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ABSTRACT

Excessive faculty mobility, from the medical school standpoint, can be interpreted as an undesirable event to the institution. Are there identifiable personal and institutional characteristics that are associated with high employment mobility? A mobility index that shows the relationship between the number of medical school jobs held and the number of years of medical school employment was used to differentiate the the characteristics of faculty at opposite ends of a continuum of mobility. The three mobility categories of faculty were compared on eight variables associated with medical schools. Faculty variables included sex, type of degree, academic rank, nature of employment, support for predoctoral training, areas of responsibility, and country of graduation. Institutional variables were ownership, department type, and geographic location. Findings were: (1) faculty mobility groups did not differ significantly with respect to administrative level or predoctoral support. The highly mobile faculty did not appear to have developed the degree of attachment or commitment to the medical school attained by the highly faculty, were generally found to be in the lower usually untenured ranks, had however responsibilities at the medical school, had professional preparation outside the United States or Canada, and had received less postdoctoral training as a group. (Author/KE)

A PRELIMINARY ANALYSIS OF DIFFERENTIAL CHARACTERISTICS BETWEEN HIGH AND LOW MOBILE MEDICAL SCHOOL APPLICANTS

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Effective May 5, 1975, a reorganization of the Health Resources Administration divided the former Bureau of Health Resources Development into two new components – the Bureau of Health Manpower and the Bureau of Health Planning and Resources Development. The material described in this publication was prepared in BHRD, and now falls within the purview of the new Bureau of Health Manpower.

AAMC Faculty Mobility Series: Report 2
A Preliminary Analysis of Differential Characteristics Between High and Low Mobile Medical School Faculty

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FOREWORD

A major mission of the Bureau of Health Resources Development (BHRD)* is assuring the development of an adequate supply of well-qualified health manpower for the Nation. To help carry out this mission, the Bureau provides financial support for the institutions training health manpower. This support has been of three types: Assistance for the construction and renovation of facilities; student assistance through loans, scholarships, traineeships, and fellowships; and assistance for the operation, expansion, and improvement of the schools (including support of faculty).

In recent years, as the cost of medical education burgeoned and Federal contributions rose, there has been a growing concern over the impact of Federal funding on the institutions training health manpower, especially upon the supply, qualifications, and retention of faculty – its role models, recognition of its importance, etc. Under terms of a contract (No. MI-24401) with BHRD, the Association of American Medical Colleges (AAMC) agreed to carry out a series of studies of medical school faculty. These studies were in large part based on data in a Faculty Roster System maintained by the Association for all 114 medical schools in the United States.

A medical school faculty profile project was initiated in 1966 by the AAMC in cooperation with the National Institutes of Health. In the early years of the project's operation, faculty profile data were obtained by annual questionnaires sent to all medical schools. Under the contract with BHRD, a computerized Faculty Roster System was developed which provides for the immediate input of information by each medical school upon the accession of each new faculty member, each transfer or other departure, as well as each change in status of a faculty member. The Faculty Roster System of the AAMC contains information on the demographic, educational, and professional characteristics of almost 50,000 past and present salaried faculty members.

This report "A Preliminary Analysis of Differential Characteristics Between High and Low Mobile Medical School Faculty", is one of five reports covering various aspects of medical school faculty which have been prepared by the AAMC under its contract with BHRD. The first study in the series, on faculty mobility in general, compared the characteristics of faculty in four mobility statuses.

This second report seeks to differentiate the characteristics of faculty at opposite ends of a continuum of mobility, i.e., high mobility vs. low mobility. To determine mobility levels, the authors developed a mobility index that shows the relationship between the number of medical school jobs held and the number of years of medical school employment, using data from the Faculty Roster System for the period 1962-71. The study included a random sample of 6,300 faculty members selected from the 113 medical schools in existence in 1971. Using a ratio of four jobs in 10 years (4:10) as a minimum ratio for high mobility, 20 percent of the sample were classified as highly mobile. At the other end of the continuum, a ratio of one job in 10 years (1:10) was used to denote the low mobile faculty; 20 percent were in this group. The 60 percent of the sample with ratios between 4:10 and 1:10 were designated as average mobile faculty.

The three mobility categories of faculty were compared on eight variables associated with faculty and on three variables associated with medical schools. Faculty variables included sex, type of degree, academic rank, nature of employment, support for predoctoral training, support for postdoctoral training, areas of responsibility, and country of graduation. Institu-

* The Bureau of Health Resources Development (BHRD) became the Bureau of Health Manpower (BHM) on May 5, 1975.

tional variables were ownership, department type, and geographic region.

This report was prepared by Dr. Philip W. Anderson, Staff Associate, and Mr. Thomas A. Larson, Director, Faculty Profiles in the Division of Operational Studies, Department of Planning and Policy Development at the Association of American Medical Colleges. The report is being published by the Resource Analysis Staff, Howard V. Stambler, Chief.

The five reports in the series are:

- Mobility Characteristics of U.S. Medical School Faculty in 1971.
- A Preliminary Analysis of Differential Characteristics Between HIgh and Low Mobile Medical School Faculty.
- Institutional Variables Related to High Faculty Attrition.
- Medical School Characteristics Associated With Faculty Participation in Federal Programs.
- Postdoctorals vs. Nonpostdoctorals: Career Performance Differentials Within Academic Medicine.

TABLE OF CONTENTS

LIST OF TABLES

PURPOSE AND SCOPE

Descriptive and analytic studies of faculty have been conducted by many diverse institutions and organizations concerned with higher education. In 1961, the Bureau of Health Manpower Education, a component of the National Institutes of Health, requested the Association of American Medical Colleges to undertake an analysis of faculty manpower at academic health centers within the United States. Since that time, the Division of Operational Studies of the AAMC has held the responsibility for the collection and dissemination of data to describe and assess the "intellectual capital" of medical education, i.e. to study the sources of faculty and the circumstances of their training, the nature of the flow of persons from one institution to another, and the reasons for departure from medical academia.

The Faculty Profile staff of the Division of Operational Studies has recently completed studies relating to the mobility or movement of faculty into, within and out of academic health centers.

The present study was conducted in an attempt to differentiate characteristics between faculty who have exhibited high or low employment mobility during a ten year period. A "mobility ratio" was developed to classify a randomly selected sample of faculty (AAMC Faculty Roster Master File) into high or low mobility groups. This ratio consisted of total number of jobs over years of employment betweeen 1962 and 1971. Faculty were judged highly mobile if they had a computed ratio equivalent to at least four jobs or more during this period of time. Faculty who were employed at only one institution for the full ten year period were judged low mobile.

HIGHLIGHTS

(1) A total of 19.5 percent of medical school faculty had changed jobs on the average of four times or more between 1962 and 1971 and were classified as highly mobile.

(2) A total of 19.4 percent of medical school faculty had remained employed at one institution during 1962 and 1971 and were as highly stable.

(3) A total of 61.2 percent of the faculty did not qualify for either group and were identified as a "average mobility group".

(4) Chi-square tests of independence were conducted on nine faculty variables and three institutional variables of which four were significant at the .001 level. The highly mobile faculty was generally found to be in the lower, usually untenured ranks, to have less responsibilities

at the medical school, to have had professional preparation outside the United States or Canada and to have received less post-doctoral training as a group.

INTRODUCTION

One question about medical school faculty that has often been raised is whether or not there is a group of faculty that accounts for the great majority of job movement. Specifically stated, are there identifiable personal and institutional characteristics that are associated with high employment mobility?

Excessive faculty mobility, from the medical school standpoint, can be interpreted as an undesirable event to the institution. Brown (1967) has observed that faculty turnover is disruptive to an institution, particularly to the academic environment. Faculty offices must be modified or built, and orientation to administrative procedures must be implemented. Quite often courses must be added or deleted, research facilities may need to be altered or expanded, and perhaps the most disruptive consequences are felt by students who must adjust to different advisors, different course offerings and different instructors. Such instability may affect the academic environment and possibly inhibit or alter student attitudes, values and career decisions. In addition, considerable time must be spent by administrators in recruiting new faculty members.

The benefits to an institution in hiring a faculty member who has exhibited a history of high employment mobility are not clear. While his or her exposure to various educational techniques and approaches may lend itself to curriculum development, one may question whether: (1) this faculty member has remained at the other institutions for enough time to observe long term effects of such approaches, or (2) this faculty member will remain at the new institution long enough to implement or incorporate such procedures.

If some faculty change jobs often, an important question concerns the economic implications of this event for the individual medical school. Has the faculty member contributed as much to the medical school as the school has invested in him or her? One would hope that findings in the present study will help medical school administrators to identify characteristics which differentiate among faculty who have exhibited a history of high or low mobility.

In this pilot study, a sample of faculty at 113 medical schools within the United States were randomly selected from the AAMC Faculty Roster Master File. The rationale and procedures used to classify faculty into one of three categories in the present report are discussed in the Method section.

Mobility Literature

Blackburn and Aurand (1972) conclude that while the literature contains a surprisingly large number of mobility studies on academicians, researchers have failed to integrate the findings into an understanding of the process, and hence, a comprehensive explanation or theory of mobility has not emerged:

> "Faculty mobility is not a predictive science. The ability to judge who will move and who will stay, at what time in his career, and the whole host of related questions are not significantly correlated with those factors which were introduced in the research." (p. 10)

Moreover, researchers also noted that the mobility of faculty in professional schools such as medicine and dentistry as well as law, business and education remains unstudied.

In spite of the dearth of literature on mobility of medical school faculty, a number of prior studies are of general interest to the present investigation.

Various faculty groups have been asked to rank job components at their institution in the order of importance. Gustad (1960) found that opportunity for creative work, colleague competency and stimulation, working with students, and freedom from restraints to be the most important components listed by faculty in English, chemistry and psychology departments. Cammack's (1965) findings indicated that the relationship with the department chairman, caliber of associations, academic freedom and the library were the four most important job components at an educational institution.

Brown (1967) studied newly hired faculty at various four - year colleges and universities and discovered that research facilities, colleague competency, teaching load and courses taught were the most important factors in job satisfaction.

One conclusion from the findings of these three studies would suggest that overall, faculty members have indicated a set of specific criteria that might relate to employment longevity (low faculty mobility) at an institution.

The following three studies have found specific reasons or influences in faculty movement. Orlich (1966) noted that male teachers were found to move for primarily economic reasons and female teachers because of working conditions. Erickson (1968) found that the influence of a faculty member's family and friends was a major consideration in the decision to leave an institution.

Kimmel (1972) investigated the job mobility of men and women psychologists in the southeastern U.S. Part of her findings indicated that the mobility of men and women was not significantly different. She noted however, that men, more often than women, reported changing jobs in order to achieve professional advancement or because of job dissatisfaction.

The investigation of highly mobile faculty in the present report is limited to faculty data of a biographical or institutional nature. Subjective responses from faculty were not collected.

A number of investigators have been able to study biographical variables and relate them to mobility of faculty turnover. Ferris (1966) concluded from his study that faculty mobility occurs chiefly between institutions of approximately the same size and function, and not from smaller, less prestigious institutions to larger, more respected institutions.

Fincher (1969) found statistically significant relationships for mobility and age, academic rank, teaching activity, tenure and publication productivity of academic physicists in higher educational institutions. Shapiro (1971) found that experience, age, and training distributions of teachers were the characteristics most significantly related to turnover, and turnover appears higher in those districts having a greater proportion of young teachers with little experience. He also found that the greater the district size and the greater its growth rate the smaller was the turnover.

Bosley and Shapiro (1967) compared a group of aerospace professional/technical personnel who had shown a high degree of job mobility, with a group from the same industrial segment who were characterized by low mobility. His analysis showed that the "type" of person who has worked in at least two geographic regions, who was born before 1930, who has held a current job for less than five years, and whose military service was either lacking, or brief and non-job relevant is likely to be highly mobile.

Interestingly, a number of follow-up studies have indicated that when faculty move because of disillusionment with their situation or institution, the chances that a new environment will be much different from the one they left is quite unlikely (Ferris, 1966; Brown, 1967; Balyeat, 1968; Blackburn and Aurand, 1972).

The diverse literature on mobility has led to the identification of potential variables related to faculty movement. However, there has been no assimilation of the literature findings into any overall conclusion. Additionally, as noted earlier, there has not been a comp-

rehensive study of mobility among medical school faculty. Therefore, a research effort that would make use of some of the key variables in other studies and attempt to achieve a general explanation of faculty mobility is in order.

METHOD

Variables Investigated

Variables previously explored in the literature section will be examined when possible in the present study.

Completion of a doctoral degree usually signifies the attainment of the highest academic degree awarded by an educational institution. It also may represent the time in a persons' career when he or she starts or resumes professional employment without further formal educational interruption. Employment opportunities and channels may vary greatly between the holders of different doctoral degrees. By the nature of their training, the supply and demand for M.D.'s is different than that of other doctorates. Other opportunities for employment may be contingent upon completion of a specialized pre or post-doctoral program. In the present study we want to determine whether a faculty members' type of degree or educational support, predisposes his/her potential for high mobility.

Another question about academic background pursued in the present study concerns the country in which the faculty member received his or her formal professional training. Are the mobility patterns of those graduated from U.S. institutions different from graduates of foreign institutions?

Differential mobility by sex will be explored. The usual argument is that females have a less stable employment pattern than males; "owing to their higher productivity in household activities, women spend less of their time in the labor force than do men. They tend to invest less in non-household skills, and this smaller investment is reflected in their lower earnings. These lower earnings imply a lower opportunity cost of their quitting employment and also of their quitting the labor force altogether".[1] However, one may question whether traditional arguments apply to the highly trained women on staff at medical schools today. One might hypothesize that in the presence of discrimination against women, women might be relatively reluctant to leave employment for fear of difficulty in finding subsequent employment. Such a position would imply a lower mobility rate for women than for men.

The academic rank of faculty has been previously explored with respect to mobility. Caplow and McGee (1958) found that associate professors were less mobile than other faculty. Brown (1967) reported the rank of faculty moving from one institution to another in terms of percentages. He found that 40 percent of the movers were instructors, and 42 percent were assistant professors, while only 10 percent of the associate professors and 7 percent of the full professors were moving from one school to another. Whether

highly mobile faculty at medical schools can be differentiated from their colleagues by academic rank or administrative title, will be investigated in the present study.

All faculty in the present study are employed as either strict full-time or geographic full-time. Strict full-time faculty receive their entire institutional income as a fixed annual amount from funds controlled by the medical school or its parent institution. Geographic full-time faculty receive a guaranteed base salary, all or most of which is paid from funds controlled by the medical school, but may earn additional income on an individualized basis from clinical work in the institution(s) paying the base salary. It could be argued that the faculty member with a geographic full-time status has a more favorable earning arrangement due to the personalized incentives for clinical income. Additional opportunity for the geographic full-time faculty member could increase his/her commitment to his/her employment situation more than that of the strict full-timer. The differences in mobility activities of faculty in both full time appointments will be pursued in the present study.

In addition, the mobility of faculty with fewer responsibilities will be compared to that of faculty with more medical school responsibilities.

Two institutional variables will be related to mobility in this investigation: ownership of institution (public or private) and department type (basic science, pathology, clinical science, or other). Can highly mobile faculty be differentiated from their colleagues with respect to department affiliation and control of the institution?

Raimon (1962) proposed a link between wage differentials in various parts of the country and patterns of geographic movement. According to his evidence, shifts in population seem definitely to take place from low wage to high wage regions. If this is true than we would expect to see regional variation in the latest employment location of the highly mobile faculty. This distribution will be explored in the present study.

Procedure

In this pilot study, we were mainly concerned about faculty who had received professional income from a medical school, and who had completed the highest academic degree level. Hence, the sample was restricted to full-time, salaried faculty with at least an M.D. or Ph.D. degree who also were employed by one or more medical schools between 1962 and 1971. It should be noted that data on the medical school faculty have been collected since 1967. Hence, faculty who left prior to 1967 and have not returned to a

salaried position at a medical school could not be included. However, we were able to include former faculty who were employed at some time since 1967 but have left prior to 1972.

In carrying out the analysis 7,399 records from the Faculty Roster Master File (37,894) were randomly [2] selected and scrutinized for possible errors or omissions in the employment history section of the questionnaire-record. A final sample of 6,314 faculty remained at the end of this process. A preliminary comparison of percentage distributions of this sample with percentages on several variables for the population in calendar 1971, showed that the sample did indeed closely represent the population.

The next procedure called for the classification of the sample into high and low mobility categories; the dependent variable.

Any notion of high mobility requires at least two components; length of professional employment and total number of jobs. Hence, a mobility ratio was developed that consisted of total number of jobs as measured by the number of employment locations between 1962 and 1971 in the numerator and total length of professional employment between 1962 and 1971 in the denominator. Those faculty with low ratios were most stable, while those with high ratios were the most mobile.

While such a ratio is a continuum, an examination of the distribution of ratios indicated that four moves in ten years represented a cluster of highly mobile faculty, therefore, in considering this problem, four moves in ten years was considered the minimum rate for high mobility. When mobility ratios were calculated, 19.5 percent of the sample had a ratio of .40 or higher. This group of faculty who had a ratio equivalent to at least four jobs or more during this ten year span were called highly mobile and numbered 1,229. For purposes of comparison, an attempt was made to identify the lowest 19.5 percent of the sample in terms of the mobility ratio. It was determined that 19.4 percent of the sample had a mobility ratio of .10. This group of faculty were employed at only one institution for the full ten-year span and were called low mobiles, numbering 1,222.

A total of 61.2 percent or 3,863 of the faculty were in the middle of the ratio-score continuum and did not qualify for either group and were identified as a type of "average mobility" group.

Results

Twelve Chi-square tests of independence were conducted on nine faculty variables and three institutional variables of which four were significant at the .001 level.

Conclusions from these Chi-square analyses indicate that:

1. Faculty with a M.D. plus Ph.D., M.D. only or Ph.D. only were not significantly different with respect to mobility.

2. Faculty who were either Department Chairmen, above department level or Deans were not significantly different with respect to mobility.

$<.001$ 3. Academic rank was significantly related to mobility. Assistant professor and instructor ranks had more highly mobile persons than Associate or Full Professor ranks.

4. A faculty member's sex was not significantly related to mobility.

5. Strict full-time faculty were not significantly different from Geographic full-time faculty with respect to mobility.

$<.001$ 6. Each faculty member has one or more major areas of responsibility. The number of responsibilities was significantly related to mobility. The lower the number of faculty responsibilities, the larger the number of persons with high mobility.

7. Faculty with pre-doctoral support were not significantly different from faculty without pre-doctoral support with respect to mobility.

$<.001$ 8. Faculty without post-doctoral support were significantly more highly mobile than those with post-doctoral support.

$<.001$ 9. Country of training was significantly related to mobility. U.S. and Canadian faculty appeared very similar. Among foreign trained faculty, however, there was a much higher percentage of highly mobile persons.

11. Faculty in the Basic Sciences, Pathology, Clinical Medicine or other medical school departments were not significantly different with respect to mobility.

12. Geographic region of the faculty member's latest medical school of employment was not significantly related to mobility.

DISCUSSION

The present study was conducted in an attempt to differentiate characteristics between faculty who have exhibited high or low employment mobility during a ten year period. A "mobility ratio" was developed to classify a randomly selected sample of faculty into high or low mobility groups. This ratio consisted of total number of jobs over years of employment between 1962 and 1971. Faculty who had a computed ratio equivalent to at least four jobs or more during this period were judged highly mobile and numbered 1,229. Faculty who were employed at only one institution for the full ten year span were called low mobile, numbering 1,222.

A total of 61.2 percent or 3,863 faculty did not qualify for either group and were identified as a "average mobility" group.

Twelve Chi-square tests of independence were conducted on nine faculty variables and three institutional variables, of which four were significant at the .001 level. The discussion of the variables found significant follows.

Academic rank was related to mobility (Table 1). Assistant professors and instructors had significantly more mobile faculty than associate or full professors. This finding is consistent with the results of other investigations (Marshal, 1964; Brown 1967; Caplow and McGee, 1968). A partial explanation for the higher mobility in the lower ranks may be that young faculty do not adequately explore openings available at other institutions when selecting their jobs. Marshal (1964) suggested that the reasons for this high mobility are: (1) a general belief that job opportunities are scarce and that these openings should be seized when presented, (2) inability to seek work opportunities properly, and (3) an indifference as to the nature of the job. Marshal concludes that having too hastily chosen the first job, they quickly become dissatisfied and search for more suitable conditions elsewhere.

From the medical schools' standpoint, faculty in the lower ranks are usually in a probationary state at the school until the faculty member satisfies the institutional requirements for tenure. Thus, a further explanation could well be that some faculty in the lower ranks are unable to make tenure and must move on to other institutions if they choose to stay in academic medicine.

Nevertheless, the instructor, at the time of his/her first appointment to a medical school, is exploring his/her new role in academic medicine. The faculty member in the lower ranks may not have the "attachment" or commitment to

the institution that the tenured faculty member would appear to have.

Each faculty member has one or more major areas of responsibility at the medical school or teaching hospital. A low number of medical school responsibilities was significantly related to high mobility (Table 6).

The faculty member who is actively involved in teaching, research, patient care and administration certainly has a higher degree of attachment to the medical school than the faculty member who only does one activity. Such increased involvement may be seen as a high order degree of diversification in a medical school system.

Increased involvement in a wide range of activities at a medical school suggests increased attachment and identification with a school. The faculty member given more responsibilities can observe and express him/herself in more ways, than the faculty member with one responsibility. From the institutions standpoint he/she may be seen as more influential and valuable to the institution than a person doing fewer activities. Hence, one may assume that an institution would be more interested in attempting to retain a faculty member who provides more services to an institution than one who does not.

Post-doctoral support is a financial stipend given to an individual faculty member for specialized training in a specific area related to academic medicine. Such stipends are usually competively sought. In the present study, faculty without postdoctoral support were significantly more highly mobile than those who had received post-doctoral support (Table 8).

This finding appears consistent with the trend of other findings in the present report. The faculty member who receives support can essentially improve his/her capabilities by staying at a medical school. Such training can also be seen as an attempt by the medical school to retain promising individuals by recommending such persons for post-doctoral training.

A recent comprehensive study on post-doctoral fellows has shown that M.D.'s and Ph.D.'s who received such stipends have advanced faster up the academic ladder, won competitive research grants more frequently, published more and are cited more frequently than M.D.'s and Ph.D.'s without such stipends.[4] Thus, the faculty member increases his/her professional capabilities, which helps him/her to prepare for more responsibilities or "attachments" to the medical school. Perhaps the faculty who fail to receive such stipends do not foresee advancement opportunities at the institution and move on.

The country of training in which the faculty member received his/her professional preparation for academic medicine was related to mobility. U.S. and Canadian trained faculty appear very similar. However, foreign trained faculty had a significantly higher percentage of highly mobile faculty than U.S. and Canadian trained faculty (Table 4). Perhaps the most salient explanation of this finding is that the foreign trained faculty member does not have similar attachments to a medical school. Some studies have indicated that some foreign trained medical immigrants do not enter the United States from their own country but enter from another country to which they have immigrated first[3]. Hence, institutions within countries may be seen as "way stations" for mobility to other geographic locations, locations that perhaps may be more consistent with their life style. This finding conforms with previous findings showing a high percentage of attrition from medical schools for foreign trained faculty members.

Investigations concerned with the determination of physician practice location may have relevance to the present findings. Yett and Sloan (1971) found that the greater the number of attachment "events" (birth, medical school training, internship and residency) occuring in a single location, the higher the probability that the physician would choose to practice in that location. It would appear that foreign trained faculty have not developed the attachments or commitments to a medical school to the same degree as others.

Conclusions

This pilot study attempted to answer some basic questions about faculty who have exhibited high or low employment mobility. The study findings partially fill a void in the literature on high mobility among faculty on staff at U.S. medical schools. The analysis was limited to a random sample of faculty who were employed all or part of the time between 1962 and 1971, a ten year period.

It was found that 19.5 percent of the faculty had changed jobs on the average of four times or more during this span and 19.4 percent of the faculty had remained employed at one institution during the entire ten years.

According to the findings in the present study, faculty mobility groups did not differ significantly with respect to their type of degree, sex, nature of employment, administrative level, or pre-doctoral support.

The variables related to extent of faculty employment mobility lent themselves to a model or pattern compatable with a type of faculty "commitment" or "attachment" to a medical school.

The highly mobile faculty did not appear to have developed the degree of attachment or commitment to the medical school attained by the highly stable faculty. The highly mobile faculty were generally found to be in the lower, usually untenured ranks, to have less responsibilities at the medical school, to have had professional preparation outside the United States or Canada, and to have received less post-doctoral training as a group.

TABLE 1

Administrative and Academic Rank of Faculty By Extent of Employment Mobility

Mobility	Rank															
	Administrative*						Academic**									
	Deans		Above Dept. Level		Dept. Chairmen		Full Prof.		Assoc. Prof.		Asst. Prof.		Instructor			
	#	%[1]	#	%	#	%	#	%	#	%	#	%	#	%		
Average	17	71	64	60	331	64	752	55	1030	63	1308	63	263	64		
Highly Stable	6	25	27	26	137	26	504	37	390	24	133	6	9	2		
Highly Mobile	1	4	15	14	53	10	120	9	215	13	630	30	140	34		
TOTAL	24	(100)	106	(100)	521	(100)	TOTAL	1376	(100)	1635	(100)	2071	(100)	412	(100)	

*Non-significant
**Chi square significant beyond .001

1. Vertical percentage only (rounded).

Table 2

Degree of Faculty By Extent
Of Employment Mobility

Mobility	Degree* MD&Ph.D. #	% [1]	MD only #	%	Ph.D. only #	%
Average	256	59	2455	61	1152	61
High Stability	89	20	748	19	385	21
High Mobility	92	21	797	20	340	18
TOTAL	437	(100)	4000	(100)	1877	(100)

* non-significant

1. Vertical percentages only (rounded).

Table 3

Sex Of Faculty By Extent
Or Employment Mobility

Mobility	Sex* Male #	% [1]	Female #	%
Average	3465	61	392	64
High Stability	1105	19	117	19
High Mobility	1116	20	108	18
TOTAL	5686	(100)	617	(100)

* non-significant

1. Vertical Percentages only (rounded).

Table 4

Country of Training of Faculty Member
By Extent of Employment Mobility

Mobility	Country of Training**						
	U.S.		Canadian		Foreign		Unknown
	#	%[1]	#	%	#	%	
Average	3136	61	81	62	638	62	8
High Stability	1076	21	26	20	118	12	2
High Mobility	930	18	24	18	269	26	6
TOTAL	5142	(100)	131	(100)	1025	(100)	16

**Chi Square significant at the .001 level
1. Vertical percentages only (rounded).

Table 5

Nature of Employment of Faculty Member
by Extent of Employment Mobility

Mobility	Employment*			
	Strict Full-Time		Geographic Full-Time	
	#	%[1]	#	%
Average	3045	62	766	59
High Stability	904	18	297	23
High Mobility	957	20	247	19
TOTAL	4906	(100)	1310	(100)

* non-significant

1. Vertical percentages only (rounded).

Table 6

Number of Responsibilities of Faculty
By Extent of Employment Mobility

Mobility	Number of Responsibilities**									
	1		2		3		4		5	
	#	%[1]	#	%	#	%	#	%	#	%
Average	414	60	1408	62	1325	61	648	61	22	48
High Stability	116	17	399	18	435	20	237	22	18	39
High Mobility	158	23	476	21	400	19	177	17	6	13
TOTAL	688	(100)	2283	(100)	2160	(100)	1062	(100)	46	(100)

** Chi Square significant beyond .001

1. Vertical percentages only (rounded).

Table 7

Pre-Doctoral Support of Faculty By
Extent of Employment Mobility

Mobility	Pre-Doctoral Support*			
	No		Yes	
	#	%[1]	#	%
Average	2400	61	990	61
High Stability	698	18	294	18
High Mobility	822	21	333	21
TOTAL	3920	(100)	1617	(100)

* non-significant

1. Vertical percentages only (rounded).

Table 8

Post-Doctoral Support of Faculty By
Extent of Employment Mobility

Mobility	Post-Doctoral Support**			
	No		Yes	
	#	%[1]	#	%
Average	1547	59	2061	63
High Stabilty	478	18	605	19
High Mobility	583	22	592	22
TOTAL	2608	(100)	3258	(100)

** Chi Square significant beyond .001

1. Vertical percentages only (rounded).

Table 9

Current Geographic Region of Faculty By
Extent of Employment Mobility

Mobility	Region*							
	Northeast[1]		South		Midwest		Farwest	
	#	%	#	%	#	%	#	%
Average	1473	62	924	60	918	61	548	62
High Stability	447	19	292	19	333	22	150	17
High Mobility	474	20	322	21	248	17	185	21
TOTAL	3394	(100)	1538	(100)	1499	(100)	883	(100)

* non-significant

1. Vertical percentage only (rounded).

FOOTNOTES

1 John Pencavel, An Analysis of the Quit Rate in American Manufacturing Industry, Industrial Relations Section, Princeton University, Princeton N.J., 1970.

2 Randomization done by the Statistical Package for the Social Sciences, McGraw-Hill, 1970. One of the prime reasons for using a random sample instead of the complete population was to reduce cost.

3 Migration of Health Personnel, Scientists, and Engineers from Latin America, PAHO, World Health Organization, September 1966.

4 Post Doctoral Training in the Biomedical Sciences: An Evaluation of NIGMS Post Doctoral Traineeship and Fellowship Programs, National Academy of Sciences, National Research Council, 1973.

5 Anderson, Philip and Larson, Thomas "Mobility Characteristics of U.S. Medical School Faculty in Calendar 1971". AAMC Faculty Mobility Series, Report 1, Association of American Medical Colleges, Washington, D.C., 1974.

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