand for advisors or specialists with Ph.D.'s is greater than that for those with lesser degrees. Consequently, the hypothesis was tested that number working as specialists or advisors will vary with the level of education of the retiree. Stated in the null form: level of education and number working as advisors or specialists is not related. The data are given in Table 43. The computed Chi Square value is .04 which is below the critical value of 3.84 and thus the null hypothesis is not refuted.

Table 43. Number working as specialists or advisors in the community by the educational level of the retiree

Educational level	Work	Do not work	Total
Bachelor's and master's	47	132	179
Doctor's	34	104	138
Total	81	236	317
	$\chi^2 = .04$	C.V. = 3.84	

Participation in Academic Affairs

In addition to participation in community services, the retired professor may still be able to maintain connections with the college he worked for and with the academic community in general. In many cases these connections can be developed to provide new interests and additional ways of satisfactorily occupying time. These connections may range all the way from mere social functions to a basis for part time employment. Much of the initiative for developing and encouraging these connections lies with the college. The AAUP and ACC recommend that colleges make it a matter of policy to help the retired faculty members remain a part of the institution. They recommend that the colleges should provide their retired personnel with such facilities as library privileges, office space, faculty club membership, the institution's publications, secretarial help, laboratory rights, and participation in convocations and processions (16, p. 296). The provision of these facilities and services will allow the individual

to keep up with new developments in his area, thus keeping him mentally active, and it will allow him to do further research and writing if he so desires. This, subsequently, could easily turn into a sizeable benefit for both society and the individual. Hall, in his work with retired executives, found that the provision of similar items to retired executives was very helpful to the individual and the company as well since it contributed greatly to satisfaction and good will (13, p. 129).

To determine the extent to which the college and the individual maintained these contacts, the question was asked if the retiree maintained any connections with the college he retired from. It was left to the individual to determine what connections entailed. In all, 75 percent indicated that they maintain some form of connections with their retiring college. Such a sizeable majority would seem to indicate that the opportunity was probably there for the others as well and that in those cases it was the individual who did not wish to maintain them. The possibility was investigated that there might be significant variations in the rate at which connections are maintained which are influenced by the sex of the retiree, educational level, and type of college retired from.

The hypothesis used to test for the first of these possibilities is that the rate at which connections are maintained will vary with the sex of the retiree. Stated in the null form: rate at which connections are maintained is not related to the sex of the retiree. The data are given in Table 44. The computed Chi Square value is 2.00 which is below the critical value of 3.84 and thus the null hypothesis is not refuted. It can be assumed that the rate at which connections are maintained is in-

Table 44. Rate at which connections are maintained by the sex of the retiree

Sex	Have connections	Do not have connections	Total
Male	139	53	192
Female	90	24	114
Total	229	77	306
	$\chi^2 = 2.00$	C.V. = 3.84	

dependent of the sex of the retiree.

Differences based on educational level was tested by the hypothesis that rate at which connections are maintained will be influenced by the educational level of the retiree. Stated in the null form: educational level and rate at which connections are maintained are not related. The data are given in Table 45. The computed Chi Square value of .04 is below the critical value of 3.84 and thus the null hypothesis is not refuted. Maintained connections are also independent of educational level.

Table 45. Rate at which connections are maintained by educational level

Educational level	Have connections	Do not have connections	Total
Bachelor's and master's	133	45	178
Doctor's	96	32	128
Total	229	77	306
	$\chi^2 = .04$	C.V. = 3.84	

To see if one type of school is more effective than the others in maintaining these connections, the hypothesis was tested that rate at which connections are maintained will vary with the type of college retired from. Stated in the null form: rate at which connections are maintained is not related to the type of college retired from. The data are given in Table 46. The computed Chi Square value of .84 is below the critical value of 5.99 and thus the null hypothesis is not refuted. The insignificance of this relationship was hinted at earlier because of the high majority maintaining connections. This test is consistent with that assumption. It now appears that the rate at which connections are maintained is independent of everything except individual desires.

Table 46. Rate at which connections are maintained by the type of school retired from

Type of school	Have connections	Do not have connections	Total
Large state	128	40	168
Small state	48	20	68
Private	53	17	70
Total	229	77	306
	$\chi^2 = .84$	C.V. = 5.99	

The connections that are maintained with the college may often be the base the retiree needs for keeping up with new developments in his area. Of course, the individual may keep up with new developments on his own as well. In any event, keeping up with new developments can also provide a

satisfactory means for occupying the retiree's time. It was found that 82 percent of the professors tried to keep up with new developments. This could be interpreted as a sign of the interest that professors have in their work and field of knowledge. When the percentage of those that try to keep up with the new developments is this high it would appear that the professors are indeed interested in their past work and that they have not grown apathetic in their retirement.

It might be expected that this interest, or whatever other motivation there might be for keeping up, would vary with different needs, desires, or interests of individuals which, in turn, could be influenced by the sex of the retiree or educational level. First, to test for the influence of the sex of the retiree, the hypothesis that the number keeping up with developments in their area will vary with the sex of the retiree was tested. Stated in the null form: number keeping up with new developments is not related to the sex of the retiree. The data are given in Table 47. The computed Chi Square value of .72 is below the critical value of 3.84 and thus the null hypothesis is not refuted. The number keeping up with new developments is independent of the sex of the retiree.

Table 47. Number keeping up with new developments by the sex of the retiree

Sex	Keep up	So not keep up	Total
Male	170	33	203
Female	96	25	121
Total	266	58	324
$\chi^2 = .72$		C.V. = 3.84	

To find out if the level of education has an influence, the hypothesis that number keeping up with new developments will vary with the level of education of the retiree was tested. Stated in the null form: number keeping up is not related to the level of education. The data are given in Table 48. The computed Chi Square value of 4.67 is above the critical value of 3.84 and therefore the null hypothesis is refuted. Examination of the data reveal that those with Ph.D.'s are more likely to keep up with the new developments in their area; 87 percent of them kept up as compared to 78 percent for those with a bachelor's or master's. Perhaps the same motivation which caused the Ph.D.'s to pursue their higher degree applies to their greater interest in keeping up with new developments.

Table 48. Number keeping up with new developments by educational level

Educational level	Keep up	Do not keep up	Total
Bachelor's and master's	145	40	185
Doctor's	121	18	139
Total	266	58	324
	$\chi^2 = 4.67$	C.V. = 3.84	

An extension of keeping up with new developments would be doing research or writing. The twin areas of research and writing can prove to be both intellectually satisfying and financially rewarding for the retiree. It appears that this is a widely used outlet for many professors as 32 percent indicated that they were doing either research or writing. This rather high percentage is encouraging for it indicates that the professors

are probably still making useful contributions to the academic world and, at the same time, they are maintaining their interest in their particular field.

There is a possibility that men will be more interested in doing research or writing because it is, after all, basically an extension of the work role and it was found earlier that men are more inclined to try to preserve this than women are. Consequently, the hypothesis was tested that the number doing research or writing will vary with the sex of the retiree. Stated in the null form: number engaged in research or writing will not be related to the sex of the retiree. The data are given in Table 49. The computed Chi Square value of 4.11 is above the critical value of 3.84 and therefore the null hypothesis is refuted. More men actually are doing research or writing; 36 percent of the males were so engaged as compared to 25 percent of the females.

Table 49. Number doing research or writing by the sex of the retiree

Sex	Do write	Do not write	Total
Male	75	131	206
Female	31	93	124
Total	106	224	330
	$\chi^2 = 4.11$	C.V. = 3.84	

Another factor which will probably influence the number participating in research or writing is the educational level. It could be expected that those with the Ph.D.'s would be more active in this area for reasons similar to their greater interest in keeping up with new developments that was found significant earlier. To see if this relationship does exist the hypothesis that number doing research or writing will vary with educational level was tested. Men and women were tested separately. The null hypothesis is: number engaged in research or writing is not related to educational level. The data are given in Tables 50 and 51. The computed Chi Square values are 20.69 for men and .62 for women as compared to a critical value of 3.84. Therefore, the null hypothesis is refuted for men but not for women. For men, the difference was quite large as 49 percent of the Ph.D.'s indicated they were engaged in research or writing as compared to 19 percent for the bachelor's and master's. The fact that the differences are significant for men but not for women is quite interesting. It could, perhaps, be speculated that women are working in less technical fields where the level of education might not be as important a factor.

Table 50. Number doing research or writing by the level of education for men

Level of education	Do write	Do not write	Total
Bachelor's and master's	17	71	88
Doctor's	58	60	118
Total	75	131	206
	$\chi^2 = 20.69$	C.V. = 3.84	

Table 51. Number doing research or writing by the level of education for women

Level of education	Do write	Do not write	Total
Bachelor's and master's	24	76	100
Doctor's	7	17	24
Total	31	93	124
	$\chi^2 = .62$	C.V. = 3.84	

It might also be expected that participation in research and writing activities would be related to amount of these activities done while fully employed relative to classroom teaching. It would seem likely that those who had specialized in research related activities while employed would find it easier to continue and would be more interested in doing it than those who had concentrated on teaching. Consequently, the hypothesis was tested that number engaged in research or writing will vary according to the time spent in research related activities relative to teaching while fully employed. Stated in the null form: number doing research will not be related to the research-teaching ratio. The data are given in Table 52. The computed Chi Square value of 1.02 is below the critical value of 3.84 and thus the null hypothesis is not refuted. Teachers appear to do just as much research and writing in retirement as those who had specialized in research related activities.

Table 52. Number doing research or writing by time spent in research related activities relative to teaching prior to retirement

Research versus teaching	Do write	Do not write	Total
Primarily research	32	79	111
Primarily teaching	73	144	217
Total	105	223	328
	$\chi^2 = 1.02$	C.V. = 3.84	

Use of Additional Time

Community and academic affairs are unlikely to completely absorb the retiree's entire surplus of free time. Consequently, other areas have to be explored in conjunction with these two areas. Other areas which can be expanded to consume more time include: relaxation (social activities, TV, conversation, hobbies etc.), sports and exercise, and other employment. Together with community and academic affairs these areas were analyzed to determine how the retiree used the time he had formerly spent on the job. Time spent in each of these areas was tabulated according to the number of respondents who indicated that they spent 10 percent or more of their time, that had formerly been used in working, in the given area.

The most frequently listed source of activity is relaxation. Ninety percent indicated that they spent some of their additional time in this area. The second most frequent source is reading, research, and writing

Another activity that can result in a considerable expenditure of time for the retiree is the relocation of his home upon retirement. The setting up of a new home always results in new experiences for the individual. For the retired person this can be expanded into many hours of preparation and subsequent creative development. The number who do relocate after retirement also provides a clue to the overall mobility of the retired professors and will have some implications for those who desire additional work, which will be studied in the next chapter.

In all, 27 percent of the professors indicated that they had moved or plan to move since they retired. Because of its important effect on the lives of the individuals who do move, an analysis was made to determine the reasons for their moving and also to see if there is a tendency for one sex to relocate more than the other.

It will first be tested to see if there is a significant difference in the tendency of the two sexes to move. The hypothesis tested to determine this is that the tendency to relocate is related to the sex of the retiree. Stated in the null form: the tendency to relocate is not related to the sex of the retiree. The data are given in Table 54. The computed Chi Square value is 4.51 which is above the critical value of 3.84 and therefore the null hypothesis is refuted. Examination of the data reveal that women are more likely to relocate than men by a difference of 33 to 23 percent, respectively. The reason that women tend to relocate more often than men appears to be explained by the reasons given for moving which will be examined next.

Table 54. Tendency to relocate by the sex of the retiree

Sex	Did relocate	Did not relocate	Total
Male	50	164	214
Female	42	84	126
Total	92	126	340
	$\chi^2 = 4.51$	C.V. = 3.84	

The reasons for moving were divided into the categories of: proximity of family, health, climate, and miscellaneous reasons. The desire to be near one's family is the most common reason for relocation after retirement as 54 percent indicated that they moved for this reason. Another 20 percent indicated that they moved in order to get to a better climate and 8 percent indicated that they moved for their health. The remaining 18 percent moved for miscellaneous reasons chief among which was probably the opportunity for additional employment.

To determine if there are significant differences in the reasons for relocating due to the sex of the retiree, the data had to be combined into just two categories because of insufficient responses. The categories of health and climate will be combined because they are probably quite closely related and the miscellaneous group will be dropped. The hypothesis used to test for differences in these two responses is that the reason for relocation will vary with the sex of the retiree. Stated in the null form:

reason for relocation is not related to the sex of the retiree. The data are given in Table 55. The computed Chi Square value is 11.21 which is above the critical value of 3.84 and therefore the null hypothesis is refuted. Examination of the data reveal that women are much more likely to move in order to be near their families. This relationship could be expected. Since so few of the retired women teachers are married, they will often be all alone in the town they were teaching in when they retired without anyone to look after them and consequently, it could be expected that they would like to move in order to be close to their relatives.

Table 55. Reasons for relocation by the sex of the retiree

Reason	Male	Female	Total
Family	19	31	50
Health and climate	19	6	25
Total	38	37	75
	$X^2 = 11.21$	C.V. = 3.84	

The use of free time can be one of the most perplexing problems a retiree is faced with. In analyzing how retired professors adjusted to this problem, it was found that most used a part of it for relaxation and for reading, research, and writing. Community activities, and sports and exercise were also important users of time for about one-half of the retirees.

Although many indicated that they used a part of their additional free time for community activities, it was also found that 37 percent experienced a decline in this area upon retirement. This decline was most prevalent for those with lesser levels of education. One area of community activities which calls for a high degree of proficiency involves work as a specialist or advisor. It was found that 26 percent of the retired professors served in this capacity with the tendency for such service slightly greater for men than for women.

Interest in the various areas of the academic world reflect the interest that the professors have in their jobs. It was found that 72 percent continued to maintain connections with the college that they had retired from. Closely related to the interest in maintaining connections is the interest in keeping up with new developments. Eighty-two percent of the professors indicated that they did keep up with new developments with the tendency being slightly greater for those with Ph.D.'s. An extension of keeping up with new developments could involve research or writing and it was found that 32 percent engaged in this activity with the tendency being greater for men than for women.

This chapter has concentrated on the use of free time which resulted from retirement. The next chapter will concentrate on a particular aspect of this use of time--employment and the desire to do further work.

CHAPTER IX. POST RETIREMENT EMPLOYMENT

Employment can provide a satisfactory means of occupying time, it can provide a set of meaningful satisfactions, and it can provide the monetary means to other sources of satisfaction for the person beyond the normal retirement age. Unfortunately, the older worker usually has several obstacles to overcome in trying to find employment. He is likely to find that he is not as attractive to prospective employers as he was before because of declining productivity and higher insurance and pension costs, all of which tend to be functions of increasing age. Along with this, the older worker is likely to be less willing to move to new employment opportunities and this will also hinder his attempts to find suitable employment (3, p. 59). However, in trying to find additional employment, the retired professor is again in a relatively advantageous position. His high level of education and experience can often be put to use in a wide variety of areas. Still, his additional employment opportunities may very well be of a lower position than his former employment and consequently, the opportunities may be less than satisfactory.

In a sense, employment or the desire for employment after the normal retirement age reflects the inability of the individual to adjust to the role of the retiree. In part it reflects the inability to find meaningful satisfactions apart from work and it may also reflect the inability to make the financial adjustments required. Of course, many individuals feel that their job provides them with the key to the best of all possible worlds and they will, therefore, want to continue working beyond the normal

retirement age. But, even in these cases, it reflects an orientation to work rather than leisure and it indicates the inability of the individual to substitute satisfactions derived from leisure for those obtained from work. Since not all can expect to find employment in their later years, this can develop into a problem for many.

Nevertheless, employment has and will undoubtedly continue to be a major source of satisfaction for many of our older citizens. In addition, their continued employment can result in important contributions to society. The value of these services is likely to be quite substantial in those cases where the potential retiree possesses a high level of skill or education, as in the case of the college professor.

Interest in Further Employment

Because of employment's important implications for the adjustment process of the individual and because of its importance for society, it is necessary that the extent of this desire or willingness for further work be determined. By combining those who are: employed, under gradual retirement obligations, and seeking employment, it is found that 49 percent of the professors are still looking to employment as a source of satisfactions. In order to determine if this interest is greater for men or women, the hypothesis was tested that interest in employment would vary with the sex of the retiree. Stated in the null form: interest in employment is not related to the sex of the retiree. The data are given in Table 56. The computed Chi Square value of 9.34 is above the critical value of 3.84 and therefore the null hypothesis is refuted. Fifty-five percent of the

men indicated that they are either employed or looking for employment as compared to only 37 percent of the women. This is an indication that men have a stronger work role orientation than women. It is possible that women have an advantage over men in adjusting to retirement because it appears that this is an indication that they are able to find satisfactions aside from employment more readily than men.

Table 56. Interest in employment by the sex of the retiree

Sex	Interested	Not interested	Total
Male	114	92	206
Female	45	76	121
Total	159	168	327
	$\chi^2 = 9.34$	C.V. = 3.84	

It is possible that people with higher levels of education will also place a higher value on their work roles and hence will have a greater interest in employment than those with the lesser levels of education. To determine if this relationship does exist, the hypothesis that interest in employment will vary with the level of education was tested. Stated in the null form: interest in further employment is not related to the level of education. The data are given in Table 57. The computed Chi Square value of 2.40 is below the critical value of 3.84 and thus the null hypothesis is not refuted. The interest of college professors in employment

Table 57. Interest in employment by the level of education of the retiree

Level of education	Interested	Not interested	Total
Bachelor's and master's	84	102	186
Doctor's	75	66	141
Total	159	168	327

$\chi^2 = 2.40$
C.V. = 3.84

beyond the normal retirement age is not influenced by their level of education.

Of the total group of professors, 39 percent indicated that they did some type of work for pay. Most of the professors were able to find work in fields closely related to their past employment. For example: many teachers were engaged in tutoring and part-time or correspondence teaching, art specialists did paintings, and business specialists consulted or did tax work. A majority of those who work for pay do so only occasionally; only 41 percent indicated that they worked a regular schedule. The amount of time spent per week varied greatly, the range ran from less than 5 hours per week to over 80 hours.

When these professors who are employed were asked the reason for their working, 19 percent indicated financial reasons were at least a part of the reason and 98 percent indicated that enjoyment of the work or the desire for something to do was a part of their reason for continued employment. Thus it appears that nonmonetary considerations are the most important

motivation for continued employment. To see if the reason for working is different for men as compared to women, the hypothesis was tested that reasons for working would vary with the sex of the retiree. Stated in the null form: reasons for working will not vary with the sex of the retiree. The data are given in Table 58. The computed Chi Square value of 2.07 is below the critical value of 3.84 and thus the null hypothesis is not refuted. Reasons for continuing employment are not related to the sex of the retiree.

Table 58. Reason for working by the sex of the retiree

Sex	Financially necessary	Enjoy it	Total
Male	21	72	93
Female	3	30	33
Total	24	102	126 ^a
	$\chi^2 = 2.07$	C.V. = 3.84	

^aMultiple responses were allowed.

In addition to those who are employed, 16 percent of the professors who are not working indicated that they would like to be. This appears to be a rather low percentage and is a good indication that most of those who did not choose to work initially were able to find meaningful substitutes for work. Despite the small percentage for those who would like to be working, it is still sizeable enough to merit examination of the type of individual who is seeking this additional employment. First, to deter-

mine if the tendency is greater for one sex than the other, the hypothesis that tendency to seek additional work will vary with the sex of the retiree was tested. Stated in the null form: tendency to seek additional work is not related to the sex of the retiree. The data are given in Table 59. The computed Chi Square value of .86 is below the critical value of 3.84 and thus the null hypothesis is not refuted. The desire for additional work among those who are not presently employed is independent of the sex of the retiree.

Table 59. The desire for additional work by the sex of the retiree

Sex	Desire work	Do not desire work	Total
Male	22	94	116
Female	12	79	91
Total	34	173	207
	$\chi^2 = .86$	C.V. = 3.84	

The age of the individual who is still seeking work is an indication of his ability to adjust with time. If there are relatively large numbers of individuals in their 70's or 80's still seeking employment it may be an indication that these people have failed to find suitable substitutes for work after an extensive trial period and hence, now desire to go back to work. The average age of this group is slightly over 72 with a standard deviation of 5.5 years. This rather large deviation means that the average

figure is not very meaningful. However, it would be reasonable to say that those above this mean would fall into the above described group of people who have had trouble adjusting to retirement.

Part of the motivation for those seeking additional employment is probably the desire to feel useful. Our work oriented society seems to demand that everyone should continue to make a contribution. In order to determine the extent of feelings of uselessness in retirement, the professors were asked if they felt that their education and experience are lying unnecessarily idle in retirement. Affirmative answers to this could result from either not being employed or being employed in a position where the individual's talents are not utilized. Twenty-one percent of the retired professors indicated that their education and experience are not being utilized. This percentage appears to be relatively small and is an encouraging sign that most of the retired professors have been able to find useful outlets for their education and experience or else they have successfully adjusted to a leisure oriented life. The feeling that one's education and experience is being wasted is of sufficient importance so that it should be determined if it pertains to one group of people more than others.

It could be expected that men with their usual stronger work role orientation would experience this feeling relatively more often than women. To determine if this relationship does exist, the hypothesis that the tendency to feel that one's education and experience are being wasted will vary with the sex of the retiree was tested. Stated in the null form: the

tendency to feel that one's education and experience are being wasted is not related to the sex of the retiree. The data are given in Table 60. The computed Chi Square value of 2.04 is below the critical value of 3.84 and thus the null hypothesis is not refuted. The fact that there is not a significant relationship could be due to the relatively large numbers of men who are employed and hence, able to avoid this feeling of uselessness.

Table 60. Feeling that education and experience are being wasted by the sex of the retiree

Sex	Wasted	Not wasted	Total
Male	46	146	192
Female	20	101	121
Total	66	247	313
	$X^2 = 2.04$	C.V. = 3.84	

It might also be expected that people with Ph.D.'s would be more likely to experience the feeling that their talents are being neglected simply because of their greater education and supposed value. To test for this, the hypothesis that tendency to feel that education and experience are being wasted would vary with the retiree's level of education was used. Stated in the null form: level of education is not related to the tendency to feel that one's experience and education are being wasted. The data are given in Table 61. The computed Chi Square value of 1.32 is below the critical value of 3.84 and thus the null hypothesis is not refuted.

cause they might feel that their greater education would make their talents of more value. The hypothesis stated in the null form is: willingness to participate is not related to the educational level. The data are given in Table 63. The computed Chi Square value of .43 is below the critical value of 3.84 and thus the null hypothesis is not refuted.

Table 63. Willingness to consider peace corp work by educational level

Educational level	Willing	Not willing	Total
Bachelor's and master's	22	161	183
Doctor's	19	118	137
Total	41	279	320
	$\chi^2 = .43$	C.V. = 3.84	

Of those who indicated that they might be willing to do peace corp work, 30 percent had worked primarily in research related activities while employed and the remaining 70 percent primarily in teaching. It would be difficult to say which of these areas would provide the most needed skills, instead the percentage figures are meant only to indicate what talents might be available. In a similar vein, it was found that: 30 percent of those indicating an interest in peace corp work had specialized in either agriculture or home economics, 20 percent were in some area related to the physical sciences, and 50 percent in an area related to the social sciences or humanities.

Willingness to Join a College Staff Part-Time

Another area that can sometimes be used to meet the individual's desire for employment and to satisfy his need for feeling useful is part-time employment as a consultant or professor on the staff of a college. In addition to satisfying the individual's needs, this can result in valuable services to the educational system and is one source of additional skills that should, perhaps, be tapped whenever the educational system's needs are consistent with the individual's wishes.

It could be expected that a large number of the professors would be interested in these positions since they are quite similar to their former jobs and also because of the prestige and status associated with them. Thus, it is not surprising that 27 percent of the retired professors indicated that they are interested. It was found that more men are interested in this line of work than women probably because it is basically an extension of the work role and, as was stated earlier, this work role is apparently of more value to men than to women. The hypothesis that was used to determine this relationship was that interest in joining a college staff part-time would vary with the sex of the retiree. Stated in the null form: interest is not related to the sex of the retiree. The data are given in Table 64. The computed Chi Square value of 6.01 is above the critical value of 3.84 and therefore the null hypothesis is refuted. Thirty-two percent of the men indicated a desire to join a staff part-time as compared to 19 percent for women.

It might also be expected that relatively more of the Ph.D.'s would be interested in this type of a position since they might feel that their

Table 64. Interest in joining a college staff part-time by the sex of the retiree

Sex	Interested	Not interested	Total
Male	63	135	198
Female	23	100	123
Total	86	235	321
	$\chi^2 = 6.01$	C.V. = 3.84	

greater education would make them of more value in such an advisory position. To test for this, the hypothesis that interest in joining a college staff part time would vary with the educational level was used. Stated in the null form: interest is not related to educational level. Men and women were tested separately and the data are given in Tables 65 and 66. The computed Chi Square values of .23 for men and 3.60 for women are both below the critical value of 3.84 and thus the null hypothesis is not refuted. Interest in joining a staff is independent of the educational level of the retired professor.

Table 65. Interest in joining a college staff part-time by educational level for men

Educational level	Interested	Not interested	Total
Bachelor's and master's	26	59	85
Doctor's	37	76	113
Total	63	135	198
	$\chi^2 = .23$	C.V. = 3.84	

Table 66. Interest in joining a college staff part-time by educational level for women

Educational level	Interested	Not interested	Total
Bachelor's and master's	16	84	100
Doctor's	7	16	23
Total	23	100	123
	$\chi^2 = 3.60$	C.V. = 3.84	

As was done with those interested in peace corp work, a general profile of those desiring positions as part-time staff members will be given in order to get a general idea of what is available. The average age of the group is about 71 with a standard deviation of 4.5 years, which means that there will be a wide variation in the ages of those who are interested. Twenty percent of those interested specialized in agriculture or home economics, 17 percent in the physical sciences, and 63 percent in the social sciences and humanities.

The mobility of these people is of prime concern for trying to match people with jobs. Those who are interested were asked to indicate which geographic regions they would be willing to work in. As could be expected, the "home" region of the Midwest is the most preferred. This is followed by areas which feature a retirement climate such as Florida and California. The lowest rate of acceptance is for the Southeast and the Northeast. The percentages of acceptance range from 71 to 23. The rather high percentages indicate that the professors are reasonably willing to move to meet new job

opportunities. This mobility is not too surprising as it has been found that professional people are almost twice as migratory as any other occupational group (19, p. 479).

The professors are most interested in working in a small or medium sized community as opposed to large metropolitan areas. Likewise, they tend to favor small colleges as compared to the large ones and also to junior colleges. The preferences for type of college do not appear to be too strong as the range of preferences is only from 36 to 66 percent. It would appear, therefore, that inducing the professors to accept these part-time positions would not be hindered too much by geographical or locational preferences.

In summary, the analysis of post retirement employment is of importance both for its impact upon society and for its place in the adjustment process of the individual. Employment continues to be an important factor in the lives of a great number of retired professors as 49 percent were found to be either employed or seeking employment. It was found that men are more likely than women to be interested in continued employment which suggests that they have a stronger reliance upon the satisfactions obtained from work. It appears that the pleasures or satisfactions obtained from work are the dominant reason for continued employment for both men and women as 98 percent of the professors indicated that one of the reasons for their working is that they enjoy the work or that it is something to do. This contrasts with the 19 percent which indicated that financial considerations are a part of their reason for working.

Closely related to the satisfactions obtained from work is the desire to feel useful. It was found that 21 percent felt that their education and experience are being wasted in retirement. Both this figure and the ones for those who are still interested in employment are indicators of the extent to which individuals have adapted themselves to leisure. High percentages in either of these areas could be interpreted as a sign that the retirees have not been able to replace the satisfactions formerly obtained from work with new ones obtained from leisure.

One area that can successfully exploit both the desire for further work and the desire to be useful is peace corp work. Thirteen percent of the professors indicated that they would be willing to consider this type of a program. This number should be sufficient to merit a more extensive recruiting effort in order to bring the jobs and people together. In a similar area, it was found that 27 percent would consider joining a college staff part-time. The education and experience of the retired college professor is such that many would be able to make worthwhile contributions in either peace corp work or as a part-time member of a faculty.

CHAPTER X. SUMMARY AND RECOMMENDATIONS

Many aspects of the retirement experiences of the retired professor have been covered in the preceding chapters. In analyzing the retirement process of the professors it was attempted, first of all, to determine the main course or trend of a particular factor and then to determine if this factor applied to one subdivision more than others. The professors' financial affairs, current activities, interest in further employment, desired retirement policy and actual policy as well as the general characteristics of the group were analyzed in this fashion. Many significant differences were found to exist between the various subgroups tested. Many of these differences were based on the sex of the retiree, the educational level, or the type of college retired from.

A detailed summary of these differences will not be made in this concluding chapter. For the reader interested in such a summary, it is suggested that the individual chapter summaries be reviewed along with Appendix A. Instead, this final chapter will emphasize those aspects that seem to be of the greatest importance and which contribute most to an understanding of the retired professor and from this to develop some rough guidelines for policy.

The entire adjustment from work to retirement focuses on three central problems: (1) the decline in income produced by retirement, (2) the need to find new ways of using the increase in leisure time, and (3) the need to find new satisfactions to replace the ones that went with work. The retired professional is in an ideal position to deal with all of these problems. However, even for these people, adjustment problems do occur.

The first of these problems to be reviewed will be the loss of income brought about by retirement. The professor's relatively high level of compensation while employed should enable him to save and invest for his future retirement. However, for many segments of American society, the emphasis on individual saving for old age has been supplanted by an emphasis on group plans. For the professor these would be the school retirement funds and, of course, social security. It seems to have become a part of the current tradition that the average American should not have to draw upon his personal savings for retirement but rather that his current income along with his retirement funds should be adequate to meet his needs. In keeping with this, it has been recommended by the AAUP and AAC that the school retirement plans together with social security should provide the retired professor with a disposable income equal to two-thirds of his preretirement after tax income. The two-thirds goal is quite arbitrary and is basically a value judgement that will have to be left to the contract negotiators. The clause that the benefits should be geared to disposable income, however, is on quite solid ground, especially if it is extended to mean purchasing value rather than dollar amounts.

The retirement plans most often used by colleges, the TIAA and CREF, are quite good in this respect. When used together they are geared to take account of inflationary trends and, at the same time, eliminate any sudden fluctuations in income. Social security also appears to be getting more responsive to changing conditions as interest in tying benefits to a cost of living index indicates. Both social security and the TIAA - CREF plans are good in that they tend to be vested in the individual

which means that it guarantees him the flexibility to change institutions and allows for continued family support in the event of his death.

Greenough and King, in their studies of retirement plans, came to the conclusion that, in general, the teaching plans are quite good and in most respects ahead of business plans (11, p. 422).

Despite a basically sound structure, the school retirement plans together with social security appear to fall short of the two-thirds goal set. It was found that only 31 percent of the professors felt that they would be able to live on these two sources of income alone. This was especially true of those with the higher levels of education. Apparently their higher status provided them with a higher level of compensation and hence, they have become accustomed to higher standards of living so that they would find it more difficult to live on these funds alone. In any event, it seems that if the two-thirds goal had been reached, the percentage would have been much higher. Fortunately, the professors do have other sources of income. As could be expected, investments and savings are the most important of these. Eighty-eight percent indicated that they relied on this source of income for at least 10 percent of their financial support. Employment is also an important source of income for 24 percent of the professors, especially for the men.

The adequacy of the total of these sources of income can be determined by the number indicating that they have to work for financial reasons. Twelve percent indicated that it is financially necessary for them to work. Proportionately more men indicated that they have to work. This

could be a function of the differences in marital status as much as in the differences in needs of the two sexes. A part of the reason for the need to work could have been the result of inadequate predictions about their needs in retirement. Thirty-five percent stated that their financial needs are greater in retirement than they had anticipated. Much of this could be due to inflation and the desire to keep up with the rising standard of living.

The relatively low number that indicated that they have to work and the large majority that find their retirement needs to be no greater than anticipated are encouraging signs. However, this can not be interpreted as an indication that the provisions are or are not adequate. The term adequate is in itself quite arbitrary and along with the final provisions made, must to some extent, be based on value judgements and the willingness of the professors to delay consumption while employed in favor of higher benefits during their retirement years.

Switching from the financial area, the problems of finding new leisure time activities and of finding new satisfactions will be reviewed next. These two areas will be examined together because of their closely related nature. After all, one of the benefits of work is that it provides a means of occupying the day. Among the other satisfactions that work can provide are: meaningful experiences, contacts with associates, and a place or role in society. Retirement alters all of these and it becomes necessary to replace these satisfactions with others from new sources.

The problems of adjusting to a life of retirement will vary greatly

with the individual. For some, the importance of the satisfactions that they received from work will be much greater and harder to replace than for others. Consequently, it is not surprising that there is a considerable variation in the desired retirement policy. A retirement policy that is tailored to the individual's needs can do much to help him adjust. It can make the timing of the retirement process consistent with his wishes and at the time that he is most ready to make the shift from employment to retirement.

In establishing a retirement policy to meet the needs of the professors, flexibility seems to be the key element. It was found that professors had a range in their desired starting age for retirement from at least 60 to 75. In addition to this, nearly one half of the professors wanted to be able to retire gradually. It should not be too difficult to develop a retirement policy which allows a professor to retire at any age he desires as long as it is under a maximum. However, a maximum will probably continue to be needed in order to protect the educational system from people who fail to recognize the time to retire. Likewise it should be possible to develop a policy which can incorporate gradual retirement provisions to suit the professor's needs. These gradual provisions should be flexible enough to allow the professor to set the amount and pace of reduction that he would like.

Despite the provisions that professors desire, it still is essential to have a system whereby the incompetent can be dismissed. To this end, better and more objective tests or measures have to be developed in order

to assure fairness and continued academic freedom for the individual professor. In addition, flexibility may also lead to adjustment problems for some professors. The fixed retirement date has one strong advantage in that it provides a specified cutoff date and thus encourages the individual to plan for it. However, this benefit is probably outweighed by the benefits of a flexible plan which can allow for differences in the individual's desires.

Regardless of the type of policy finally selected, many professors are going to continue to reach the age where they will either want to quit or the college will refuse to hire them. It is of prime concern to determine how these professors can best make the adjustment needed in orientating themselves to the new way of life. In order to do this, the experiences and steps taken by the sample group will be reviewed. It was found that: 90 percent of the retirees use at least a part of their former working day for various types of relaxation, 74 percent use a part of the extra time for reading, research, and writing, 55 percent for community activities, about 35 percent for sports and exercise, and 25 percent for paid employment. Males tended to rely more on paid employment and women more on community activities as consumers of their additional free time.

Professors are in a very good position for coming into contact with new interests and experiences while employed and should be able to develop some of these into meaningful sources of satisfaction in retirement. However, professors like every other retiree have to overcome the orientation to work that society has developed within them for so long if they are to satisfactorily enjoy their retirement. This orientation to work and the

need to feel useful may be so strong that the retiree will continue to have to rely on employment, his old line of work, or volunteer work for his source of satisfaction. This is not to suggest that this in itself is undesirable. In fact, it can produce satisfactions of equal or greater value to the individual so engaged as compared to one who has made the transformation to leisure based satisfactions. In addition, it can result in valuable services for society.

Of these alternatives to leisure, paid employment appears to be the most attractive to the retirees. Forty-nine percent indicated that they are either working for pay or seeking employment. This interest in employment is based mostly on the satisfactions it provides rather than financial returns. This is brought out by the 98 percent who indicated that one of the reasons for their working is that they either enjoy the work or that it is something to do. Only 19 percent indicated that a part of their reason for working is financial considerations. The value of the work role appears to be greater for men than for women as proportionately more of them continue either to work or seek employment.

Community activities are also an area that can be used to occupy the individual's time and to make him feel useful in addition to producing valuable services. Unfortunately, work connections provide much of the support for involvement in community activities and hence upon retirement 37 percent of the professors experienced a decline in their involvement with the greatest drop occurring for those with the lesser level of education. Others, of course, did not experience this decline and many reported an actual increase. A measure of how many increased their community

involvement is provided by the 55 percent, mentioned earlier, who reported that some of their increase in free time was used for community activities.

The final area to be considered as an alternative to the leisure orientated life is continued participation in the area of previous employment. Numerous opportunities are available for the retired professor along this line. For example, 82 percent continued to keep up with the new developments in their area. This, by itself, could probably be expanded to take as much time as the individual wanted to put into it. Thirty-two percent of the professors even expanded this into further research and writing.

The professors seem to continue to have a strong demand for work orientated activities. Not only do large numbers continue to work (both in paid employment and volunteer work), but a sizeable number also indicated that they felt that their education and experience are being wasted in retirement. In order to maximize their contentment in retirement it would appear to be beneficial to expand work opportunities and programs of community involvement for these people. Their high level of education and experience should result in meaningful contributions to society and, as long as they wish to supply these services, society might do well to take advantage of it.

The problem of adjusting to the increase in leisure time and the need to find new satisfactions to replace the ones that went with work is influenced greatly by the attitudes of society. In trying to recommend how people are to adjust to retirement problems it becomes necessary to know

just what society wants from its elder citizens. If retirement is to be thought of as a period of reward for work well done, the arts of leisure have to be emphasized much more than they have been in the past. If, however, society wishes to make continued use of the talents of its elder citizens this emphasis should not be used but rather a greater effort should be made to attract the individuals to programs that can utilize their talents.

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APPENDIX A: SUMMARY OF FINDINGS

Table that data are presented in	Hypothesis	Test used	Significant at the .05 level
1	The frequencies of the age groupings will vary with the sex of the retiree.	X^2	No
2	Tendency to be married will vary with the sex of the retiree.	X^2	Yes
4	The level of educational attainment will vary with the sex of the retiree.	X^2	Yes
5	The rate of participation in research relative to teaching will vary according to the sex of the retiree.	X^2	No
6	The rate of participation in research relative to teaching will vary with the level of educational attainment of the retiree.	X^2	Yes
7	The propensity to join a union will vary with the sex of the retiree.	X^2	No
8	The type of college retired from will vary with the sex of the retiree.	X^2	Yes
9	Tendency to be involuntarily retired will vary with the sex of the retiree.	X^2	Yes
10	Tendency of males to be involuntarily retired will vary with the level of education.	X^2	No
11	Tendency of females to be involuntarily retired will vary with the level of education.	X^2	No
12	Tendency of men to be involuntarily re-retired will vary with the type of college retired from.	X^2	Yes
13	Tendency of women to be involuntarily retired will vary with the type of college retired from.	X^2	Yes

Table that data are pre- sented in	Hypothesis	Test used	Significant at the .05 level
14	Female voluntary immediate retirees will retire earlier than male voluntary immediate retirees.	t-test	No
14	Female involuntary immediate retirees will retire earlier than male involuntary immediate retirees.	t-test	Yes
14	Female voluntary immediate retirees will retire earlier than female involuntary retirees.	t-test	Yes
14	Male voluntary immediate retirees will retire earlier than male involuntary retirees.	t-test	Yes
14	Male immediate retirees will retire later than female immediate retirees.	t-test	Yes
15	Male immediate retirees from large state schools will retire earlier than those from small state schools.	t-test	Yes
15	Male immediate retirees from large state schools will retire earlier than those from private schools.	t-test	No
15	Female immediate retirees from large state schools will retire earlier than those from small state schools.	t-test	No
15	Female immediate retirees from large state schools will retire earlier than those from private schools.	t-test	No
16	Male immediate voluntary retirees will retire earlier from large state schools than from small state schools.	t-test	Yes
16	Male immediate involuntary retirees will retire earlier from large state schools than from small state schools.	t-test	No
17	Male immediate retirees with bachelor's and master's will retire earlier than ones with Ph.D.'s.	t-test	Yes

Table that data are presented in	Hypothesis	Test used	Significant at the .05 level
17	Female immediate retirees with bachelor's and master's will retire earlier than ones with Ph.D.'s.	t-test	No
18	Tendency to retire gradually will vary with the sex of the retiree.	X^2	Yes
19	Starting age of gradual retirement will be earlier for men than for women.	t-test	Yes
19	Ending age of gradual retirement will be greater for women than for men.	t-test	No
20	Starting age for male gradual involuntary retirees will be greater than for voluntary retirees.	t-test	No
20	Starting age for female gradual involuntary retirees will be greater than for voluntary retirees.	t-test	No
21	Tendency of women to retire gradually will vary with the level of education.	X^2	No
22	Tendency of men to retire gradually will vary with level of education.	X^2	No
23	Tendency of men to retire gradually will vary with the type of college retired from.	X^2	No
24	Tendency of women to retire gradually will vary with the type of college retired from.	X^2	No
25	Tendency of men to retire gradually will vary with the area of specialization.	X^2	No
26	Participation in school retirement plans will vary with the type of college retired from.	X^2	Yes
27	Desire to retire gradually will vary with the sex of the retiree.	X^2	No

Table that data are presented in	Hypothesis	Test used	Significant at the .05 level
28	Desire of men to retire gradually will vary with the level of education.	X^2	No
29	Desired starting age of gradual retirement will be later for women than for men.	t-test	No
30	Professors with Ph.D.'s will have a later desired starting age for gradual retirement than bachelor's and master's.	t-test	Yes
31	Reason for voluntary retirement will vary with the sex of the retiree.	X^2	No
32	Changes desired in the retirement process will vary with the sex of the retiree.	X^2	No
33	Frequencies of sources of income will vary with the sex of the retiree.	X^2	Yes
34	Frequencies of sources of income will vary with the level of education.	X^2	No
35	Indicated possibility of living on school retirement and social security funds will vary with the sex of the retiree.	X^2	No
36	Indicated possibility of living on school retirement and social security funds will vary with the educational level.	X^2	Yes
37	Indicated possibility of living on school retirement and social security funds will vary with the type of school retired from.	X^2	No
38	Ability to anticipate retirement needs will vary with the sex of the retiree.	X^2	No
39	Financial necessity of continued employment will vary with the sex of the retiree.	X^2	Yes

Table that data are presented in	Hypothesis	Test used	Significant at the .05 level
40a	Financial necessity of continued employment will vary with the educational level of the retiree.	X^2	No
40b	Decline in participation in community activities will vary with the sex of the retiree.	X^2	No
41	Decline in participation in community activities will vary with the level of education of the retiree.	X^2	Yes
42	Number working as specialists or advisors in the community will vary with the sex of the retiree.	X^2	Yes
43	Number working as specialists or advisors in the community will vary with the level of education of the retiree.	X^2	No
44	Rate at which connections are maintained with the retiring college will vary with the sex of the retiree.	X^2	No
45	Rate at which connections are maintained with the retiring college will vary with the educational level of the retiree.	X^2	No
46	Rate at which connections are maintained with the retiring college will vary with the type of school retired from.	X^2	No
47	Number keeping up with new developments will vary with the sex of the retiree.	X^2	No
48	Number keeping up with new developments will vary with the educational level of the retiree.	X^2	Yes
49	Number doing research or writing will vary with the sex of the retiree.	X^2	Yes
50	Number doing research or writing will vary with the level of education of the retiree for men.	X^2	Yes

Table that data are pre- sented in	Hypothesis	Test used	Significant at the .05 level
51	Number doing research or writing will vary with the level of education of the retiree for women.	X^2	No
52	Number doing research or writing will vary with the amount of time spent in research related activities relative to teaching.	X^2	No
53	Frequencies of sources of new activities will vary with the sex of the retiree.	X^2	Yes
54	Tendency to relocate after retirement will vary with the sex of the retiree.	X^2	Yes
55	Reason for relocating will vary with the sex of the retiree.	X^2	Yes
56	Interest in post retirement employment will vary with the sex of the retiree.	X^2	Yes
57	Interest in post retirement employment will vary with the level of education of the retiree.	X^2	No
58	Reason for working will vary with the sex of the retiree.	X^2	No
59	Number still seeking employment will vary with the sex of the retiree.	X^2	No
60	Feeling that education and experience are being wasted will vary with the sex of the retiree.	X^2	No
61	Feeling that education and experience are being wasted will vary with the level of education of the retiree.	X^2	No
62	Willingness to consider peace corp work will vary with the sex of the retiree.	X^2	No
63	Willingness to consider peace corp work will vary with educational level of the retiree.	X^2	No

Table that data are pre- sented in	Hypothesis	Test used	Significant at the .05 level
64	Interest in joining a college staff part-time will vary with the sex of the retiree.	χ^2	Yes
65	Interest in joining a college staff part-time will vary with the level of education for men.	χ^2	No
66	Interest in joining a college staff part-time will vary with the level of education for women.	χ^2	No

APPENDIX B: SAMPLE QUESTIONNAIRE

Survey of Labor Force Withdrawal Patterns
and Retirement Activities of College Professors

A. Vital Statistics

1. Name _____

Last	First	Middle
------	-------	--------
2. Address _____

Street	City	State	Zip Code
--------	------	-------	----------
3. Birthdate _____

Month-Day-Year

4. Age as of April 1, 1969 _____
5. Sex (M or F) _____
6. Marital Status: Married _____ Widowed _____ Divorced and/or Separated _____
Never married _____
7. Area of academic specialization _____
8. Number of years as a college professor _____
9. What was the highest degree or equivalent level of education that you attained?
Bachelors _____ Masters _____ Doctorate _____
10. What percentage of your time was spent teaching relative to research?

Less than 1/4 _____	1/2 -- 3/4 _____
1/4 -- 1/2 _____	Over 3/4 _____
11. Did you belong to a teacher's union or association? Yes _____ No _____
If you did, to which one(s) _____

B. Retirement Process

1. From what college or university are you retired?

2. Did your work load gradually decrease before final retirement? Yes _____ No _____

3. At what age did your retirement, either gradual or immediate, begin? _____

4. If you gradually retired, at what age did you or will you completely retire? _____

Question 5 applies only to those who gradually retired.

5. Was your gradual retirement plan: a school plan? _____ an individual plan? _____

a. For those enrolled in a school plan.

(1.) Was this program voluntary? Yes _____ No _____

(2.) Was the withdrawal progression standard for all persons of the same status? Yes _____ No _____

(3.) If your answer was "no" on the previous question, will you please describe your retirement process with reference to timing of work load reductions?

b. For those on an individual plan.

(1.) May any person of your status retire gradually? Yes _____ No _____

(2.) Who worked with you to set up this gradual retirement? _____

(3.) Will you please describe your retirement process with reference to timing of work load reductions?

6. Who decided that you should retire, whether gradually or immediately?

Mainly your idea (voluntary) _____
 Mainly someone else's idea (involuntary) _____

a. For voluntary retirees only: Was voluntary retirement motivated by:

Health _____ Job pressures _____
 Desire for leisure _____ Other causes _____ Please specify _____

b. For involuntary retirees only:

(1.) Was involuntary retirement the result of:

Retirement rules _____ Health _____
 Other causes _____ Please specify _____

(2.) If you had not been asked to gradually or immediately retire from full time work, would you have liked to continue working full time?

Yes _____ No _____

(3.) If you were under an involuntary gradual retirement plan, were you ready to fully retire at the required time? Yes _____ No _____

(4.) If you answered "no" to the previous question, did you want to work: longer than you did _____ not as long as you did _____

7. a. If you were not under a gradual retirement plan, would you have liked to participate in one? Yes _____ No _____

b. If your answer was "yes" on the previous question, at what age would you have been ready to begin a decrease in work load? _____

C. Financial Support

1. Means of financial support.

Source	All	Some %	None
Teachers insurance & annuity funds	_____	_____	_____
School retirement funds	_____	_____	_____
Part-time employment	_____	_____	_____
Personal savings	_____	_____	_____
Earnings from investments	_____	_____	_____
Social Security	_____	_____	_____
Family member assistance	_____	_____	_____
Other, please specify	_____	_____	_____

2. Would it be possible to live on your school retirement funds and Social Security alone? Yes _____ No _____
3. How many persons other than yourself rely upon your financial support? _____
4. How do your financial needs in retirement compare with those you anticipated?
Needs are greater _____
less _____
equal to _____
5. Have you found it necessary, since retirement, to gain employment for financial reasons (do not include gradual retirement obligations)? Yes _____ No _____

D. Retirement Activities

1. Did you relocate or do you plan to relocate your home after retirement?
Yes _____ No _____ From _____ to _____
city - state city - state
2. If you did move, please indicate the reason.
Proximity to family _____ Better climate _____
Health _____ Other, please specify _____
3. If you are completely retired, do you maintain any connections with your re-tiring college? Yes _____ No _____
4. Do you keep up with new developments in your area? Yes _____ No _____
5. Are you doing any research or writing currently? Yes _____ No _____
6. Do you work as a specialist or advisor in your community? Yes _____ No _____
7. Did your participation in community activities decline after retirement?
Yes _____ No _____
8. Given the time spent on academic pursuits previous to beginning retirement as 100% of your work day, can you now apportion this time in percentage figures for your current activities?
Reading, research, and writing (unpaid) _____ Relaxation (social activities, TV, conversation, hobbies) _____
Paid employment _____ Participatory sports and exercise _____
Community activities _____

9. Do you do any work for pay (excluding gradual retirement obligations) now that you are retired? Yes _____ No _____
10. If you are not now employed would you like to be? Yes _____ No _____

Questions 11-15 apply only to those who answer "yes" to question 9.

11. Please indicate the reason for your working.

Financially necessary _____ Something to do _____
 Enjoy the work _____ Other, please describe _____

12. Is your work: Regular _____ Occasional _____
13. If you work regularly how many hours per week do you work? _____
14. How long have you been working this regular schedule? _____
15. What kind of work do you do? _____

E. Retirement Opinions and Proposals

1. If given the opportunity to face retirement again, would you make any changes in your retirement process?

No change _____ Not retire _____
 Retire earlier _____ Retire gradually _____
 Retire later _____ Retire all at once _____

2. Do you feel that your education and experience is lying unnecessarily idle in retirement? Yes _____ No _____

3. Would you consider a domestic or foreign Peace Corp position?

Neither _____ Foreign _____
 Domestic _____ Both _____

4. Would you consider joining the staff of a college where you and other retired professors could work as consultants and part-time professors? Yes _____ No _____

Questions 5-7 apply only to those who answered "yes" to the previous question.

5. Please indicate the location(s) where you would accept such an academic position.

Florida _____ Southwest _____ California _____ Northwest _____
 Southeast _____ Midwest _____ Northeast _____

6. In what type of community would you prefer to work?

Large metropolitan area _____ Small college town _____

Medium size city area _____

7. In what type of school(s) would you prefer to work?

Junior college _____ Small state school _____

Small private college _____ Large state school _____

Large private college _____