

FROM THE HEART: A CAREER IN NURSING

**Philip D. Gardner, Ph.D.
Research Administrator**

**Sue-Wen Lien
Research Assistant**

October, 1989

**Collegiate Employment Research Institute
Career Development and Placement Services
113 Student Services Building
Michigan State University
East Lansing, MI 48824-1113**

**Career Development and Placement Services
Division of Student Affairs and Services
Thomas D. Luten
Director
Michigan State University
East Lansing, MI 48824-1113**

Copyright: October, 1989

Price: \$5.00

MSU is an AffirmativeAction/Equal Opportunity Institution

A critical shortage of health care personnel, especially nurses, has received attention by both the federal government (Department of Health and Human Resources, 1988) and national and local media (Hubbell, 1989). Estimates from the Department of Health and Human Services place the shortage of nurses at about 200,000 registered nurses. Hospital administrators have hustled to redesign salary, benefit and work assignment packages in attempts to attract new nurses to their facilities. Annual starting salary offers have risen to as high as \$30,000 in some parts of the country (Ringold, 1988). Ancillary benefits expected from rising salaries are the expectations that more students graduating from high school will select nursing as a profession and that trained nurses who have left the field can be lured to return. In fact, several observers of this health care crisis contend that an actual shortage does not exist as a sufficient supply of trained nurses is available; they simply have to be enticed back into the hospitals (Ringold, 1988).

At the same time changes are occurring in the labor market several evaluations of the nursing profession have been completed on job satisfaction, professional opportunities, and career development options (e.g. Kramer, 1974, Ringold, 1988). Higher salaries alone will not necessarily bring nurses back into the hospitals. Nurses have long-standing complaints on working conditions and the lack of professional respect they find typical of their positions.

Using the career histories provided by a group of nurses who graduated from Michigan State University, a better understanding of how nurses view their profession was obtained. The results confirmed the existence of deep dissatisfaction with certain aspects of their work environment, the lack of career plans among various groups of nurses, and nurses' strong commitment to helping others. By examining entire career histories, the opportunity to substantiate career patterns typically pursued by nurses was made available. These patterns have often been alluded to in the popular literature but are generally not documented with a large sample or an extensive survey instrument. Career information can then be used by institutions to design appropriate policies and programs to attract and return nurses.

Participants

In 1986 a broad sample of Michigan State University alumni, representing ten graduating classes from 1952 to 1985, received a questionnaire that covered various aspects of their careers. Of the 7,848 respondents, 144 indicated that they had worked at one point in their career as a nurse. The majority of these respondents graduated from the College of Natural Science (57%) and, more recently, the College of Nursing (35%) which was established in 19 . The remaining respondents received their bachelor's degrees from the Colleges of Business, Social Science, Education, and Arts and Letters.

The sample was predominately a white (98.6%) female (95.8%), middle class group with a median family income between \$40,000 and \$50,000. The respondents' ages ranged from 23 to 57 (33% below 30 years of age, 38% between 30 and 39, 18% between 40 and 49, and 10% over 50) with a mean age of 35.56.

At the time of the survey, 76% of the respondents were married; 15% indicated that they were single. The remaining 9% were divorced, widowed or cohabitating. Approximately 41% reported that no dependents were living with them. For those with dependents, the average number living at home was 2.36. Nearly 43% of the respondents' fathers had attained a bachelor's degree or higher; 27% of their mothers had attained a

bachelor's degree or higher; and 76% of their spouses had attained a bachelor's degree or higher.

Of the 128 respondents who responded to the question on additional schooling beyond the bachelor's degree, 37% indicated that they had taken no classes after completing their degree. The remaining 63% had pursued courses with several outcomes. Slightly over 23% reported taking additional coursework for training purposes, or to keep current on developments in their field. Twenty-two percent (22%) completed master's degrees (MA or MS) or professional master's degrees (MSW or MBA). Three individuals earned doctoral degrees and three earned professional degrees (veterinarian, lawyer, and chiropractor).

Six individuals, those who entered nursing later in their careers, had received another bachelor's degree in addition to their nursing degrees. Twelve nurses (9%) had earned associate's degrees prior to completing their bachelor's degrees. It should be noted that students with two-year nursing degrees may be delayed transferring to the university; these students may come into the program with several years of prior work experience. This situation is mentioned, at this time, because these years of work experience were often entered in the respondents' career diaries, resulting in total years of work exceeding the number of years since the receipt of the nursing bachelor's degree.

The doctoral degree recipients were working in an academic environment (two) and in a nursing position (one). The master's degree recipients were found in nursing (4), teaching (3), and management (3). The professional master's recipients were in a variety of fields: nursing (7); teaching (4); therapist/counselor (3); management (1); systems analyst (1); and health technician (1).

School and Work

Before examining career paths nurses might follow, this section will briefly cover the general skills and competencies considered necessary for success in nursing and the general effectiveness of their undergraduate academic programs in developing these competencies. Kramer (1974) has contended that there exists a gap between the curriculum taught in nursing school and the realities of the work place. Her findings have suggested that a transition course, focusing on shifting the mental image of nursing held by students to a more realistic perception, representative of the work environment, would be helpful to bridge this gap. The questions used in this study cover general skills, not specific skills that may pertain to nursing. Nevertheless, these general categories parallel the major skill areas of nursing.

Participants were asked to rate the importance of sixteen selected skills to their career success and then indicate the effectiveness of their academic programs for providing these skills. Each item was rated on a five-point Likert scale. Factor analysis on the importance scale resulted in five general variables: Social Skills (cope with complex moral and ethical issues, sensitivity to feelings of others, utilize the political process, and place problems in historical, cultural, and philosophical perspectives); Communication/Decision-Making Skills (write effectively, communicate effectively both orally and interpersonally, acquire new skills on their own, evaluate alternative courses of action); Quantitative Skills (think analytically, utilize quantitative tools, solve complex problems); Work Skills (organize/supervise work of others and function as a team member); and Creative Skills

(formulate original ideas/solutions and convey meaning through artistic (creative) expression).

As the means in the following table indicate, the highest rated skills were Communication (mean = 4.45) and Work (mean = 4.35), both being very to extremely important. The other three skills were rated fairly important. How well did undergraduate programs develop these skills? The ratings showed that the programs were fairly effective in preparing students. Low effectiveness ratings ("somewhat effective") were reported for Creative (mean = 2.52) and Quantitative (mean = 2.65) Skills. The highest effectiveness ratings were received by Communication Skills (mean = 3.53). Even though effectiveness scores were highest for Communication and Work skills, the largest differences between importance and effectiveness were found for these two variables.

Career Skills/Program Effectiveness: Means (Standard Deviation)

Skills	Skills Important to Career Success	Effectiveness of Undergraduate Program to Develop Skill	Difference (I - E)
Social	3.64 (0.65)	3.03 (0.70)	0.61
Communication	4.45 (0.48)	3.53 (0.67)	0.92
Quantitative	3.10 (0.79)	2.65 (0.73)	0.45
Work	4.35 (0.69)	3.17 (1.00)	1.18
Creative	3.08 (0.79)	2.52 (0.85)	0.56

When comparing these scales across selected descriptor variables, few differences were observed for starting as a nurse (versus not starting as a nurse); always a nurse (versus those who took jobs outside the nursing profession); current position (not in workforce, working as a nurse, or not working as a nurse); and year of graduation. The one noticeable exception was older nurses (those who graduated 25 or more years ago) who rated quantitative skills much lower than more recent graduates.

The number of jobs a person held produced some variations. Individuals who held more than three jobs listed Social, Communication, and Quantitative Skills higher than the other groups and Creative Skills lower. The rating scores tended to be in better agreement for those who held only one job and those with two jobs. Holders of three or more jobs were generally more critical of their undergraduate education, except for Communication Skills.

Career Skills/Program Effectiveness by Number of Jobs Held: Means

Skill	IMPORTANCE		
	Jobs = 1	Jobs = 2	Jobs > 3
Social	3.06	3.58	3.67
Communication	4.44	4.25	4.53
Quantitative	3.04	2.99	3.15
Work	4.53	4.28	4.34
Creative	3.24	3.25	2.98
Skill	EFFECTIVENESS		
	Jobs = 1	Jobs = 2	Jobs > 3
Social	3.05	3.09	3.01
Communication	3.44	3.50	3.55
Quantitative	2.60	2.81	2.60
Work	3.34	3.23	3.12
Creative	2.64	2.60	2.48

Career Patterns

The work history diaries allowed respondents to provide information on ten jobs that they have held during their careers. These jobs could be a result of relocation, switching organizations, or entry and exit from the workforce. Changes in functional positions within the same organization were also permitted if these changes had an important impact on one's career. Full-time homemaking was considered a full-time job and could be included in a respondent's work history.

Job information solicited on the survey included occupation, type of employer, number of years employed, major work activity, geographic location, career prospects, underemployment, and employment status (full or part-time). A coding sheet provided the available responses for each of these headings. Space on the machine-scanned survey form did not permit additional questions about each separate job.

The average number of jobs held by the respondents was 3.71. The majority of nurses have held five or fewer jobs (83.9%) with two and four positions being the most commonly reported, at 23.8% and 21.0% respectively. Those who have only held one position generally were the most recent graduates; however one individual reported having only one job for 35 years. Slightly over 16% of the respondents had worked in six or more positions, with four individuals listing ten positions.

Number of Jobs Held and Average Tenure Per Job

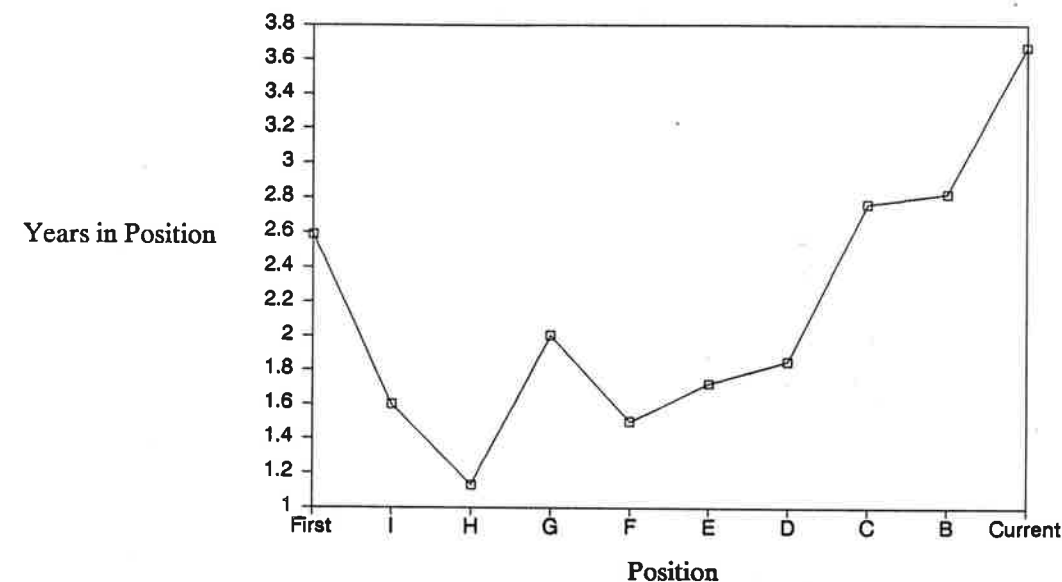
Number of Jobs Held	N	%	Mean Length of Time Per Position	Standard Deviation
1	17	11.9	5.24	8.00
2	34	23.8	3.99	3.80
3	22	15.4	2.77	1.79
4	30	21.0	2.32	1.61
5	17	11.9	2.40	2.06
6	4	2.8	2.33	1.28
7	9	6.3	1.75	0.90
8	3	2.1	1.83	0.85
9	3	2.1	2.11	0.49
10	4	2.8	1.60	0.98

As the number of positions held increases, the average number of years in each position decreased. For those individuals who have only held one position, the average length of tenure was 5.24 years. This number was strongly influenced by the individual who has held only one position for 35 years, as indicated by a high standard deviation. The drop in tenure was rather dramatic, dropping about one year per position, over the next three positions (jobs 2, 3, and 4). Upon reaching the fourth job held, respondents appeared to stay approximately two years in each subsequent position (jobs 5 through 10).

Another way to illustrate job tenure patterns is to examine the years spent in each position from the first position to the most recent. The accompanying graph depicts work history with initial job anchoring the left end of the horizontal axis and current employment anchoring the right end of the horizontal axis. Moving from left to right, the positions chronologically proceed from first to most recent. Eleven people, still in their first (initial) position, are categorized with initial position rather than current position.

Workers tended to work for their first employers for about two and one-half years. For those who made the most changes, the number of years spent in the next six positions ranged from one to two years. As individuals approach their current employment, the number of years in each position increases to approximately three years. For the current position, the average tenure was slightly over three and one-half years.

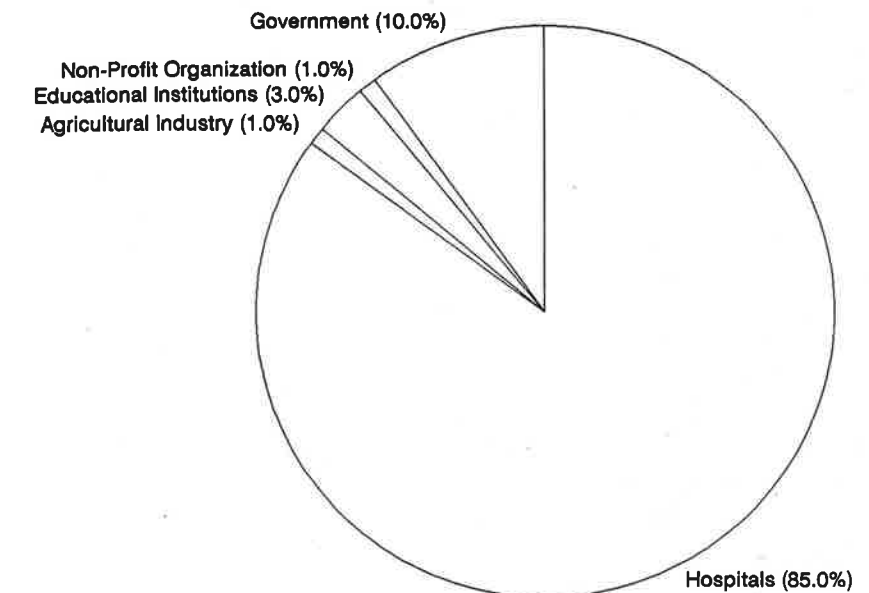
Job Tenure by Position



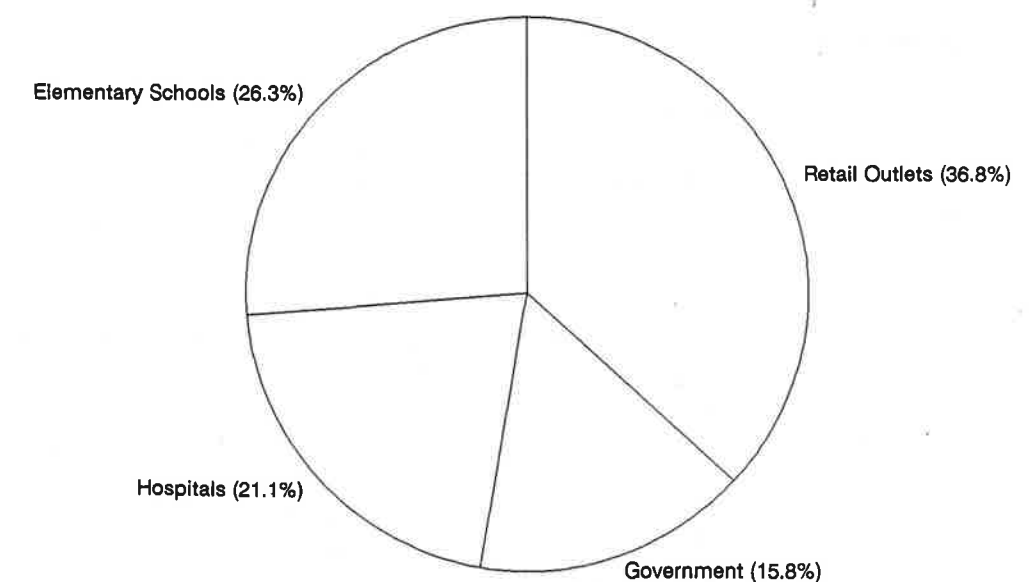
Graduate's First Job. One hundred thirty-eight (138) respondents reported that they entered the work force immediately after graduation; five were homemakers and one did not provide any work history for this period. Of the 138 entering paid employment, 110 listed their occupation as nurse, either licensed practical (5) or registered nurse (105). The remaining 28 listed a variety of fields including teacher, food and beverage servicer, retail sales, armed forces, health technician, urban planner, and musician, for example. Of these 28 individuals, 6 (21%) had received a nursing degree but were not employed in nursing in their first job.

The major employers of nurses were hospitals and clinics (85), government, primarily local (10), private practice (3), educational institutions (3), agricultural industry (1), and non-profit organizations (1). Those not in nursing were working for a wide variety of employment, including retail outlets (7), elementary schools (5), government (3), and hospitals and clinics (4). The work most often performed by nurses ranged from providing medical services (86), teaching and counseling (9), to sales and service (6). Non-nurses were in a wider range of activities but primarily teaching and counseling (8), sales and service (6), production (3) and "other" work activities (7).

Employers of Those in Nursing Positions (First Job)



Employers of Those Not in Nursing Positions (First Job)



Seventy-nine percent (79%) of the nursing graduates remained in Michigan for their first job with the Southwest and other Great Lake states attracting 9% and the remainder moving to various parts of the country. Slightly over 71% of the non-nurses remained in Michigan with 18% going to the Southeast states after graduation.

The vast majority of nurses (93%) felt that their first job was appropriate for their career prospects. The remaining nurses considered their jobs to be temporary until something better came along. In comparison, only 54% of those who did not start in nursing felt their jobs matched their career expectations while 46% indicated that their initial positions were interim or temporary until a better job could be found.

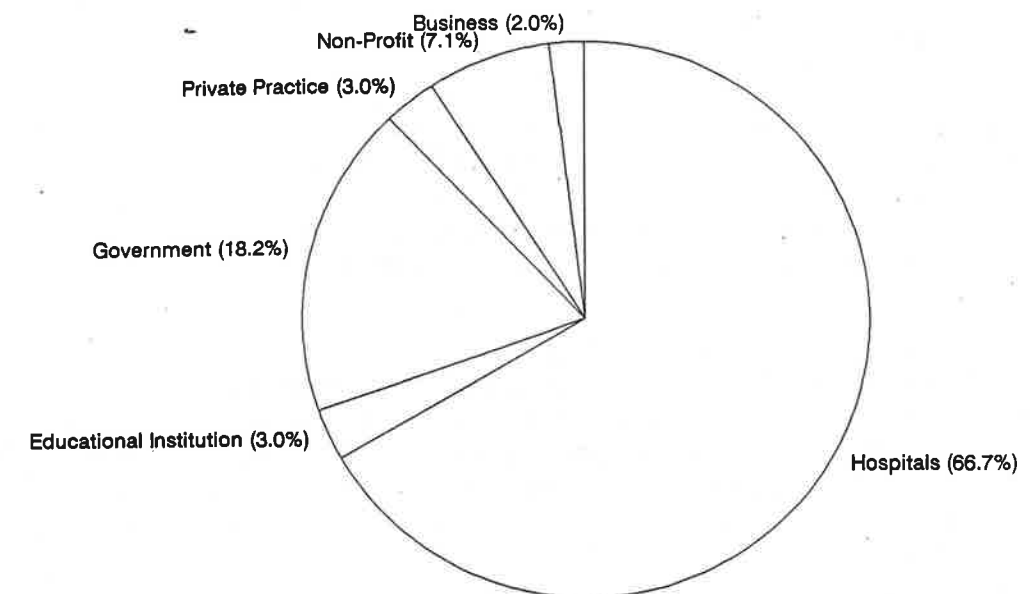
A common problem among some college graduates is frequent underemployment in terms of the skills required in initial positions obtained immediately after graduation. This situation was certainly true for the group that did not start in nursing. Approximately 62% considered themselves underemployed. For 35% the initial position they accepted was the only job they could find. The rest either felt underpaid or were attracted to certain aspects of the job even though they had more skills, or had inadequate experience for the job they wanted. For nurses, just the opposite was true. Over 84% felt that their position matched their skills. If nurses expressed concern about being underemployed, it was because they felt the pay was too low (6%), or they felt attracted to certain aspects of the job even though they had more skills than the job demanded (4%). Only a few reported that they took a job because it was the only job available or they had inadequate experience for the job they wanted. Only one individual (a non-nurse) reported that the first position accepted after college was a result of family obligations.

A final characteristic of the first position was full or part-time status. Nursing has traditionally been viewed as a career that allows for a flexible work schedule, including part-time positions. Interestingly, 94% of the nurses were working full-time while only 64% of the non-nurses were employed full-time. The high incidence of part-time employment for the non-nurse group may reflect the difficulty this group faced when making the transition from college to work.

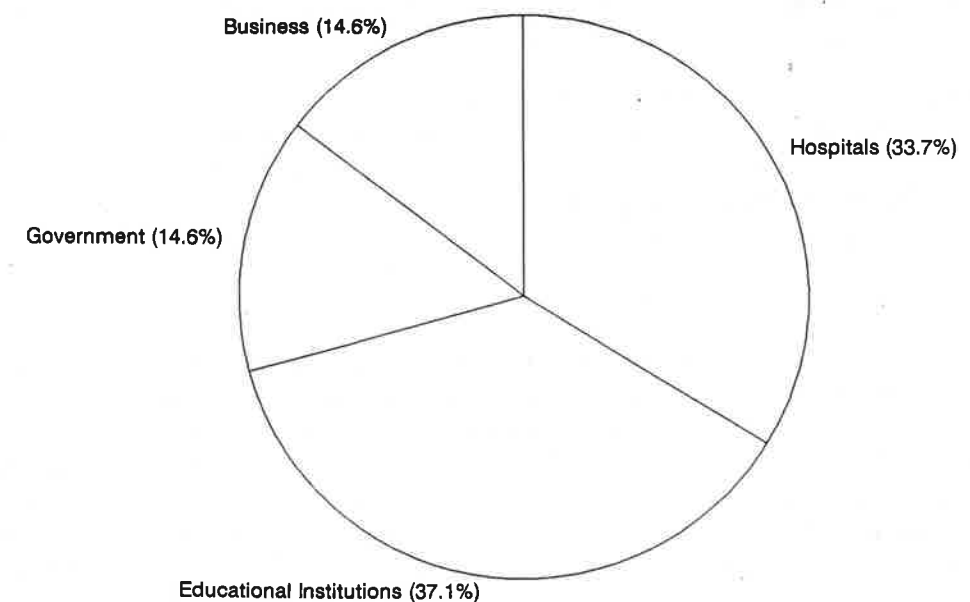
Current Employment. At the time of the survey, 13 respondents listed their present employment as homemaker, 11 were still working in their first job, and one person did not provide current employment information. The remaining 119 respondents were employed in nursing (75%) and non-nursing (25%) occupations. Non-nursing careers included teaching (43%), management (17%), health services (such as, health technician, therapist, counselor), professional occupations (lawyer, chiropractor, veterinarian), and a variety of other positions (such as systems analyst, receptionist, and sales).

The mix of employers that nurses were working for changed from their initial employment. Nearly 66% (59) were still working at hospitals or clinics. Other employers included government, primarily at the state level (18%), private practice (3%), non-profit organizations (7%), educational institutions (3%), and business (2%). Not listing nursing as one's primary occupation did not mean the person was not working for a hospital or clinic; nine (30%) of the non-nurses worked for this category of employer. Managers/supervisors and teachers were the occupations generally pursued in the hospital setting by non-nurses. The major employer of non-nurses, however, was educational institutions, especially at the post-secondary level (33%). Other employers of non-nurses were government (13%) and business (13%).

Employers of Those in Nursing Positions (Current Position)



Employers of those in Non-Nursing Positions (Current Positions)



Probably the biggest difference reported by nurses was the kind of work being performed. Only 61%, a drop of 20%, were involved in patient care. Slightly over 20% were teaching and 13% were managers of nursing units. The remaining nurses were involved in a variety of activities, including research, testing, consulting and development. Non-nurses, on the other hand, tended to group into teaching (50%) and management (20%). A few non-nurses were found in research, sales, consulting, and information services.

Over the years, these respondents have gradually dispersed throughout the country. The number residing in Michigan decreased to 65% of those working full-time. The Great Lake states and the Southeast attracted 10% and 8%, respectively. The remaining respondents were fairly evenly distributed throughout the rest of the country. The only major difference between nurses and non-nurses was a slightly higher percentage of non-nurses moving out of the state.

Comparing career prospects from the first job to the present job, a major change occurred among non-nurses. Only one individual felt that their current position had no career potential. This swing from 54% to 97% for those with positive expectations for their career was dramatic. For nurses the swing went in the opposite direction. Eighty-one (81) percent, down from 93%, considered their current job to be consistent with their career expectations. The remaining nurses indicated they were in temporary positions until a better job came along.

Another major shift for non-nurses occurred with respect to their perception of their underemployment. Slightly over 83%, up from 35% at the first job, believed they were not underemployed in their current positions. In nursing, however, the number considering themselves underemployed dropped to 70%, or a decline of 14%. The primary factors cited by nurses for underemployment were: underpayment for work performed (14%), the attraction of certain aspects of the position (5%); and family obligations (5%). The number of individuals reporting family obligations as a major influence on their job increased to 5% of all respondents, with nurses being more likely to use this reason.

Nurses were much more likely to be found in part-time positions than non-nurses, with 33% and 20%, respectively. Again a change in work behavior is noted for these two groups. It appeared that the composition of the two groups had changed. Most of the non-nurses, found in the first job, moved into nursing while the majority non-nurses in the current position had left nursing. This movement may reflect a transition into positions that were more suited to the individual's aspirations as well as better suited to other aspects of a person's lifestyle.

Career Patterns. Various observers who have monitored nurses' careers have noted that many nurses tend to hop from job to job. This pattern typically expresses dissatisfaction with the work environment or denotes interruptions to meet family obligations. Kramer (1974) conducted a detailed analysis of the early careers of nurses in her study on the conflict between professional training at the university and the work environment. In order to distinguish between different types of nurses, Kramer created a topology of career patterns, based on her observation of nurses employment patterns.

- **Rutters:** Members of this group do not change jobs very often, averaging approximately 2.5 jobs during the first three years after graduation. The basic reasons for changing jobs included better pay, better hours, and a change in

spouse's employment. They are not professionally involved and generally work to provide support for their families or themselves. Over time this group changes very little with few dropping out of nursing. This type of nurse is best described as "in a rut" (p. 82) or "burned out in sustained apathy" (p. 83); they lack interest and enthusiasm for nursing.

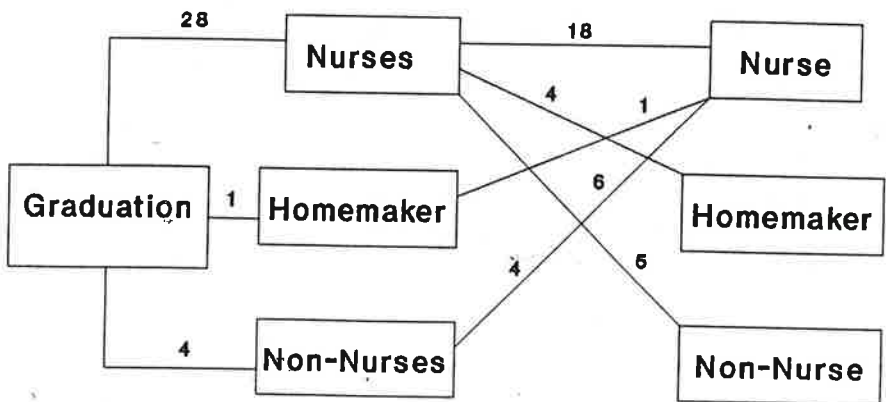
- **Organizational Nurses.** Nurses who have a strong bureaucratic or organizational perspective generally have longer tenure in their jobs (median six years) and are likely to be in management or supervisory positions. Job movement resulted from promotions and transfers within the organization, rather than job changes. In fact, this group displayed the fewest moves since graduation, averaging 1.9. Even though these nurses were not professionally involved in nursing associations and did not keep up on developments in the field through reading, they expressed involvement and commitment to the job. There was a very low exodus from this group over time and if a member did leave it would most likely be into teaching. This group has been summarized as hard working, skilled performers who value the system, yet wanted few demands for professional performance placed upon them (p. 84-85). In other words, they liked their job, but were not strongly enthusiastic about nursing in general.
- **Lateral Arabesques.** Typically employed as staff nurses, this group is identified as job hoppers, with as many as two to nine jobs in two years. Individuals in this group expressed a strong desire to return to school and then enter the teaching profession. And many of them did just that! A high percentage leave nursing (30% return to school) and if they continue in nursing, seldom do they become managers. This group stands out because of the high degree of conflict between the ideals and professional aspirations learned in school and the bureaucratic realities of the work place. Because they do not understand the work culture, lateral arabesques usually withdraw from the practice of nursing to a position where they can still participate in the profession. These nurses really enjoy nursing, but disapprove of the way hospitals provide nursing care. Not being able to handle the conflict between the two cultures (school and work), they become highly mobile, carrying their frustration from job to job.
- **Bicultural.** Nurses in this group demonstrate an ability to operate effectively within both the professional culture obtained from school and the work environment. Bicultural nurses tend to be in autonomous clinical positions, usually staff, not management. They have made relatively few job changes, averaging about three, but have made numerous job transfers. Nursing, for them, is a very satisfying career where they are able to use conflict to their advantage. High membership in professional organizations and regular reading of current issues in nursing are characteristic of this group. Many members of this group expressed an interest in returning to school, but differ from the lateral arabesques group in that they have several years of work experience before returning to school. Rather than teach, this group would be more likely to use their degrees as clinical nurse specialists. If members of this group drop out, it is usually to teaching, however. This group is seldom satisfied with nursing and health care as it is currently delivered and work within the system to make it better.

Kramer's topology cannot be used to describe accurately the sample used in this study, because an insufficient number of similar questions were used to permit group sorting.

However, Kramer's groupings provide some insights into possible career paths followed by nurses that can be extended to this study. Specifically, we can look at nurses who have stayed in the same types of jobs, those who have job-hopped numerous times, nurses who have left to teach, and those who have left nursing completely.

Career Histories. Using the career diaries completed by respondents, different career paths were developed. Basically these paths were constructed based on the number of jobs an individual held. The easiest paths to construct were those for individuals who held three or fewer jobs. These paths provided some insight into early career adjustments, as these respondents were likely to be recent graduates. For more than four positions, numerous paths were identified, but were collapsed into six practical career avenues for discussion purposes.

- **Only one job.** Eleven individuals indicated that they were still employed in their first job. Five members of this group had graduated the year prior to the survey though two individuals reported more than one year of work experience. (They were working as LPN's while in school and retained the same position after graduation.) Another three graduated in 1983 and reported three to five years of experience. The three remaining individuals had five to 35 years of work experience. For several individuals their work activities, as managers and teachers within a hospital, suggest that they have likely been promoted within the same job and not reported these promotions as career moves. It is too early to tell if the majority of this group are "rutted" in their jobs, because of they just recently graduated. For five members with tenure of more than five years, they may have become locked into their positions. It should be noted that two of these respondents were working only part-time. All respondents indicated that their positions were definitely appropriate for their careers. Two recent graduates complained about the amount of pay they received for the job they performed.
- **Two jobs.** The accompanying diagram illustrates the career paths of those respondents who have held only two jobs. At the time of graduation, 28 individuals went directly into nursing, one was a homemaker, and four were in non-nursing occupations (artist, retail sales, food service, and the military). When changing jobs, all four non-nurses entered nursing, as did the homemaker. Of the 28 nurses, 18 continued in nursing, four became homemakers, and five opted for jobs outside nursing. Several of the jobs outside nursing were still health related (health technician and veterinarian); the other jobs involved local government (work activity not specified), systems analyst, and teacher (one at the secondary level and one at the post-secondary level).



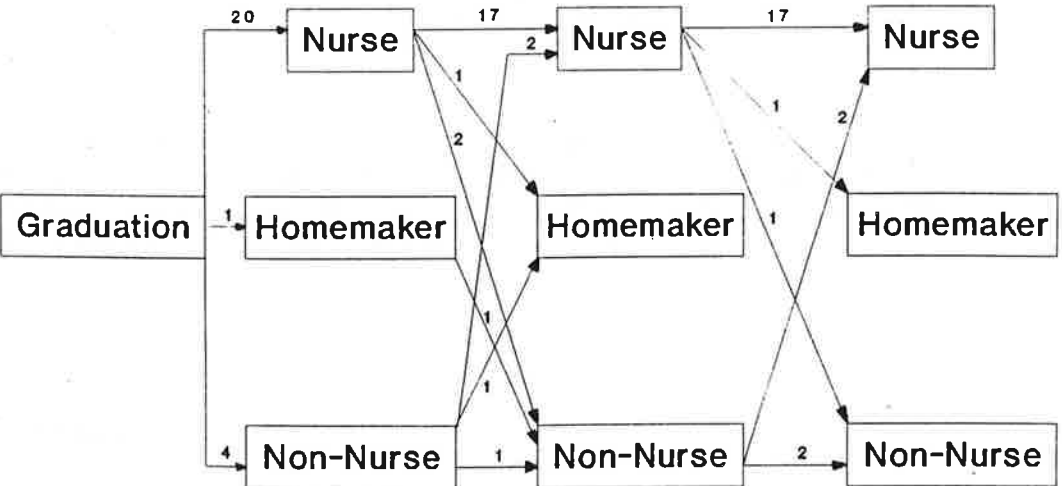
Only eleven members of this group were recent college graduates from the classes of 1983 and 1985. Nearly 72% of this group graduated from five to twenty years prior to the initiation of this study. In other words, this group was well established in their careers.

Some interesting changes occurred between the first and second jobs of these respondents. Only three individuals reported working part-time in their first positions; for seven individuals part-time positions were preferred in their second positions. A number of job changes occurred because of relocation as seven families moved to different parts of the country. Job activities also changed to some extent. In the first job, 22 individuals were providing patient care, three were in sales, two in production work, two in teaching, and one each in consulting and homemaking. In their second job, only 16 listed their job functions as patient care while eight listed teaching, three were homemakers, two were dietitians, and three were hospital managers.

- **Three Jobs.** The addition of another job makes the paths one can take a little more complicated. From observing the paths taken by the 25 respondents who had held three positions, it was interesting to note that few strayed away from nursing. Twenty individuals went directly into nursing after graduation. Of these, 17 continued in nursing in their second job while one became a homemaker and two others went into non-nursing jobs. With regards to the third position, 15 of those who started in nursing remained in a similar position; in other words, 60% never left the nursing profession.

One graduate chose to stay at home immediately after graduation. Upon entering the work force, this individual entered a non-nursing position. Her third position, however, was in nursing.

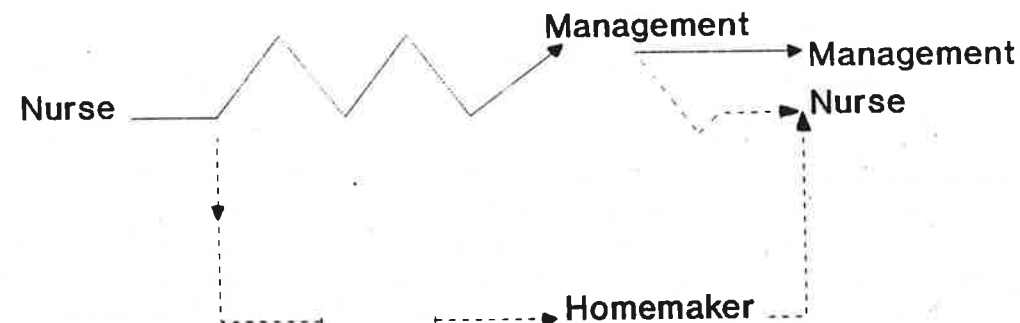
Four graduates accepted non-nursing positions after receiving their degrees. Two of these individuals pursued nursing in their second position. The remaining two went into nursing when taking their third position. As the diagram below illustrates, the movement between positions was primarily within nursing. Only one of the non-nursing positions is outside a hospital or medical facility.



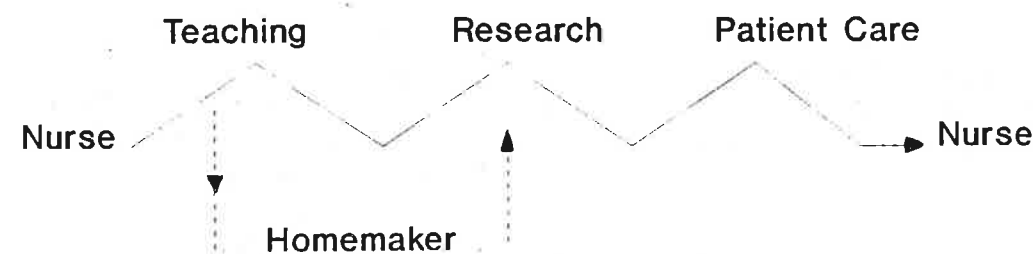
- **Four or More Jobs.** For individuals who held four or more positions, the career paths were generalized into the most common patterns. These patterns are illustrated below.

The three most common were:

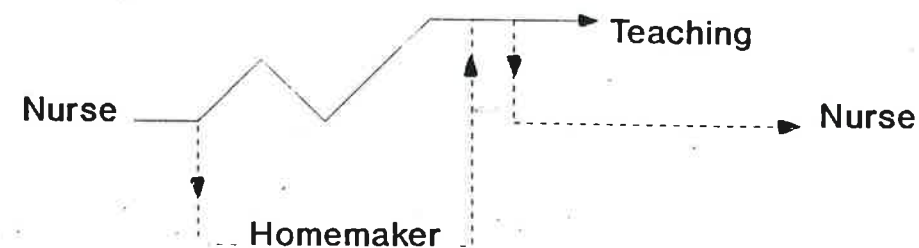
- (1) Graduates began their careers in nursing, eventually becoming managers after changing positions within nursing several times. Once a manager, two courses were followed: (a) the individual continued in a managerial position, or (b) the individual returned to a staff nursing position. The only time any of these individuals left the hospital/clinic environment was for homemaking responsibilities.



- (2) Graduates changed positions (work activities) regularly from teaching to research to patient care (or some variation), never leaving the hospital setting, except for homemaking responsibilities.

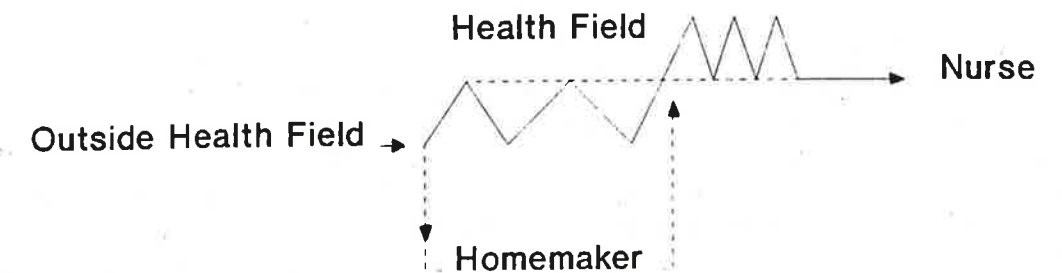


- (3) Graduates who began in nursing quickly left for teaching positions outside the hospital, usually at the post-secondary level. Individuals in this group have either continued teaching or returned to hospital staff positions after terminating their teaching assignment. The only non-nursing positions reported were for family obligations.

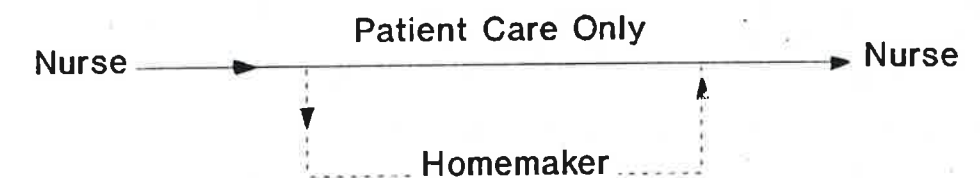


Several patterns that occurred on a regular basis were:

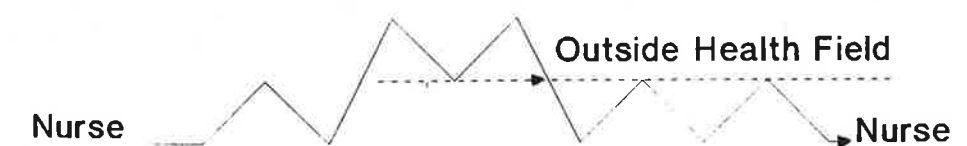
- (4) Graduates who began working in positions outside the health field; holding several of these types of positions prior to becoming a nurse. Once they entered nursing, they have stayed but may have held several different positions. Several respondents reported interruptions in work for family responsibilities.



- (5) Graduates who have worked exclusively in patient care during their entire careers, except for breaks for family responsibilities.



- (6) Graduates who began their careers in nursing, but after several jobs left the health field. After several non-nursing positions, they returned to nursing and have held several nursing positions.



Three other patterns also emerged with only a few individuals in each one. Included in these groups would be those who: (1) moved from a position outside the health field into nursing and then either (a) left the health field (four individuals) or (b) found another job in the health field (four individuals); and (2) began in a health-related position and moved into nursing (two individuals).

Career, Work and Life Satisfaction

The career histories of these nursing graduates revealed that only a few remained in the same position for a long period of time. Transitions from one job to another could have resulted from (1) personal career planning, or (2) dissatisfaction with one's work environment. If job changing is a result of effective career planning, then individuals should show a high level of career involvement. Given Kramer's results, one would also expect that the work environment contributed to the decision to switch jobs. This section considers the career involvement of the individuals in this study and also their perceptions of their work environment.

Career Planning

Career effectiveness has been defined by Hall (1976) as having four dimensions: (1) performance, (2) attitudes, (3) adaptability, and (4) identity. Performance is commonly measured in terms of salary and position in the organization. Attitudes capture how the career is viewed by the individual. Adaptability refers to an individual's ability to deal with change and keep atop of advancements in one's field. The degree of awareness of one's own abilities, values, and interests is measured by identity.

Gould's (1979) scale for career planning was used to measure effectiveness. Scales were composed of 21 statements in a 6-point Likert format. The statements were anchored at one end by "strongly disagree" and at the other by "strongly agree".

The extent of career planning was measured using a six-item scale. This scale captured: (1) the extent to which career plans exist; (2) the clarity of the plans; (3) the frequency that career plans are changed; and (4) the presence of a strategy for implementing the plan. A high score on this scale would indicate that the individual is involved in self-initiated career planning. Coefficient alpha computed for this scale was .88, indicating an acceptable level of internal consistency.

The level of career involvement was measured on an eight-item scale. This scale captures the extent to which one's career is a central focus of one's identity. A high score on this scale would indicate a close parallel between one's career and one's identity. Coefficient alpha for this scale was .84.

A four-item scale was used to measure identity resolution. Identity resolution relates to the individual's understanding of their own values, interests, and capabilities. Coefficient alpha for this measure was .78.

Finally, adaptability was measured with a three-item scale. This scale captures the ease with which individuals adapt to changes in their jobs. Coefficient alpha for this scale was .71.

The means and standard deviations for each scale variable are reported in the following table. Participants scored highest in career involvement, suggesting that nurses are heavily

vested in what they do. When compared to results for other groups reported in the literature (i.e. Gould, 1979), this group of nurses had extremely low scores across all dimensions of this instrument. Particular attention needs to be given to career planning and adaptability where the scores were noticeably low. Nurses in this sample apparently have no definite career plans nor do they adapt easily to changes in their jobs.

Means and Standard Deviations for Career Variables

	Mean	Standard Deviation
Career Planning	16.20	3.39
Career Involvement	24.49	4.87
Identity Resolution	13.47	2.60
Adaptability	9.37	1.98

Zero order correlations between the scale variables and a group of selected descriptor variables can be found in the next table. One hypothesis suggests that measures of career effectiveness (career performance, career involvement, adaptability, and identity) would be positively related to the extent of career planning reported by participants. The correlations generally support this hypothesis. Correlations indicate that career planning was positively related to involvement ($r = .39, p .001$), identity resolution ($r = .51, p .001$), and adaptability ($r = .42, p .001$). Level in the organization (whether the person was ever a manager or not) did not appear strongly correlated. The only other variable that appeared significant was whether the individual was presently a nurse. The negative sign before the correlation indicates that those who were currently not in nursing had higher career planning scores ($r = -.18, p .05$).

Correlations for Career Scale Variables

	1	2	3	4	5	6	7	8	9
Career Planning	--								
Involvement	0.39 **	--							
Identity Resolution	0.51 **	0.63 **	--						
Adaptability	0.42 **	0.56 **	0.69 **	--					
Management	-0.05	0.17 *	0.03	0.09	--				
Age	-0.01	0.07	0.15	0.06	0.09	--			
Number of Jobs	-0.06	0.08	0.17 *	0.16 *	0.20 *	0.39 **	--		
Started as a Nurse	0.08	0.09	-0.06	0.08	0.16 *	0.09	-0.05	--	
Always a Nurse	-0.16	0.09	-0.19 *	0.15	-0.02	0.26 **	0.42 **	0.49 *	--
Currently a Nurse	-0.18 *	0.05	-0.06	-0.15	-0.13	-0.33 **	0.29 **	-0.01	0.58 **

* $p < .05$

** $p < .001$

These variables were included in a step-wise multiple regression with Career Planning as the dependent variable. Each of the four dimensions of career effectiveness contributed to the explanation of the difference in the extent of career planning among subjects of this sample. The following table reports these coefficients: involvement (Beta = .18, p .03); identity resolution (Beta = .42, p .001); adaptability (Beta = .13, p .10); and management (Beta = -.19, p .06). Several other variables also contributed significantly, including: Age (Beta = -.10, p .05) and Currently in Nursing (Beta = -.22, p .01). The largest factor contributing to the explanation the variation in career planning was identity resolution with a partial R² of .32 or 32% of the variance. Those participants with high understanding of themselves had higher career planning scores.

Independent Variable	Change in R ²	Total R ²	Beta	F to Enter	Significance
Identity Resolution	0.32	0.32	0.42	59.93	p < .001
Adaptability	0.03	0.35	0.13	5.86	p < .01
Involvement	0.02	0.37	0.18	3.70	p < .05
Management	0.01	0.38	-0.19	2.91	p < .09
Currently a Nurse	0.02	0.40	-0.22	3.64	p < .06
Age	0.02	0.42	-0.01	4.70	p < .04

Job Satisfaction

A 42-item index of organizational reactions (IOR) scale that measures eight components of work satisfaction within an organizational context (Smith, 1976) was employed in this study. The eight sub-scales include: Supervision, Company Identification, Kind of Work, Amount of Work, Co-workers, Physical Work Conditions, Financial Rewards, and Career Future.

In nearly all facets of the work environment, all respondents expressed some dissatisfaction, especially with supervisors, amount of work, physical work conditions and financial rewards. The one apparently positive aspect of work was one's co-workers. Another interesting insight from these measures was the lack of strong identification with the organization employing these individuals.

Means and Standard Deviations for Work Satisfaction

	Mean	Standard Deviation
Supervision	2.45	0.92
Company Identification	2.77	1.04
Kind of Work	2.59	0.82
Amount of Work	2.54	0.91
Co-workers	2.96	0.31
Physical Work Conditions	2.54	0.82
Financial Rewards	2.55	0.92
Career Future	2.65	0.92

Comparisons of scores across various groups, e.g., year of graduation, left nursing versus always a nurse, and started versus didn't start as a nurse, showed very few differences. Those individuals who left nursing tended to have slightly higher scores across all facets; yet, even for these participants, satisfaction did not improve significantly after leaving the nursing profession.

Strong differences were noted when a comparison was made by number of jobs held. Individuals who only held one job were very dissatisfied with nearly every aspect of their work, except for co-workers.

	One Job	Two Jobs	Three or More Jobs
	Mean	Mean	Mean
Supervision	1.98	2.68	2.46
Company Identification	2.30	2.89	2.81
Kind of Work	2.13	2.72	2.62
Amount of Work	2.14	2.58	2.59
Co-Workers	2.98	3.00	2.94
Physical Environment	2.07	2.66	2.58
Financial Rewards	1.99	2.63	2.62
Career Future	2.19	2.73	2.69

Interestingly, there were very small differences in the scale scores between those individuals who held two jobs and those who held three or more jobs. Two job holders expressed slightly higher satisfaction on nearly every facet, however.

A more general measure of job satisfaction, the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Davis, England and Lofquist, 1967), was also included in the survey. This measure contained 19 items that formed two sub-scales: intrinsic job satisfaction and extrinsic job satisfaction. Extrinsic job satisfaction focuses on job facets like pay and supervision that are provided by, or controlled by, the organization. Intrinsic job satisfaction is a variable that focuses on the work itself, reflecting the individual's knowledge, skills and abilities.

Extrinsic job satisfaction was measured by 6 items from the MSQ. Cronbach's alpha for this scale was .80. The intrinsic satisfaction scale was comprised of 11 items from the MSQ. Cronbach's alpha for the intrinsic scale was .84.

Mean Scores on MSQ Scales

Intrinsic Satisfaction	3.79
Extrinsic Satisfaction	2.94
Total Satisfaction	3.51

Intrinsic job characteristics were the most satisfying aspects of work for these participants. Their work environment, however, was perceived as slightly dissatisfying. More striking differences were found when comparing groups using this measure than the IOR job satisfaction scales.

Year of graduation and whether graduates started in nursing or moved into nursing from another field made no significant difference on the internal or external scores. The number of jobs held did make a difference. Individuals who only held one position scored significantly lower than the other two groups. One-job holders had a particularly negative view of their work environments. These results serve to confirm in part Kramer's work that rutted individuals have higher negative feelings about their work-place. These scores may also suggest that more recent graduates are frustrated and ready to change jobs. Job-hopping is initiated in response to an incompatible work environment.

For those who have always remained in nursing, scores on the two scales were significantly lower when compared to those who have taken positions outside nursing. Kramer pointed to this pattern by showing that teaching and other types of health positions were quickly obtained by those who had experienced a high degree of conflict within their work environment. Outside positions proved to be more compatible with the desires of the individual. When they eventually re-entered nursing, their view of the work-place and their internal satisfaction remained positive.

The final significant comparison was between individuals who were working as nurses and those working outside nursing. While agreeing closely on their internal satisfaction, nurses were less positive about their external environment than non-nurses.

Comparisons on the Minnesota Satisfaction Scales (Means and Standard Deviations)

	Internal Satisfaction	External Satisfaction	Total Satisfaction
YEAR OF GRADUATION			
1952-1962	4.00 (1.07)	3.05 (1.30)	3.75 (1.03)
1967-1979	3.79 (1.22)	3.04 (1.19)	3.52 (1.17)
1981-1985	3.71 (1.15)	2.79 (1.13)	3.41 (1.07)
NUMBER OF JOBS HELD			
One	3.17 (1.91)**	2.31 (1.51)**	2.87 (1.74)
Two	3.83 (1.09)	3.04 (1.16)	3.58 (1.03)
Three or More	3.87 (1.01)	3.01 (1.11)	3.59 (0.98)
FIRST POSITION			
Started Outside Nursing	3.94 (1.68)	2.88 (1.17)	3.61 (1.03)
Started in Nursing	3.74 (1.19)	2.96 (1.20)	3.48 (1.14)
ATTACHMENT TO NURSING			
Took Positions Outside Nursing	3.96 (0.94)	3.07 (1.06)	3.67 (0.92)
Always a Nurse	3.62 (1.33)*	2.82 (1.27)*	3.36 (1.25)
CURRENT POSITION			
Non-compensated	2.34 (2.14)	1.66 (1.58)	2.11 (1.93)
Outside Nursing	4.22 (0.42)	3.47 (0.90)	4.01 (0.44)
As a Nurse	4.03 (0.47)	3.11 (0.87)**	3.72 (0.51)

** p < .01

* p < .05

(Individuals in non-compensated positions were not included in the means comparison tests.)

Career Plateaus and Job Success

Before concluding this section, two additional measures will be introduced that reveal more about the individuals' perception of their career success. The first concept is career plateauing. A career plateau describes an individual who is unlikely to receive future promotions in an organization's hierarchy. Several questions were included in the survey to measure individuals' perceptions of their promotion possibilities and the rewards available for hard work.

The average score on the career plateau scale was 2.00 for all participants. This low score indicated that nurses found themselves stuck at the same level with limited opportunities for moving ahead in the organization. Plateau scores, comparing various groups, are reported in the following table. Only two significant differences were found. Individuals who have held only one job have significantly lower scores than those who have held three or more. Nurses who have held all their positions in nursing have significantly lower scores ($p < .01$) than those who have taken some of their positions outside nursing.

There was no difference between those with current employment outside nursing and those with current employment in nursing. Thus, simply moving to a position away from the hospital does not insure that careers will advance. These results, in light of the earlier results on career planning, strongly suggest that nurses are very passive when it comes to dealing with their careers.

Career Plateau and Job Success Means With Standard Deviations in Parentheses

	n	Plateau	Job Success
Overall	146	2.00 (0.72)	3.81 (1.09)
YEAR OF GRADUATION			
1962 or Earlier	19	2.19 (0.30)	3.96 (1.08)
1967 to 1979	71	2.01 (0.69)	3.83 (1.15)
1981 to 1985	56	1.92 (0.69)	3.74 (1.03)
YEAR OF GRADUATION			
One	16	1.77 * (0.98)	3.27 (1.68)
Two	34	1.92 (0.62)	3.80 (1.06)
Three or More	95	2.07 (0.71)	3.90 (0.96)
FIRST POSITION			
Start Outside Nursing	33	2.12 (0.77)	3.90 (0.98)
Started in Nursing	113	1.96 (0.70)	3.78 (1.15)
ATTACHMENT TO NURSING			
Took Positions Outside Nursing	69	2.11 (0.68)	3.94 (0.86)
Always a Nurse	77	1.90 ** (0.75)	3.69 (1.26)
CURRENT POSITION			
Outside Nursing	30	2.13 (0.68)	4.21 (0.55)
As a Nurse	99	2.12 (0.44)	4.00 (0.46)

* Significantly different from the group holding three or more jobs at $p < .10$

** p < .001

Consistent with previous high scores for internal job satisfaction, these participants consider themselves to be quite successful at their work. This belief is held irrespective of year of graduation. Differences did appear for nurses who held only one position, those who started in nursing, and those who were always a nurse, as they rated themselves slightly lower on success measures. The only group that scored low on these measures was comprised of individuals who were no longer active in the workforce.

Life Satisfaction

A career is an essential part of a person's life, as the high scores for congruence between career and personal identity indicated. An individual's feeling about work can easily affect his/her view of life in general. To determine the role of work in a person's total life, several questions were included that measured (1) the level of satisfaction with various facets of a person's life and (2) the priority an individual would place on a set of personal goals. Each set of questions included work facets or goals, as well as family and personal elements.

The first set of questions contained fourteen items, measured on a five-point Likert scale from "Not Satisfied" to "Extremely Satisfied." The means for each life facet are found below. Ratings approaching the very satisfied level were reported for life outside work (mean = 3.58), family life, (mean = 3.67), general level of happiness (mean = 3.65), and overall health status (mean = 3.64). Satisfaction with their current job was close behind (mean = 3.42). Areas where individuals showed dissatisfaction included amount of leisure time (mean = 2.43), level of physical activity (mean = 2.65), and degree of physical fitness (mean = 2.48).

Means for Life Satisfaction Measures

Life Facets	All	One Job	Two Jobs	Three or More Jobs
Life Outside Work	3.58	3.72	3.82	3.46
Health Lifestyle	3.40	3.67	3.62	3.26
Family Life	3.67	3.72	3.94	3.55
Quantity of Leisure Time	3.14	2.89	3.35	3.11
Amount of Leisure Time	2.43	2.33	2.76	2.33
General Happiness	3.65	3.89	3.91	3.51
Level of Physical Activity	2.65	2.56	2.82	2.61
Degree of Physical Fitness	2.48	2.56	2.76	2.36
Geographical Area Where you Live	3.38	3.22	3.62	3.33
Climate Where you Live	3.08	2.78	3.24	3.08
Ability to Cope With Stress	3.24	3.33	3.18	3.24
Social Life	2.99	3.00	3.26	2.88
Current Job	3.42	3.50	3.44	3.40
Overall Health	3.64	3.72	3.94	3.51
	3.20	3.21	3.40	3.12

Means for life satisfaction facets were compared across different descriptor variables where very few differences were found. The exception was comparisons made by number of jobs held. The means for this group are also included in the above table. Those who held three or more jobs generally rated their satisfaction lowest across most facets. In all but a few cases, two-job holders have had the highest satisfaction scores. While job-hopping may alleviate the immediate frustration stemming from the work environment, the practice does not necessarily contribute positively to other facets of one's life. Simply changing jobs does not guarantee that a person's life will be better.

The final exercise was a bidding game where participants were given 100 points to distribute, as they chose, across nine personal goals covering various aspects of their lives. While family goals received the highest allocation of points, irrespective of comparisons, a number of interesting differences were uncovered. Some differences were expected, such as age. For instance, older and younger participants placed slightly lower priorities on family; older individuals distributed points equally over more goals than other groups; and younger nurses placed a higher priority on leisure time.

As the following table indicates, the differences by Current Work Status, Number of Jobs Held, and Always a Nurse provided some interesting insights into nurses and their priorities in life. Clearly, family was the most important aspect. However, those who had held only one job placed slightly more emphasis on salary and leisure time. Those individuals who held two jobs were much more focused on family goals.

For individuals not working as a nurse, family goals were important, but about 4% lower than for nurses. Non-nurses placed higher priority on financial resources and professional recognition than other groups. Similarly, those who left nursing at one time were more interested in finances and professional recognition.

Distribution of 100 Points Across Life Goals

	All Partici- Pants	Start as Nurse		Always a Nurse		Not Working	Not in Nursing	Nursing	Jobs Held			Year of Graduation		
		No	Yes	No	Yes				1	2	>3	1952- 1962	1967- 1979	1982- 1985
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Financially Well-Off	14	15	13	16	12	13	16	13	18	11	14	13	15	13
Community Leader	2	3	2	3	2	1	2	2	3	2	2	3	1	3
In Business	3	3	3	2	3	3	3	2	3	2	3	4	2	3
Raising a Family	32	32	32	30	34	36	28	32	30	37	30	29	33	31
Leisure Activities	13	14	13	12	13	14	12	13	15	13	12	12	12	15
Professional Recognition	9	7	10	11	8	5	13	9	7	8	10	10	10	9
Religious Commitment	8	7	8	7	8	10	8	7	9	9	7	9	7	8
Public Service	6	7	6	7	5	5	5	7	4	6	6	8	6	6
Health Status	12	12	12	11	12	11	10	12	7	12	13	11	12	11

Discussion

The work histories provide a unique opportunity to survey the career paths and outcomes of a select group of nurses. Kramer's topology captures many of the participants in this study. It may be difficult to distinguish the organizational and bicultural nurses; but the "rutted" nurses and the job-hoppers stand out. In addition to tracking career paths, this investigation provided insights into the perceptions nurses held of their profession. From this perspective, some possible solutions to the nursing shortage emerge.

"People are attracted to nursing by the prospect of helping people get well" (Hubbell, 1989). From this analysis, it is evident that nurses continue to perform their jobs because of the high internal satisfaction they receive. Clearly, nurses offer their service from the heart. No other rewards, financial or organizational, significantly emerge from this study as work motivators. Maybe, in the scheme of things, these latter factors are less important in providing health care.

Nevertheless, the work environment continues to deteriorate for nurses. With fewer nurses available to fill positions, patient care suffers as available staff becomes stretched thin simply providing basic care. Budget cuts further exacerbate the situation by eliminating support personnel, thus requiring nurses to pick up extra duties. Paper work, required by federal and state governments, has also increased, taking up additional precious time. Time pressures, inadequate patient care, low pay, and demeaning tasks create a very negative work environment. To reverse the nursing shortage, the image of nursing and the organizational context of work need to be changed. Specifically, the issues of compensation, responsibility and involvement warrant attention (Hubbell, 1989).

These challenges will have to be addressed at various levels. The medical institutions will have a major role in correcting the work environment. The question of compensation presents an interesting dilemma. Starting salaries at the bachelor's level are generally among the highest of all university majors (Gardner and Hwang, 1987). However, salary ranges for nurses quickly reach a maximum, usually within seven to ten years. The American Nurses' Association reports that nurses can expect their salaries to increase by approximately 36% during their career while computer programmers' will increase slightly over 100% and accountants' nearly 200% (Hubbell, 1989).

A close examination of nursing salary range reveals that entry level salaries range from \$22,000 to \$26,000. Seven years later salaries may approach \$35,000. After controlling for tenure and inflation, the difference between starting and maximum salary would be quite small.

Hospitals and other medical institutions have the major responsibility of improving nurses' salaries. In spite of the restructuring of payment schedules by Medicare and private insurers, hospitals need to prioritize the role of nurses in patient health care and pay them accordingly. The compensation issue may not be as difficult to address as those of responsibility and involvement.

Rather than demeaning the nurses' work assignments by adding housekeeping duties and routine tasks, the responsibilities of nurses should be enhanced to the level of primary health care provided. Nurses are there to help patients recover and improve their health. A fragmented health delivery system where a nurse only provides specific services

misutilizes the strengths of the nurse. To allow nurses to have complete responsibility for a patient requires involvement with physicians as partners. As partners, nurses participate in the decisions for the care of patients. By increasing responsibilities and enabling nurses to be involved in total health care, hospitals/medical facilities can alter the organizational context of work, where, over the long term, nurses can receive as much external satisfaction from work as they presently do from their internal satisfaction. In addition, the loyalty to the organization will probably be enhanced.

Is achieving this type of work environment feasible? According to Hubbell (1989), several hospitals provide this type of climate. Boston's Beth Israel Hospital serves as an excellent example. In this institution, nurses are assigned a limited number of patients, working closely with doctors in designing health care plans and monitoring patients. Nurses are salaried at Beth Israel with starting salaries at approximately \$31,500 and top salaries at \$63,000. Over a career, a nurse can realize a 100% increase in salary without having to change jobs constantly or leave patient care for teaching or administration. To achieve a system like Beth Israel's means that long held beliefs about the role of nurses will have to change, as well as prioritizing the way budget dollars are allocated to health care expenditures.

Medical organizations are also going to have to be less passive in providing career options for employees. Career ladders for nurses have been poorly articulated. Where they exist, cost containment measures jeopardize their viability, as upper management nursing positions are often the first cuts when budgets are tightened. Career planning, counseling, and other forms of career advising are seldom provided by health services institutions.

Health services organizations should not feel alone in this task. Many American corporations have recently eliminated, often dramatically, middle management positions. Left with a staff facing limited promotional opportunities, employers will have to provide career options in order to retain qualified, productive employees. Again, the Beth Israel model provides an environment that enhances the career aspirations of nurses without having to put in place a formalized career ladder.

At the individual level, nurses must take responsibility for their career planning. Nurses are passive and reactionary in their career planning. As a result, the work environment determines the career paths of most nurses.

Self-initiated planning is difficult, especially for rutters, organizational nurses, and job-hoppers. The latter group generally uses the job-hop as a career planning device, rather than seriously examining their career options. Evidence from this study also indicates that those who left nursing did not necessarily improve their situation -- they were generally dissatisfied with many facets of their positions outside of the nursing profession. The problem of individually initiated career planning has not gone unobserved. Hoffman (1984) and Henderson and McGettigan (1986) have prepared excellent guidebooks for nurses to use when preparing for new jobs as well as career changes. Whether nurses, irrespective of type, use these resources is not known.

Educational institutions can also play an important role in preparing future nurses for the realities of work. Kramer's reality approach merits closer attention. Her study indicates that a strong intervention program dealing with the transition from school to work can sensitize students to their work environments. The results of her model program could assist nurses in coping with their work and could lead to longer tenure in their jobs.

Educational institutions can further enhance the career planning skills of their students by offering a career development course during their senior year. Improved career planning skills will assist nurses in matching their needs with an appropriate position; this action may lead to reduced job-hopping and to higher external satisfaction with the job.

One option that is clearly not available is to do nothing. Raising salaries alone will probably not provide the cure-all many expect. The impetus of higher salaries on recruiting new graduates would not be seen for five to ten years or until today's ninth and tenth graders would graduate from nursing programs. Because of the number of factors, from federal regulations to the attitudes of doctors, that impinge on the nursing environment, no single policy will address all the issues that may be contributing to the nursing shortage. Only an integrative program that captures the various elements within the work environment nurses are most concerned about will help mitigate the nursing shortage.

References

- ioni, R. M. V. Lee, and N. Williamson. 1982. Factors Affecting Employment of Graduates of the University of Virginia, School of Nursing From 1978-1980. Washington, D.C.: American Association of Colleges of Nursing.
- partment of Health and Human Services, 1988. Nursing Shortage: Strategies for Nursing Practice and Education. Report of the National Invitational Workshop. Bureau of Health Professionals. Washington, D.C.: GPO.
- rdner, P. and H. Hwang. Starting Salary Trends: Nursing Graduates, 1978-1986. August, 1987.
- ould, S. 1979. "Characteristics of Career Planners in Upwardly Mobile Occupations." Academy of Management Journal, 22: 539-550.
- all, D. T. 1976. Careers in Organizations. Pacific Palisades, CA: Goodyear.
- enderson, F. C. and B. O. McGettigan. 1986. Managing Your Career in Nursing. Menlo Park, CA: Addison-Wesley.
- offman, Vicki, R. 1984. New Directions for the Professional Nurse: Exploring Your Career Options and Discovering Great Escapes. NY: ARCO Publishing.
- abbell, John G. 1989. "Where Have All the Nurses Gone?" Reader's Digest. pp 71-76.
- amer, Marlene. 1974. Reality Shock: Why Nurses Leave Nursing. St. Louis: The C. V. Mosby Company.
- ngold, Evelyn S. 1989. "Nursing in Crisis." McCall's. August: 54-65.
- nith, F. J. 1976. "Index of Organizational Reactions (IOR). JSAS Catalog of Selected Documents in Psychology. 6 (1); 54: No. 1265.
- eiss, D. J., R. V. Davis, G. W. England, and L. H. Lofquist. 1967. Manual for the Minnesota Satisfaction Questionnaire. Industrial Relations Center, University of Minnesota.

The Collegiate Employment Research Institute was established by Michigan's Legislature in 1984. The Institute is charged with the task of examining issues on career development and employment for college graduates. Various projects are underway, including the study covered in this report, to provide information to educators and counselors for program development. If you have any questions on this study or any Institute project, please contact the Institute directly.

Thomas D. Luten
Director
Career Development and Placement Services

L. Patrick Scheetz, Ph.D.
Assistant Director, Career Development and Placement Services;
Director of the Institute

Philip D. Gardner, Ph.D.
Assistant Director, Career Development and Placement Services;
Research Administrator of the Institute

Collegiate Employment Research Institute
Career Development and Placement Services
Michigan State University
East Lansing, MI 48824

Collegiate Employment Research Institute
Career Development and Placement Services
113 Student Services Building
Michigan State University
East Lansing, MI 48824-1113

Non-Profit Org. U.S. POSTAGE PAID E. LANSING, MI PERMIT No. 21
