

THE EFFECT OF DEMOGRAPHIC CHARACTERISTICS ON THE
COMMITMENT OF PROFESSIONAL NURSES
TO VOLUNTEERISM

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We hereby recommend that the thesis prepared under
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CHAPTER I

INTRODUCTION

Professional nurses represent a large, potential reservoir of volunteers. Many actively give service as volunteers for health related agencies, civic/political groups, and professional nurse organizations. Most voluntary organizations operate with a small number of paid staff who coordinate and facilitate the provision of agency services and programs to the community by a corps of volunteers. Some of these organizations, due to the nature of their services, must rely on professional nurses to carry out their purposes.

Volunteers, in general, are attracted to organizations whose purposes they deem valuable. The number of years a volunteer participates with an organization varies individually, however, some organizations appear more successful than others in recruiting and maintaining a stable group of volunteers. Elling and Lee (Jaco 1972) document this in their study of the formal connections of community leadership to the health system. One of the ways an organization can gain and maintain credibility in the community is to be reliable in its delivery of services. Knowledge of factors

which affect the participation of volunteers can be useful in predicting volunteer personnel needs to effectively deliver a voluntary organization's programs and services.

Statement of Problem

This study asked the question, "Is there a correlation between demographic characteristics of professional nurses and the longevity of service they give as volunteers?" This general problem was investigated in view of a more specific question. If indeed demographic characteristics correlate with longevity of service, which characteristics are they?

Statement of Purposes

The purposes of this study were:

1. To determine the relationship between demographic characteristics and longevity of service
2. To identify selected factors influencing the attrition of professional nurse volunteers
3. To discover any pattern indicated in the volunteer profile that would aid efforts in recruitment and retention of professional nurse volunteers

Background and Significance

Several studies have linked demographic characteristics with involvement in volunteer services. Rothman (1974) summarized a collection of social research studies on citizen

participation in voluntary associations. He made six generalizations relating to the demographic characteristics of participants in voluntary associations based on the findings of the studies. Participation in voluntary associations varied with social class, occupation, sex, age, socioeconomic status, and education. According to a statistical study of volunteers in the United States (Action 1974), the rate of volunteerism varied with employment status, age, education, income, sex, race, and marital status.

Hodge and Treiman (1968) examined the relationship between various aspects of social participation and a number of social status and social background factors. They found that participation was influenced by the level of participation of the respondent's parents and by the respondent's socioeconomic status. Elling and Lee (Jaco 1972) found similar results. They identified community and family traditions, organizational prestige, and the leader's position in the community as determinants for participation. Their hypothesis was supported by the study results.

Smith and Rawls (1965) evaluated formal education as a factor in explaining differences in rates of participation in voluntary associations. They found that variations in participation rates were significantly and positively associated with level of education.

Hagedorn and Labovitz (1967) analyzed occupational groups in a large-scale research organization with regard to their membership and participation in community and professional associations. The study supported the importance of occupations in the explanation of membership and participation in voluntary associations. In a second study, Hagedorn and Labovitz (1968) evaluated three concepts they labelled alienation, socialization, and task generalization to determine the degree to which each one predicted variations in joining and participating in community associations by occupation. Each concept was used to generate hypotheses tested in the study. Alienation was used to predict the effects of structural and perceived states of isolation and powerlessness in the work setting. Socialization was used to predict the effect of level of education. Task generalization predicted the effect of occupations which required the use of leadership skills on participation in community organizations. Each of the concepts was supported with the best predictor variables being education and leadership.

Thus, a beginning literature review suggested a relationship between demographic characteristics and participation in voluntary organizations. The limited amount of literature devoted to professional nurses as volunteers supported the usefulness of this study to identify the demographic profile associated with professional nurse volunteers.

Hypotheses

This study tested the following hypotheses:

1. Demographic characteristics have no significant correlation with the longevity of volunteer service given by professional nurses

2. There is no significant difference between the various demographic characteristics and duration of active volunteerism

Definition of Terms

For the purpose of this study, the following terms are defined:

Volunteer--any person who gives service to an organization as an unpaid worker.

Volunteer, active--any volunteer who gives service at least once per calendar year is considered active for that calendar year.

Volunteer, inactive--any volunteer who fails to give service during a calendar year is placed on inactive status for the following and subsequent calendar years. The record is retained in the inactive files.

Volunteerism--the willingness of a professional nurse to potentiate an agency's manpower by giving service as an unpaid worker, and to fulfill the requirements to remain active with that agency each year.

Voluntary Organization--any nonprofit organization that relies on unpaid workers to deliver its services and programs to the community.

Professional Nurse--any person who has completed a basic nursing curriculum (diploma, associate degree, baccalaureate) leading to licensure as a registered nurse and who holds a current license at the time of enrollment.

Red Cross Nurse Badge--a pin awarded from National Red Cross to professional nurses who have completed the requirements for enrollment and have given a minimum of eighteen hours of volunteer service.

Enrollment--the procedure consists of completing Form 2824 and showing evidence of licensure as a registered nurse. A volunteer record is then established for the nurse and kept by the Nursing Department of Red Cross. Once enrolled the nurse maintains this status regardless of volunteer activity.

Form 2824--a volunteer service record that is completed by registered nurses interested in becoming Red Cross volunteers. It contains demographic information and a detailed account of the volunteer's service. This form is permanent and can be transferred to any Red Cross chapter in the country (see appendix B).

Fiscal Year--the period of July 1 to June 30 of any year.

Commitment--the written agreement a professional nurse makes upon enrolling as a Red Cross volunteer to give service when needed and remain active with the agency.

Length of Service--determined by counting the number of years a volunteer was considered on active status from the date of enrollment.

Longevity of Service--the pattern of participation in volunteer service determined by several factors: number of years enrolled, length of service, and longest periods on active and inactive status.

Nursing and Health Program--one of seven departments at Houston-Harris County Chapter Red Cross. The department is responsible for providing volunteer nursing services in disaster relief, community health projects (such as first aid stations, health screenings), and health education. This department utilizes professional nurses to carry out its programs.

Demographic Characteristics--these variables will include age, sex, area of residence, education (basic nursing education preparation, and highest degree held), and employment (employed status, type of position, and principal field of employment) (see appendix A).

Limitations

For the purposes of this study, the following limitations have been identified:

1. Factors other than demographic characteristics may influence the longevity of volunteer service
2. Certain disadvantages such as incomplete data, lack of data other than that which is recorded, and errors in recording are inherent when using records as the source of data for a research study
3. The applicability of the results of this study were limited to Houston-Harris County, American Red Cross

Delimitations

The delimitations of this study included:

1. The study population consisted of professional nurses whose volunteer service records are available at the Houston-Harris County Chapter of the American Red Cross
2. The study population included two groups of volunteers, active and inactive

Assumptions

The following assumptions were made in this study:

1. The professional nurses had demonstrated commitment to volunteerism by enrolling as a Red Cross Volunteer

2. All professional nurses in this study who enrolled as volunteers did so with the intent of remaining active

Summary

Maintaining a corps of volunteer personnel presents a problem for many voluntary organization. Those who do not have problems recruiting volunteers often have problems keeping them active. Professional nurses represent a potential reservoir of volunteer personnel for those organizations who provide health related services. The literature review suggests that demographic characteristics are significant in predicting who will participate and the rate of participation in voluntary organizations. Information that could be used to develop guidelines on volunteer recruitment and retention, identify factors affecting attrition of volunteers, and effectively plan for volunteer personnel needs could be of value to voluntary organizations.

Chapter II presents a review of the literature concerning the demography of involvement and participation in voluntary associations. Demographic characteristics examined include social class, occupation, age, sex, and marital status.

Chapter III presents a description of the Nursing Department of the Houston-Harris County Chapter of the

American Red Cross which was the setting for this study. The method of population selection by stratified sampling, the Census instrument, and the volunteer service records used as the source of data are discussed. Results of the pilot study are reported and include a discussion of the reliability and validity of the instrument. Included in this chapter is the procedure for the treatment of the data which consisted of tabulation of frequency distributions of demographic data and volunteer service history data, and the application of statistical measures for analyzing the significance of demographic factors on longevity of volunteer service.

Chapter IV presents the statistical analysis of the data obtained in the study. The Chi Square statistic was employed to determine the level of significance of association in regard to demographic characteristics and volunteer service.

Chapter V is a summary of the study's findings regarding demographic characteristics and longevity of volunteer service. Conclusions drawn from statistical analyses and inspection of the graphic representations, implications of these findings, and recommendations for further studies regarding volunteer participation are included.

CHAPTER II

REVIEW OF LITERATURE

An understanding of the demography of involvement in voluntary organizations is necessary to determine its value in predicting the longevity of service of volunteers. Chapter II is a review of the literature pertaining to the demographic profile of American volunteers and the relationship of selected demographic characteristics to membership and participation in voluntary organizations.

Demographic Profile of American Volunteers

Several studies have been devoted to defining the demographic profile of American volunteers. Some discrepancies were noted in the findings reported pertaining to prevalence of volunteers in the population and the definition of the profile associated with the most typical volunteer. According to O'Connell (1976) a far greater proportion of the country's population is involved today in volunteering for public service than in any previous time in our history. Volunteering includes every economic group. Many customary recipients of volunteer services are now serving both their own personal and their community's interests (O'Connell 1976). O'Connell (1976) states that those who believe volunteering

is declining do not accept as volunteers the people who are immediately interested in their own problems.

According to a 1974 Census Bureau Survey (Action 1974), one out of four Americans over the age of 13 does some form of volunteer work. Their study determined that 37 million people, 24 percent of 156 million citizens, volunteered in 1974. The most typical volunteer was a married, white woman, between the ages of 25-44, who held a college degree, and was in the upper income bracket (Action 1974). Of the volunteers surveyed, 15 percent volunteered in health related organizations. For health volunteers the volunteer rate increased with age. In the 45-64 age bracket their rate was 18 percent and, over 65 years of age, it rose to 22 percent (Action 1974).

Engs and Kirk (1974) conducted a study to determine the characteristics of nonprofessional volunteers in crisis intervention centers in Tennessee. They found that 55 percent of all volunteers were female. The percentage of volunteers peaked at two age groups, the 20-24 group (24 percent) and the 40 and over age group (36.5 percent). They found that 14.9 percent were professionals including registered nurses and 85.1 percent were nonprofessionals. Volunteers with a professional background volunteered for a mean of 20.55 months and nonprofessional volunteers for a mean of 19.14 months (Engs and Kirk 1974).

Stein (1966) examined the demographic profile of the first group of Peace Corps volunteers in a rural community development program. He found that the average age of the group was 23 years. Their educational attainment ranged from two years of college to a higher education degree. They originated from middle class families. These demographic variables were used to screen the most desirable volunteers (Stein 1966).

Wright and Hyman (1958) conducted a follow-up analysis of two national and several local survey studies to gain information on the pattern of membership in voluntary associations of Americans. An interesting conclusion reported in their findings was that membership in voluntary organizations was not characteristic of the majority of Americans. Other findings reported were: (1) membership was more characteristic of the white than the black population, (2) membership is directly related to socioeconomic status as measured by level of income, occupation, and education; membership increases as socioeconomic status increases, (3) membership is related to family status, being increased for coupled with children (Wright and Hyman 1958). Wright and Hyman (1971) repeated their study in 1971 and found that adults with non-union memberships increased in their volunteer rate from 36 percent in 1958 to 43 percent in 1971.

Demographic Characteristics

Rothman (1974) summarized a collection of social research studies on citizen participation in voluntary organizations. He cited several generalizations relating to the demographic characteristics of participants. (1) Most adults are members of voluntary associations. (2) Participation in voluntary associations varies with an individual's social class as measured by level of education, family income, and perceived social status. (3) Participation varies with certain characteristics of an individual's occupation (highest among members of "professional" occupations, occupations that have a leadership role, and occupations with prestige ranking within an organization). (4) Men and women have different rates of participation: white men have higher rates than white women and black women have higher rates than black men. (5) Rates of participation differ at different stages in an individual's life cycle. They are greatest among persons of middle age; greater for married than single persons; and greater for people with school age children than for people with infants through preschoolers (Rothman 1974).

Scott (1957) studied a 5 percent random sample (232 persons) of a Vermont community to determine the relationship between variations in sex, age, education, religion, occupation, marital status, residence, and social status to variations in the degree to which persons participate in voluntary

associations. His findings were that 64.2 percent of the population were members in one or more voluntary organizations. The average duration of membership was ten years. More men (75 percent) volunteered than women (56 percent). Scott (1957) reported the general influence of age was not significant but there was a significant increase in participation associated with an increase in education.

Curtis (1971) conducted a secondary analysis of data from national surveys of Americans, Canadians and adults in four other countries to provide a perspective on the theory of "Americans as a nation of joiners." He hypothesized that the scope of the American pattern of association joining has been overemphasized. His findings showed that the percentage of affiliation with voluntary organizations increased with increases in education. Males, married people, and people in the age group, 36-50 years, had the higher percentages of affiliations for both Americans and Canadians. The American and Canadian figures for variables considered in the study were markedly higher than for the other four countries (Great Britain, Germany, Italy, and Mexico). Thus Curtis' (1971) findings were in agreement with earlier studies which define Americans as "joiners."

Babchuk and Booth (1969) studied the patterns of voluntary group participation of a panel of adults over a four year period. Their finding indicated that a greater

proportion of men than women were affiliated with associations. The married were, more frequently, members of voluntary groups than the single, widowed, or divorced. Social class as measured by educational achievement and occupation was directly related to associational membership (Babchuk and Booth 1969). Babchuk and Booth (1969) also measured stability and change in membership. Of the panel, 65 percent changed their membership profile in one way or another; 25 percent experienced an increase in number of affiliations; and 28 percent had an overall loss (Babchuk and Booth 1969).

Volunteer Participation by Occupation

A variety of studies have been conducted to determine the relationship between community participation and occupations. Hagedorn and Labovitz (1967) analyzed occupational groups in a large-scale research organization with regard to their membership and participation in community and professional associations. Occupations were grouped into eight categories ranging from clerks and janitors to physicists and managers. The occupational groups were analyzed in terms of their membership in four types of community associations: church, fraternal, neighborhood, and sport (Hagedorn and Labovitz 1967). They reported that the occupational groups associated with status, authority, and influence in the work setting (foremen, physicists, managers, and chemists)

had the highest percentage in community leadership. Occupational groups with the lowest percentage were clerks, janitors and machinists.

Faunce and Clelland (1967) studied the effects of professionalization (increase in the proportion of occupations requiring professional skills) of a major employing firm in a community, on the occupational distribution of elected officials in the community. They found that the professionals were more active in community affairs and that they increased in community influence more than any other working group. The professionals increased in percentage elected as city officials from 17 percent to 64 percent over a thirty-two year period (Faunce and Clelland 1967).

Elling and Lee (Jaco 1972) identified that a crucial problem facing voluntary community organizations is the extent to which the community leaders become involved in that particular area of community life and the form the involvement takes. They hypothesized that some organizations will be more successful than others in recruiting top community leaders. Elling and Lee (Jaco 1972) have named several background factors that are important in determining the affiliation of top community leaders. These included community and family traditions, organizational prestige, and the extent to which various services were considered essential. In their study, Elling and Lee (Jaco 1972) noted three categories of top

influences: economic dominants, elected officials, and knowledge specialists. They theorized that community leaders tend to associate with organizations according to the leaders' position in the community and the major functions of the health organization. They found that 77 percent of all leaders were connected with volunteer coordinating bodies (funding types) and hospital boards, 47 percent with voluntary health organizations, and 30 percent with health related service organizations.

Holloway, Artis, and Freeman (Jaco 1972) found similar results when studying the participation patterns of economic influentials and their control of hospital boards. Their findings indicated that occupants of important economic status attempt to influence or control important decision making in the community.

Hagedorn and Labovitz (1968) evaluated three concepts which they have labeled alienation, socialization, and task generalization. Their purposes were to determine the degree to which each concept predicted variations in joining and participating in community organizations by occupation. Each concept was used to generate hypotheses. Alienation was related to perceived and structural states of isolation and powerlessness in the work setting. The effects of alienation could either be generalized from the work setting to the community and therefore lessen community participation or the

effect could cause compensation by increased involvement. Socialization was measured by formal education. Involvement would increase as education increased. Task generalization measured the presence or use of leadership skills in the occupational role. Participation would increase as use of leadership skills increased. Correlations were significant for socialization and task generalization in predicting joining and participating in community organizations. The alienation theory was useful only in predicting participation levels but not in joining patterns (Hagedorn and Labovitz 1968).

Bonjean (1966) compared (on a number of sociopersonality and social participation variables) three "middle mass" occupational categories, independent businessmen, corporate supervisors and managers, and hourly paid workers. He found that workers and independent businessmen were more likely than managers to possess those sociopersonality characteristics identified with the concept "mass" (social isolation, normlessness, and alienation). Businessmen were least likely to participate or be involved in community activities. Managers were the most likely to participate and workers were more likely to resemble businessmen (Bonjean 1966).

Wilensky (1961) states that social participation and community attachment are related to the cumulative experiences a person has in the economic system. Orderly and

pleasant experiences in the labor market provide motive and opportunity for similar experiences in community participation. Wilensky (1961) states that this is especially true where the position (1) offers much freedom, (2) necessitates sustained and wide ranging contact with people, and (3) provides an orderly progression from one position to another. He studied the effects of careers on social integration on a group of 678 urban white males of upper and lower middle classes. Wilensky's (1961) findings revealed: men whose careers progress orderly will have stronger attachments to formal associations and the community, more memberships in formal associations, and attend more meetings, and will average more hours a month in all activities of formal associations. His results were significant at .01 and .03 levels (Wilensky 1961).

Education

Many of the studies previously reported (Action 1974; Babchuk and Booth 1969; Curtis 1971; Hagedorn and Labovitz 1968; Rothman 1974; Scott 1957; Wright and Hyman 1958) had statistically significant findings for the relationship between education and volunteer participation. Smith and Rawls (1965) conducted an evaluation of a standardization technique employed in a study of the relationship of level of formal education attainment and the extent of participation

in voluntary organizations. Data were collected from three rural communities. The subjects were homogenous with respect to race, religion, residence, language, and ethnic origin. Factors studied were age, sex, and work place. Education was standardized as high and low so that the results would not be influenced by the cutting point. Education was found significant at the .01 level in organization affiliations and non-religious participation. Age and sex were not found to be significant (Smith and Rawls 1965).

Foskett (1955) analyzed social structure and social participation. His problem was to identify who participated in community affairs, to what extent, and what factors were associated with such participation. Foskett (1955) related three demographic factors (age, education, and income) to social participation scores. His findings showed a continuous and marked rise in mean scores of participation with a rise in level of formal education. Foskett (1955) also found a distinct relationship in level of income and participation. He reported that education and income tended to vary together, producing a compound effect. The relationship of age and participation was not so significant, and rather reflected an influence of education and income combined. In Foskett's (1955) study findings education was the most significant variable and age the least.

Social Status

Laumann and Segal (1972) have stated that through the processes of social mobility and social change, people with low evaluated ascriptive characteristics, such as race, religion, and ethnicity, succeed in raising their positions in status systems. Their success was based on achievement, such as, those of educational attainment or occupational prestige. This, they felt, necessarily created inconsistencies between their relative ranks in the achieved and ascribed status system. Laumann and Segal (1972) tested this theory of status inconsistency by studying the effects of ethnoreligious group membership and education on several indicators of social participation. They theorized that the status-discrepant individuals would be expected to avoid membership in voluntary associations which were broadly recruited, and to be less involved in those associations in which they were a member. They reported that their study's findings clearly rejected this hypothesis (Laumann and Segal 1972).

Freeman, Novak, and Reeder (1957) used multiple regression analysis and factor analysis to discover variables in addition to social class that distinguish those who join voluntary organizations from those who do not. They considered four class variables: residential area, place of work, mobility, and community attitudes. They reported that

the use of these additional variables failed to increase the power of social class as a predictor of membership in voluntary associations. Mobility and community attitude were both significantly related to membership.

Hodge and Treiman (1968) assessed the effects of intergenerational transmission of patterns of social participation as a mechanism for volunteer recruitment. They examined the relationship between various aspects of social participation and selected social status and social background factors. Social participation factors included: the number of organizations to which respondents belonged, the number of times respondents attended meetings, and the number of different friends the respondent saw in a specified period. Background factors included: the family income, the main earner's occupation, the respondent's educational attainment, the father's highest level of education and his occupation, and the mother's educational attainment (Hodge and Treiman 1968). The findings indicated that for both males and females there was a relatively high degree of intergenerational transmission of membership in voluntary organizations.

Stern and Noe (1973) investigated affiliation and participation in voluntary associations with respect to social class and mobility. The study was designed to gather data on social class and intergenerational mobility. Social class was determined by using the "white collar" "blue collar"

distinction. Intergenerational mobility was determined by a comparison of the occupation of the husband's and wife's fathers while the husband and wife were growing up, with the present occupation of the husband. Stern and Noe (1973) reported that the study's findings demonstrated a direct and positive relationship between social class and affiliation. This relationship was significant at the .01 level.

Vorwaller (1970) investigated two alternative hypotheses regarding the consequences of vertical social mobility for membership in voluntary associations, the socialization hypothesis, and the dissociation hypothesis. The socialization hypothesis predicted an adaptive outcome while the dissociation hypothesis predicted a maladaptive one.

Curtis (1959) conducted a similar study. He compared the membership rates of mobile and stable persons in selected types of formal voluntary associations. He found that the average level of voluntary memberships of most mobile persons were not unusually low.

Age

The Lambert, Guberman, and Morris (1964) report demonstrated ample evidence that there is a reservoir of skill, talents, and potential capacities for training in the aged population. Cutler (1976) analyzed data from the 1972

American National Election Study and the 1974 General Social Survey to examine the patterns of age differences in voluntary association memberships. The effects of income and education were removed. They identified a pattern of increasing membership in the age range, 35-44 years. Then either stable or increasing levels of membership were noted for persons 75 years of age and older. Findings are similar for both males and females.

Sex

Booth (1972) compared the extent and the quality of participation by men and women in voluntary associations. He used interview data from a sample of 800 adults in two urban communities. Booth (1972) reported that the evidence on male-female differences is mixed. He found that while white collar men belonged to more volunteer organizations than women, women spend as much time as men on organizational activities on a monthly basis. Women in all social strata showed stable patterns of participation through life. Men and women participated in different types of organizations. Females were more likely to join church and recreation groups, while men joined governing boards, job-related, and fraternal service groups (Booth 1972). Babchuk, Massey, and Gordon (1960) supported these findings in their study on the power and prestige of men and women in community agencies. They noted

that women were more likely to serve on boards of agencies functioning as expressive (social oriented) type organizations than on instrumental (task oriented) agency boards.

Residence

Usui, Lei, and Butler (1977) have examined the patterns of social participation of rural and urban migrants to an urban area. Independent variables in the study were size of town/city (origin), age, socioeconomic status, and length of residence. A 10 percent sample of households was selected from the entire city. Usui, Lei, and Butler (1977) investigated the relationship between rural and urban origin and social participation by multiple regression. Results failed to document if origin had any effect on participation in voluntary associations.

Edwards, Klemmack, and Hatos (1973) examined the differences in participation patterns between mobile home and single family dwellers residing in adjoining suburban areas. They conducted a random sampling of 60 mobile home and 55 single family dwellers. Their findings indicated that when sociodemographic characteristics, such as, occupational status, educational attainment, income, and community background, were controlled, mobile home residents were found to participate less in voluntary associations. They further reported that their findings indicated that the type of

residence had a greater impact upon associational participation than did the sociodemographic characteristics identified in their study (Edwards, Klemmack, and Hatos 1973).

Volunteer Recruitment

Demographic characteristics are frequently used as screening measures for volunteer placement. Many agency publications (American Red Cross 1964; American Red Cross 1968; and Weinberg 1974) and recruitment articles (Fine, Knight-Webb, and Breau 1976; Minor and Thompson 1975) have reported that characteristics, such as, sex, age, marital status, and education are useful for determining appropriate volunteer placement. Schoenfeld, Preston, and Adams (1976) explored the selection of telephone crisis intervention volunteers. They used demographic characteristics and personality variables to differentiate "good" volunteers from "poor" volunteers. The statistical tests calculated on the accepted and rejected groups showed a significant difference at the .05 level. Schoenfeld, Preston, and Adams (1976) have recommended that more studies should be conducted in this area.

Summary

A review of selected literature revealed that the effects of occupation, education, social status, age, sex, and residence are significant in predicting the patterns of membership and participation in voluntary organizations.

Education was reported most frequently as the most significant variable when several demographic characteristics were examined simultaneously. Further education was reported to have a compound effect when considered with income. Age was reported most frequently as the least significant variable.

There was much discrepancy among the findings of studies seeking to identify the demographic profile of the most "typical" volunteer. The main areas of variance were in the percentage of Americans participating in voluntary organizations and whether men or women were more active.

Based on the findings examined in the literature review, it can be concluded that demographic characteristics are significant in predicting volunteer affiliation and participation, and that some characteristics are more significant than others.

CHAPTER III

PROCEDURE FOR THE COLLECTION AND TREATMENT OF DATA

This study was historical as defined by Fox (1970). A retrospective, epidemiological approach was used to survey the volunteer service records of professional nurse volunteers (see appendix B). This study was undertaken to determine if demographic characteristics could be used to predict longevity of volunteer service. Chapter III discusses the setting, the population, and the process used to collect and analyze the data.

Setting

The setting for this study was the Nursing and Health Services Department of the Houston-Harris County, American Red Cross. The department maintains a regional plan to deliver volunteer health services and programs to the Houston-Harris County community. Volunteers in the department include registered, licensed vocational, and student nurses, and lay professionals. During the past year, a corps of 588 volunteers served 17,500 people by community health projects and reached 13,000 people by teaching health education courses (Houston-Harris County Chapter 1977). Paid

staff include three registered nurses, a summer student nurse, a secretary, and a supply clerk.

Population

The population for this study consisted of the volunteer service records of 164 professional nurses. Each nurse in the study met the minimum requirements for enrollment, and had been enrolled as a volunteer for a minimum of one fiscal year, some time in the period July 1, 1967 to June 30, 1977. The population included both active and inactive volunteers. During the pilot study it was determined that the minimum sample size needed for statistically significant results was thirty records for each demographic characteristic under study. Thus stratified sampling was employed. For stratified sampling, the population was divided into strata, such as, sex, then race, and the like, from which random samples were drawn (Kerlinger 1973). Kerlinger's (1973) table of random numbers was used to select the records for the sample.

Instrument

A census type instrument was developed (see appendix A) to collect the data. Treece and Treece (1973) suggest that the instrument should be suitable for its function and provide for the gathering of data appropriate to test the hypothesis or answer the question under investigation. The

data available from the records was demographic, thus this format contained the components that needed to be recorded in this study.

The census consisted of two parts. Part I contained demographic data and included the following categories: birth date, sex, marital status, area of residence, education, and employment. Part II contained the Red Cross volunteer service history. It included the following variables: type of Red Cross experience, Red Cross Nurse Badge possession, number of years active, number of years inactive, status of current activity, longest period on active status, longest period on inactive status, and date of enrollment.

The reliability and validity of the instrument were tested during the pilot study. The procedure used to test for instrument reliability was multiple testing by separate investigators. Data from twenty volunteer records were collected independently by four investigators using the census. The investigators were given verbal instructions on use of the census and given an opportunity for questions and answers before collecting the data. A copy of the instructions can be found in appendix C. The data recorded on the censuses were compared for consistency. The results were calculated for percentage of error. The instrument was accepted at a 90 percent reliability level. The reliability

of the instrument in this study was high because of the following reasons:

1. The instrument was used by one researcher, thus reducing the chances for inconsistency in the recording of the data

2. The researcher was familiar with the record-keeping process used to record the study data

The content validity method was used to establish the validity of the census instrument. Treece and Treece (1973) suggest that the jury for content validity be comprised of individuals who are experts in the field under study. The jury consisted of the nursing staff and secretary of the Nursing and Health Services department. They were qualified to be members of the jury because of their length of employment in the department and the frequency with which they used the records under study. The purpose of the study and the instrument were explained to the jury. A copy of the explanation can be found in appendix C. They inspected the instrument and compared it to the volunteer service records for deficiencies and lucidity. The jury deleted sex from the instrument as the record has no area that requires a sex distinction to be made.

Data Collection

Volunteer service records from a ten year period, July 1, 1967 to June 30, 1977, from both the active and inactive files were studied. The historical design gave the study the advantage of a longitudinal study which was needed to define the volunteer profile sought in this study. Treece and Treece (1973) state that the longitudinal approach shows changing trends or patterns over a period of time.

The census was used to collect data on demographic characteristics and volunteer service in a format that would facilitate analysis. A systematic review was made of each record in the sample. The data were recorded on the census as obtained from the written record. One census was completed for each record. Treece and Treece (1973) identify several advantages of using records as a source of data:

1. Records are unbiased
2. Records cover a long period of time
3. Records are inexpensive
4. Records are convenient and time saving
5. Records have already been collected; the

researcher cannot bias the subjects

They also identify several disadvantages of using records:

1. The data available are limited to what has been recorded

2. No one can be sure of the conditions under which the records were collected

3. There is no assurance of the accuracy of the records

4. They may have been collected for a purpose irrelevant to the researcher's purpose

Most of these disadvantages were not applicable to the use of records in this study. The researcher used the information from the records in the same form in which it was collected, as demographic data and volunteer service history data. In addition, the Red Cross places emphasis on accuracy of records and has specific procedures for handling them (American Red Cross 1969) which supports error reduction in recording.

Treatment of Data

The frequency distribution was tabulated for each variable in relation to the demographic characteristic under study. Chi Square was employed to test the significance of the association between demographic characteristics and the variables of volunteer service. The .05 level was used to determine significance.

Summary

A retrospective, epidemiological survey was made of the volunteer service records of professional nurses enrolled

as Red Cross volunteers. The study covered a ten year period and considered both active and inactive volunteers.

The data from the records were compiled and subjected to statistical analysis to determine if there was a significant association between demographic characteristics and the longevity of volunteer service given by professional nurses.

CHAPTER IV

ANALYSIS OF DATA

A historical survey was conducted to determine the relationship between demographic characteristics and longevity of service of professional nurse volunteers; to identify selected factors influencing attrition; and, to determine a "typical" active volunteer profile. A census schedule was designed and used to compile data on demographic characteristics and volunteer service from records. Frequency distributions were tabulated for each category of volunteer service and the selected demographic characteristics examined in this study. The Chi Square statistic was employed to test the significance of the relationship between the volunteer service categories related to longevity of service and the demographic characteristics under study. Chapter IV is a report of the study findings based on the frequency distribution tabulations and statistical analysis of the data.

Age

Age was divided into six groups: 19-28, 29-38, 39-48, 49-58, 59-68, and 69-78. Three groups were similar in type of experience. The 19-28 (41 percent), 29-38 (53 percent), and the 39-48 (38 percent) age groups had more frequent

experience in volunteer teaching. The 49-58 age group most frequently had experience in disaster nursing, while the 69-78 group had experience serving in community projects. The 19-38 and the 49-78 groups had the least volunteer experience in another department. The 39-48 group had equal experience in the remaining areas. Over 50 percent of the 19-38 ages were active from one-half to all of the years they were enrolled. In contrast, 50 percent of the 39-78 ages were inactive for the same amount of time. The 19-38 age groups had most frequently been enrolled for 10 years or less. The other age groups were most frequently enrolled 11 to 60 years. Table 1 shows the frequency distribution tabulations for each category of volunteer service by age.

The Chi Square statistic was computed for age using a two by five table ($df=4$) for the six volunteer service categories which measure longevity of service. Table 2 illustrates the Chi Square values. Chi Square for number of active years was 11.29 which was significant at the .05 level. The 19-38 group contributed most to this significance with 79 percent of the group active one-half to all of their period of enrollment. This age group represents a younger age range than reported in the literature review. Curtis (1971) reported that the 36-50 age group was more active. Action (1974) reported the most active age group was the 25-44 age group. In this present study Chi Square for the

TABLE 1

FREQUENCY DISTRIBUTION OF THE ASSOCIATION OF AGE TO VOLUNTEER SERVICE VARIABLES

Volunteer Service Variables	Age											
	19-28		29-38		39-48		49-58		59-68		69-78	
	%	n	%	n	%	n	%	n	%	n	%	n
Type of Red Cross Experience												
None	6	1	0	0	15	5	4	2	11	4	17	2
Teaching	41	7	53	23	37	12	25	12	17	6	8	1
Community projects	29	5	23	10	16	5	23	11	29	10	42	5
Disaster nursing	24	4	19	8	16	5	42	20	32	11	25	3
Another department	<u>0</u>	<u>0</u>	<u>5</u>	<u>2</u>	<u>16</u>	<u>5</u>	<u>6</u>	<u>3</u>	<u>11</u>	<u>4</u>	<u>8</u>	<u>1</u>
Total	100	17	100	43	100	32	100	48	100	35	100	12
Red Cross Nurse Badge Possession												
Yes	57	8	57	17	70	21	80	24	92	24	100	10
No	<u>43</u>	<u>6</u>	<u>43</u>	<u>13</u>	<u>30</u>	<u>9</u>	<u>20</u>	<u>6</u>	<u>8</u>	<u>2</u>	<u>0</u>	<u>0</u>
Total	100	14	100	30	100	30	100	30	100	26	100	10
Number of Active Years												
0	7	1	23	7	27	8	30	9	46	12	50	5
1-4	14	2	20	6	36	11	30	9	19	5	10	1
5-9	43	6	40	12	20	6	23	7	12	3	30	3
10	<u>36</u>	<u>5</u>	<u>17</u>	<u>5</u>	<u>17</u>	<u>5</u>	<u>17</u>	<u>5</u>	<u>23</u>	<u>6</u>	<u>10</u>	<u>1</u>
Total	100	14	100	30	100	30	100	30	100	26	100	10
Number of Inactive Years												
0	36	5	20	6	20	6	16	5	23	6	10	1
1-4	21	3	20	6	13	4	27	8	8	2	30	3
5-9	36	5	43	13	40	12	27	8	23	6	10	1
10	<u>7</u>	<u>1</u>	<u>17</u>	<u>5</u>	<u>27</u>	<u>8</u>	<u>30</u>	<u>9</u>	<u>46</u>	<u>12</u>	<u>50</u>	<u>5</u>
Total	100	14	100	30	100	30	100	30	100	26	100	10

Table 1 (Continued)

Volunteer Service Variables	Age											
	19-28		29-38		39-48		49-58		59-68		69-78	
	%	n	%	n	%	n	%	n	%	n	%	n
Current Activity Status												
Active	64	9	64	19	40	12	43	13	35	9	30	3
Inactive	<u>36</u>	<u>5</u>	<u>36</u>	<u>11</u>	<u>60</u>	<u>18</u>	<u>57</u>	<u>17</u>	<u>65</u>	<u>17</u>	<u>70</u>	<u>7</u>
Total	100	14	100	30	100	30	100	30	100	26	100	10
Longest Active												
0	7	1	17	5	27	8	30	9	46	12	50	5
1-4	43	6	40	12	40	12	40	12	19	5	10	1
5-9	14	2	20	6	17	5	13	4	12	3	30	3
10	<u>36</u>	<u>5</u>	<u>23</u>	<u>7</u>	<u>17</u>	<u>5</u>	<u>17</u>	<u>5</u>	<u>23</u>	<u>6</u>	<u>10</u>	<u>1</u>
Total	100	14	100	30	101	30	100	30	100	26	100	10
Longest Inactive												
0	36	5	20	6	17	5	17	5	23	6	10	1
1-4	36	5	20	6	23	7	30	9	8	2	30	3
5-9	21	3	43	3	33	10	23	7	23	6	10	1
10	<u>7</u>	<u>1</u>	<u>17</u>	<u>5</u>	<u>27</u>	<u>8</u>	<u>30</u>	<u>9</u>	<u>46</u>	<u>12</u>	<u>50</u>	<u>5</u>
Total	100	14	100	30	100	30	100	30	100	26	100	10
Number of Years Enrolled												
1-10	100	14	80	24	43	13	40	12	19	5	0	0
11-20	0	0	20	6	53	16	30	9	27	7	0	0
21-30	0	0	0	0	3	1	27	8	54	14	80	8
31-40	0	0	0	0	0	0	3	1	0	0	0	0
41-50	0	0	0	0	0	0	0	0	0	0	10	1
51-60	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>10</u>	<u>1</u>
Total	100	14	100	30	99	30	100	30	100	26	100	10

TABLE 2

ASSOCIATION BETWEEN AGE AND VOLUNTEER SERVICE VARIABLES USING CHI SQUARE

Volunteer Service Variables	Age										Total	Chi Square
	19-28		29-38		39-48		49-58		59-68			
	O ^a	E ^a	O	E	O	E	O	E	O	E		
Number of Active Years												
0-4	3	7.5	13	16.1	19	16.1	18	16.1	17	14.1	70	11.29*
5-10	<u>11</u>	6.4	<u>17</u>	13.8	<u>11</u>	13.8	<u>12</u>	13.8	<u>9</u>	11.8	<u>60</u>	
Total	14		30		30		30		26		130	
Number of Inactive Years												
0-4	8	5.4	12	11.7	10	11.7	13	11.7	8	10.2	51	3.35
5-10	<u>6</u>	8.5	<u>18</u>	18.2	<u>20</u>	18.2	<u>17</u>	18.2	<u>18</u>	15.8	<u>79</u>	
Total	14		30		30		30		26		130	
Longest Active												
0-4	7	8.8	17	18.9	20	18.9	21	18.9	17	16.4	82	2.43
5-10	<u>7</u>	5.1	<u>13</u>	11.0	<u>10</u>	11.0	<u>9</u>	11.0	<u>9</u>	9.6	<u>48</u>	
Total	14		30		30		30		26		130	
Longest Inactive												
0-4	10	6.0	12	12.9	12	12.9	14	12.9	8	11.2	56	6.53
5-10	<u>4</u>	7.9	<u>18</u>	17.0	<u>18</u>	17.0	<u>16</u>	17.0	<u>18</u>	14.8	<u>74</u>	
Total	14		30		30		30		26		130	

TABLE 2 (Continued)

Volunteer Service Variables	Age										Total	Chi Square
	19-28		29-38		39-48		49-58		59-68			
	O ^a	E ^a	O	E	O	E	O	E	O	E		
Current Activity Status												
Active	9	6.6	19	14.3	12	14.3	13	14.3	9	12.4	62	7.21
Inactive	<u>5</u>	7.4	<u>11</u>	15.7	<u>18</u>	15.7	<u>17</u>	15.7	<u>17</u>	13.6	<u>68</u>	
Total	14		30		30		30		26		130	
Number of Years Enrolled												
1-10	14	7.3	24	15.6	13	15.6	12	15.6	5	13.6	68	35.65*
11-60	<u>0</u>	6.6	<u>6</u>	14.3	<u>17</u>	14.3	<u>18</u>	14.3	<u>21</u>	12.4	<u>62</u>	
Total	14		30		30		30		26		130	

^aO = observed frequency; E = expected frequency.

df=4

*Significant at the 0.05 level.

**Significant at the 0.01 level.

number of years enrolled was 35.65 which was significant at the .01 level. This result could be anticipated because of the natural expectancy for older volunteers to be enrolled longer than younger volunteers.

Marital Status

Marital status was divided into two groups, single and married. Most of the single group (43 percent) had experience in volunteer teaching. Members of the married group had equally frequent experience in teaching and community projects. Both the single and married groups had the least frequent experience in another Red Cross service. Over 70 percent of both groups had earned their Red Cross badges, having participated a minimum 18 hours each. The single group most frequently was enrolled 10 years or less (60 percent), while the married group was most frequently enrolled 11 years or more. Table 3 shows the frequency distribution tabulations for each category of volunteer service by marital status.

Chi Square was computed for marital status using a two by two table ($df=1$) for longevity of service. None of the variables were significantly related. Table 4 shows the Chi Square values for the variables. From the findings of studies reported in the literature review it was expected

TABLE 3

FREQUENCY DISTRIBUTION OF THE ASSOCIATION OF MARITAL STATUS
TO VOLUNTEER SERVICE VARIABLES

Volunteer Service Variables	Marital Status			
	Single		Married	
	%	n	%	n
Type of Red Cross Experience				
None	5	2	6	2
Teaching	43	15	33	11
Community projects	26	9	21	7
Disaster nursing	17	6	33	11
Another department	<u>9</u>	<u>3</u>	<u>6</u>	<u>2</u>
Total	100	35	100	33
Red Cross Nurse Badge Possession				
Yes	73	22	77	23
No	<u>27</u>	<u>8</u>	<u>23</u>	<u>7</u>
Total	100	30	100	30
Number of Active Years				
0	27	8	27	8
1-4	20	6	23	7
5-9	17	5	30	9
10	<u>36</u>	<u>11</u>	<u>20</u>	<u>6</u>
Total	100	30	100	30
Number of Inactive Years				
0	36	11	20	6
1-4	10	3	20	6
5-9	27	8	33	10
10	<u>27</u>	<u>8</u>	<u>27</u>	<u>8</u>
Total	100	30	100	30
Current Activity Status				
Active	50	15	43	13
Inactive	<u>50</u>	<u>15</u>	<u>57</u>	<u>17</u>
Total	100	30	100	30

TABLE 3 (Continued)

Volunteer Service Variables	Marital Status			
	Single		Married	
	%	n	%	n
Longest Active				
Never	27	8	27	8
1-4 years	17	5	23	7
5-9 years	20	6	30	9
10 years	<u>36</u>	<u>11</u>	<u>20</u>	<u>6</u>
Total	100	30	100	30
Longest Inactive				
Never	36	11	20	6
1-4 years	14	4	20	6
5-9 years	23	7	33	10
10 years	<u>27</u>	<u>8</u>	<u>27</u>	<u>8</u>
Total	100	30	100	30
Number of Years Enrolled				
1-10	60	18	47	14
11-20	23	7	23	7
21-30	10	3	30	9
31-40	7	2	0	0
41-50	0	0	0	0
51-60	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	100	30	100	30

that the relationship of the married group to longevity of service would be expected to report significance.

Residence

Residence was determined using a key map directory. Four areas were identified: northwest, northeast, southwest, and southeast. The northwest group most frequently had

TABLE 4

ASSOCIATION BETWEEN MARITAL STATUS AND VOLUNTEER SERVICE
VARIABLES USING CHI SQUARE

Volunteer Service Variables	Marital Status				Total	Chi Square
	Single		Married			
	O ^a	E ^a	O	E		
<hr/>						
Number of Active Years						
0-4	14	14.5	15	14.5	29	.066
5-10	<u>16</u>	15.5	<u>15</u>	15.5	<u>31</u>	
Total	30		30		60	
Number of Inactive Years						
0-4	14	13.0	12	13.0	26	.271
5-10	<u>16</u>	17.0	<u>18</u>	17.0	<u>34</u>	
Total	30		30		60	
Current Activity Status						
Active	15	14.0	13	14.0	28	.268
Inactive	<u>15</u>	16.0	<u>17</u>	16.0	<u>32</u>	
Total	30		30		60	
Longest Active						
0-4	13	14.0	15	14.0	28	.268
5-10	<u>17</u>	16.0	<u>15</u>	16.0	<u>32</u>	
Total	30		30		60	
Longest Inactive						
0-4	15	13.5	12	13.5	27	.606
5-10	<u>15</u>	16.5	<u>18</u>	16.5	<u>33</u>	
Total	30		30		60	
Number of Years Enrolled						
1-10	18	16.0	14	16.0	32	1.070
11-60	<u>12</u>	14.0	<u>16</u>	14.0	<u>28</u>	
Total	30		30		60	

^aO = observed frequency; E = expected frequency.

df=1

Chi Square significant at the 0.05 level.

experience in volunteer teaching and community projects. The northeast group most frequently had experience in disaster nursing. This is likely due to the tendency of the east side of Houston to have flooding. Both south groups had experience in volunteer teaching. Most of the members of the four residential groups had earned their Red Cross service badge. The north groups and southwest group were most frequently active one half to all of their period of enrollment. The southeast group was more frequently inactive for that amount of time. Table 5 shows the frequency distribution tabulations for volunteer service by residence.

Chi Square was computed for residence using a two by four table ($df=3$) for longevity of service. None of the relationships were significant. Table 6 shows the Chi Square values for each variable.

Basic Nursing Education

Basic nursing education was divided into three groups: diploma, associate degree, and baccalaureate. The most frequent type of experience for the diploma group was service in community projects, while the associate and baccalaureate groups more frequently participated in volunteer teaching. The members of the educational groups most frequently earned their Red Cross service badges. The diploma group had equal periods of active and inactive service time. The associate

TABLE 5

FREQUENCY DISTRIBUTION OF THE ASSOCIATION OF RESIDENCE
TO VOLUNTEER SERVICE VARIABLES

Volunteer Service Variables	Area of Residence							
	NW		NE		SW		SE	
	%	n	%	n	%	n	%	n
Type of Red Cross Experience								
None	2	1	6	2	6	2	10	4
Teaching	33	15	26	9	39	14	39	16
Community projects	33	15	20	7	28	10	27	11
Disaster nursing	27	12	48	17	19	7	22	9
Another department	<u>5</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>8</u>	<u>3</u>	<u>2</u>	<u>1</u>
Total	100	45	100	35	100	36	100	41
Red Cross Nurse Badge Possession								
Yes	77	23	73	22	80	24	67	20
No	<u>23</u>	<u>7</u>	<u>27</u>	<u>8</u>	<u>20</u>	<u>6</u>	<u>33</u>	<u>10</u>
Total	100	30	100	30	100	30	100	30
Number of Active Years								
0-	27	8	27	8	23	7	23	7
1-4	20	6	20	6	20	6	30	9
5-9	13	4	30	9	30	9	27	8
10	<u>40</u>	<u>12</u>	<u>23</u>	<u>7</u>	<u>27</u>	<u>8</u>	<u>20</u>	<u>6</u>
Total	100	30	100	30	100	30	100	30
Number of Inactive Years								
0	40	12	23	7	27	8	20	6
1-4	7	2	23	7	20	6	17	5
5-9	27	8	27	8	30	9	40	12
10	<u>27</u>	<u>8</u>	<u>27</u>	<u>8</u>	<u>23</u>	<u>7</u>	<u>23</u>	<u>7</u>
Total	101	30	100	30	100	30	100	30
Current Activity Status								
Active	60	18	50	15	50	15	47	14
Inactive	<u>40</u>	<u>12</u>	<u>50</u>	<u>15</u>	<u>50</u>	<u>15</u>	<u>53</u>	<u>16</u>
Total	100	30	100	30	100	30	100	30

TABLE 5 (Continued)

Volunteer Service Variables	Area of Residence							
	NW		NE		SW		SE	
	%	n	%	n	%	n	%	n
Longest Active								
0 years	27	8	23	7	23	7	23	7
1-4 years	23	7	27	8	20	6	30	9
5-9 years	10	3	23	7	30	9	27	8
10 years	<u>40</u>	<u>12</u>	<u>27</u>	<u>8</u>	<u>27</u>	<u>8</u>	<u>20</u>	<u>6</u>
Total	100	30	100	30	100	30	100	30
Longest Inactive								
0 years	40	12	23	7	27	8	20	6
1-4 years	13	4	20	6	20	6	17	5
5-9 years	20	6	30	9	33	10	40	12
10 years	<u>27</u>	<u>8</u>	<u>27</u>	<u>8</u>	<u>20</u>	<u>6</u>	<u>23</u>	<u>7</u>
Total	100	30	100	30	100	30	100	30
Number of Years enrolled								
1-10	67	20	50	15	50	15	54	16
11-20	13	4	33	10	20	6	20	6
21-30	20	6	17	5	30	9	20	6
31-40	0	0	0	0	0	0	3	1
41-50	0	0	0	0	0	0	3	1
51-60	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	100	30	100	30	100	30	100	30

group was more frequently inactive while the baccalaureate group was enrolled 10 years or less, while the associate group enrollment was equally divided between 10 years or less and 11 years and more of service. Most of the diploma group was enrolled more than 10 years. Table 7 shows the frequency distribution for volunteer service by basic nursing education.

TABLE 6

ASSOCIATION BETWEEN AREA OF RESIDENCE AND VOLUNTEER SERVICE VARIABLES
USING CHI SQUARE

Volunteer Service Variables	Area of Residence								Total	Chi Square
	NW		NE		SW		SE			
	O ^a	E ^a	O	E	O	E	O	E		
Number of Active Years										
0-4	14	14.2	14	14.2	13	14.2	16	14.2	57	.634
5-10	<u>16</u>	15.7	<u>16</u>	15.7	<u>17</u>	15.7	<u>14</u>	15.7	<u>63</u>	
Total	30		30		30		30		120	
Number of Inactive Years										
0-4	14	13.2	14	13.2	14	13.2	11	13.2	53	.792
5-10	<u>16</u>	16.7	<u>16</u>	16.7	<u>16</u>	16.7	<u>19</u>	16.7	<u>57</u>	
Total	30		30		30		30		120	
Current Activity Status										
Active	18	15.5	15	15.5	15	15.5	14	15.5	62	1.200
Inactive	<u>12</u>	14.5	<u>15</u>	14.5	<u>15</u>	14.5	<u>16</u>	14.5	<u>58</u>	
Total	30		30		30		30		120	
Longest Active										
0-4	15	14.7	15	14.7	13	14.7	16	14.7	59	.791
5-10	<u>15</u>	15.2	<u>15</u>	15.2	<u>17</u>	15.2	<u>14</u>	15.2	<u>61</u>	
Total	30		30		30		30		120	

TABLE 6 (Continued)

Volunteer Service Variables	Area of Residence								Total	Chi Square
	NW		NE		SW		SE			
	O ^a	E ^a	O	E	O	E	O	E		
Longest Inactive										
0-4	16	13.5	13	13.5	14	13.5	11	13.5	54	1.780
5-10	<u>14</u>	16.5	<u>17</u>	16.5	<u>16</u>	16.5	<u>19</u>	16.5	<u>66</u>	
Total	30		30		30		30		120	
Number of Years Enrolled										
1-10	20	16.5	15	16.5	15	16.5	16	16.5	66	2.170
11-60	<u>10</u>	13.5	<u>15</u>	13.5	<u>15</u>	13.5	<u>14</u>	13.5	<u>54</u>	
Total	30		30		30		30		120	

^aO = observed frequency; E = expected frequency.

df=4

Chi Square significant at the 0.05 level.

TABLE 7

FREQUENCY DISTRIBUTION OF THE ASSOCIATION OF BASIC NURSING
EDUCATION TO VOLUNTEER SERVICE VARIABLES

Volunteer Service Variables	Basic Nursing Education					
	Diploma		AA		BS	
	%	n	%	n	%	n
Type of Red Cross Experience						
None	5	2	13	5	5	2
Teaching	27	11	39	15	52	23
Community projects	34	14	24	9	23	10
Disaster nursing	29	12	24	9	16	7
Another department	<u>5</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>5</u>	<u>2</u>
Total	100	41	100	38	101	44
Red Cross Nurse Badge Possession						
Yes	87	26	83	25	60	18
No	<u>13</u>	<u>4</u>	<u>17</u>	<u>5</u>	<u>40</u>	<u>12</u>
Total	100	30	100	30	100	30
Number of Active Years						
0	36	11	27	8	10	3
1-4	14	4	36	11	20	6
5-9	30	9	13	4	30	9
10	<u>20</u>	<u>6</u>	<u>23</u>	<u>7</u>	<u>40</u>	<u>12</u>
Total	100	30	99	30	100	30
Number of Inactive Years						
0	20	6	23	7	40	12
1-4	23	7	40	12	13	4
5-9	20	6	10	3	40	12
10	<u>36</u>	<u>11</u>	<u>27</u>	<u>8</u>	<u>7</u>	<u>2</u>
Total	99	30	100	30	100	30
Current Activity Status						
Active	53	16	33	10	60	18
Inactive	<u>47</u>	<u>14</u>	<u>67</u>	<u>20</u>	<u>40</u>	<u>12</u>
Total	100	30	100	30	100	30

TABLE 7 (Continued)

Volunteer Service Variables	Basic Nursing Education					
	Diploma		AA		BS	
	%	n	%	n	%	n
Longest Active						
Never	36	11	27	8	7	2
1-4 years	17	5	43	13	33	10
5-9 years	27	8	7	2	20	6
10 years	<u>20</u>	<u>6</u>	<u>23</u>	<u>7</u>	<u>40</u>	<u>12</u>
Total	100	30	100	30	100	30
Longest Inactive						
Never	20	6	23	7	40	12
1-4 years	30	9	7	2	17	5
5-9 years	13	4	43	13	36	11
10 years	<u>36</u>	<u>11</u>	<u>27</u>	<u>8</u>	<u>7</u>	<u>2</u>
Total	99	30	100	30	100	30
Number of Years Enrolled						
1-10	36	11	50	15	90	27
11-20	27	8	30	9	10	3
21-30	36	11	20	6	0	0
31-40	0	0	0	0	0	0
41-50	0	0	0	0	0	0
51-60	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	99	30	100	30	100	30

Chi square was computed for basic nursing education using a two by three table (df=2) for longevity of service. Table 8 shows the Chi Square values for each variable. Chi Square for the number of active years was 6.54 which was significant at the .05 level. Chi Square for the number of years enrolled was 18.96 which was significant at the .01 level. It was expected that education would be significant,

TABLE 8

ASSOCIATION BETWEEN BASIC NURSING EDUCATION AND
VOLUNTEER SERVICE VARIABLES USING CHI SQUARE

Volunteer Service Variables	Basic Nursing Education						Total	Chi Square
	Diploma		AA		BS			
	O ^a	E ^a	O	E	O	E		
Number of Active Years								
0-4	15	14.3	19	14.3	9	14.3	43	6.54*
5-10	<u>15</u>	15.6	<u>11</u>	15.6	<u>21</u>	15.6	<u>47</u>	
Total	30		30		30		90	
Number of Inactive Years								
0-4	13	16.0	19	16.0	16	16.0	48	2.53
5-10	<u>17</u>	14.0	<u>11</u>	14.0	<u>14</u>	14.0	<u>42</u>	
Total	30		30		30		90	
Current Activity Status								
Active	16	14.6	10	14.6	18	14.6	44	4.62
Inactive	<u>14</u>	15.3	<u>20</u>	15.3	<u>12</u>	15.3	<u>46</u>	
Total	30		30		30		90	
Longest Active								
0-4 years	16	16.3	21	16.3	12	16.3	49	5.46
5-10 years	<u>14</u>	13.6	<u>9</u>	13.6	<u>18</u>	13.6	<u>41</u>	
Total	30		30		30		90	
Longest Inactive								
0-4 years	15	13.6	9	13.6	17	13.6	41	4.65
5-10	<u>15</u>	16.3	<u>21</u>	16.3	<u>13</u>	16.3	<u>49</u>	
Total	30		30		30		90	
Number Years Enrolled								
1-10	11	17.6	15	17.6	27	17.6	53	18.96**
11-60	<u>19</u>	12.3	<u>15</u>	12.3	<u>3</u>	12.3	<u>37</u>	
Total	30		30		30		90	

^aO = observed frequency; E = expected frequency.

df=2

*Significant at the 0.05 level.

**Significant at the 0.01 level.

since the literature review studies reported education as the most significant variable.

Highest Degree Held

Data on the highest degree held were divided into three groups: associate degree, baccalaureate, and higher degrees. Volunteer teaching was the most frequent type of experience for all groups. Most of the members of all three groups had earned their Red Cross service badges. The associate degree group was less active than either of the other degree groups. Over 50 percent of all three groups were enrolled 10 years or less. Table 9 shows the frequency distribution for volunteer service by highest degree held.

Chi Square was computed for highest degree held using a two by three table ($df=2$). Table 10 shows the Chi Square values for longevity of service. Chi Square for number of active years was 22.24 and significant at the .01 level. Chi Square for number of inactive years was 17.64 and significant at the .01 level. Chi Square for current activity status was 12.13 and significant at the .01 level. Chi Square for longest period inactive was 13.70 and significant at the .01 level. Chi Square for number of years enrolled was 6.21 and significant at the .05 level. These are supported by the literature which reports that participation increases with increases in education.

TABLE 9

FREQUENCY DISTRIBUTION OF THE ASSOCIATION OF HIGHEST DEGREE
HELD TO VOLUNTEER SERVICE VARIABLES

Volunteer Service Variables	Highest Degree Held					
	AA		BS		Post- graduate	
	%	n	%	n	%	n
Type of Red Cross Experience						
None	11	4	2	1	20	6
Teaching	39	14	48	20	30	9
Community projects	33	12	29	12	10	3
Disaster nursing	17	6	19	8	17	5
Another department	<u>0</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>23</u>	<u>7</u>
Total	100	36	100	42	100	30
Red Cross Nurse Badge Possession						
Yes	81	21	67	20	82	14
No	<u>19</u>	<u>5</u>	<u>33</u>	<u>10</u>	<u>18</u>	<u>3</u>
Total	100	26	100	30	100	17
Number of Active Years						
0	31	8	7	2	0	0
1-4	38	10	30	9	6	1
5-9	12	3	23	7	53	9
10	<u>19</u>	<u>5</u>	<u>40</u>	<u>12</u>	<u>41</u>	<u>7</u>
Total	100	26	100	30	100	17
Number of Inactive Years						
0	19	5	40	12	41	7
1-4	4	1	10	3	47	8
5-9	46	12	43	13	12	2
10	<u>31</u>	<u>8</u>	<u>7</u>	<u>2</u>	<u>0</u>	<u>0</u>
Total	100	26	100	30	100	17
Current Activity Status						
Active	35	9	57	17	88	15
Inactive	<u>65</u>	<u>17</u>	<u>43</u>	<u>13</u>	<u>12</u>	<u>2</u>
Total	100	26	100	30	100	17

TABLE 9 (Continued)

Volunteer Service Variables	Highest Degree Held					
	AA		BS		Post-graduate	
	%	n	%	n	%	n
Longest Active						
Never	31	8	7	2	0	0
1-4 years	42	11	36	11	12	2
5-9 years	8	2	17	5	47	8
10 years	<u>19</u>	<u>5</u>	<u>40</u>	<u>12</u>	<u>41</u>	<u>7</u>
Total	100	26	100	30	100	17
Longest Inactive						
Never	19	5	40	12	41	7
1-4 years	12	3	13	4	47	8
5-9 years	38	10	40	12	12	2
10 years	<u>31</u>	<u>8</u>	<u>7</u>	<u>2</u>	<u>0</u>	<u>0</u>
Total	100	26	100	30	100	17
Number of Years Enrolled						
1-10	54	14	83	25	59	10
11-20	27	7	10	3	23	14
21-30	19	5	7	2	12	2
31-40	0	0	0	0	6	1
41-50	0	0	0	0	0	0
51-60	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	100	26	100	30	100	17

Type of Position

Type of position was categorized into four groups:

Administration, supervisory, staff, and none working.

Teaching was the most frequent type of experience for the administration, staff, and none working group. Supervisory nurses most frequently had experience in volunteer teaching

TABLE 10

ASSOCIATION BETWEEN HIGHEST DEGREE HELD AND VOLUNTEER
SERVICE VARIABLES USING CHI SQUARE

Volunteer Service Variables	Highest Degree Held						Total	Chi Square
	AA		BS		Post graduate			
	Oa	Ea	O	E	O	E		
Number of Active Years								
0-4	18	10.7	11	12.3	1	7.0	30	22.24**
5-10	<u>8</u>	15.3	<u>19</u>	17.7	<u>16</u>	10.0	<u>43</u>	
Total	26		30		17		73	
Number of Inactive Years								
0-4	6	12.8	15	14.8	15	8.3	36	17.64**
5-10	<u>20</u>	13.1	<u>15</u>	15.2	<u>2</u>	8.6	<u>37</u>	
Total	26		30		17		73	
Current Activity Status								
Active	9	14.6	17	16.9	15	9.5	41	12.13**
Inactive	<u>17</u>	11.3	<u>13</u>	13.1	<u>2</u>	7.4	<u>32</u>	
Total	26		30		17		73	
Longest Active								
0-4	19	12.1	13	13.9	2	7.9	34	16.51**
5-10	<u>7</u>	13.8	<u>17</u>	16.0	<u>15</u>	9.1	<u>39</u>	
Total	26		30		17		73	
Longest Inactive								
0-4	8	13.8	16	16.0	15	9.0	39	13.70**
5-10	<u>18</u>	12.1	<u>14</u>	13.9	<u>2</u>	7.9	<u>34</u>	
Total	26		30		17		73	
Number of Years Enrolled								
1-10	14	17.4	25	20.1	10	11.4	49	6.21*
11-60	<u>12</u>	8.5	<u>5</u>	9.8	<u>7</u>	5.5	<u>24</u>	
Total	26		30		27		73	

^aO = observed frequency; E = expected frequency.

df=2

*Significant at the 0.05 level.

**Significant at the 0.01 level.

and community projects. Most of the members of each group had earned their Red Cross service badges. Most of the groups were active one half to all of their enrollment period. Administration nurses were active longer than the staff and none working groups. The most frequent length of enrollment for each group was 10 years or less. Table 11 shows frequency distribution for volunteer service by type of position.

Chi Square was computed using a two by four table ($df=3$). Table 12 shows the values computed for longevity of service. None of the variables were significantly related to type of position. This result is contrary to the results which the literature led the investigator to expect.

Principal Field of Employment

Principal field of employment was categorized into five groups: hospital, school of nursing, community health, and other, representing occupational nurses, private duty nurses, and office nurses. Volunteer teaching was the most frequent type of experience for all groups except community health. Their most frequent experience was in disaster nursing. The least frequent type of volunteer experience for all groups was another Red Cross department. Most of the members of each group had earned their Red Cross service badge. The school of nursing group was the most active.

TABLE 11

FREQUENCY DISTRIBUTION OF THE ASSOCIATION OF TYPE POSITION
TO VOLUNTEER SERVICE VARIABLES

Volunteer Service Variables	Type of Position							
	Admin.		Supvr.		Staff		None	
	%	n	%	n	%	n	%	n
Type of Red Cross Experience								
None	8	3	8	3	3	1	7	3
Teaching	27	10	30	11	33	11	35	15
Community projects	11	4	30	11	29	10	23	10
Disaster nursing	24	9	27	10	35	12	28	12
Another department	<u>30</u>	<u>11</u>	<u>5</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>7</u>	<u>3</u>
Total	100	37	100	37	100	34	100	43
Red Cross Nurse Badge Possession								
Yes	83	25	67	20	70	21	83	25
No	<u>17</u>	<u>5</u>	<u>33</u>	<u>10</u>	<u>30</u>	<u>9</u>	<u>17</u>	<u>5</u>
Total	100	30	100	30	100	30	100	30
Number of Active Years								
0	17	5	33	10	20	6	27	8
1-4	17	5	17	5	30	9	30	9
5-9	43	13	23	7	20	6	23	7
10	<u>23</u>	<u>7</u>	<u>27</u>	<u>8</u>	<u>30</u>	<u>9</u>	<u>20</u>	<u>6</u>
Total	100	30	100	30	100	30	100	30
Number of Inactive Years								
0	23	7	27	8	27	8	20	6
1-4	44	13	10	3	17	5	20	6
5-9	20	6	30	9	36	11	33	10
10	<u>13</u>	<u>4</u>	<u>33</u>	<u>10</u>	<u>20</u>	<u>6</u>	<u>27</u>	<u>8</u>
Total	100	30	100	30	100	30	100	30
Current Activity Status								
Active	64	19	53	16	50	15	43	13
Inactive	<u>36</u>	<u>11</u>	<u>47</u>	<u>14</u>	<u>50</u>	<u>15</u>	<u>57</u>	<u>17</u>
Total	100	30	100	30	100	30	100	30

TABLE 11 (Continued)

Volunteer Service Variables	Type of Position							
	Admin.		Supvr.		Staff		None	
	%	n	%	n	%	n	%	n
Longest Active								
Never	13	4	33	10	20	6	27	8
1-4 years	30	9	23	7	43	13	33	10
5-9 years	33	10	17	5	7	2	20	6
10 years	<u>24</u>	<u>7</u>	<u>27</u>	<u>8</u>	<u>30</u>	<u>9</u>	<u>20</u>	<u>6</u>
Total	100	30	100	30	100	30	100	30
Longest Inactive								
Never	23	7	27	8	30	9	20	6
1-4 years	47	14	13	4	23	7	23	7
5-9 years	17	5	27	8	27	8	30	9
10 years	<u>13</u>	<u>4</u>	<u>33</u>	<u>10</u>	<u>20</u>	<u>6</u>	<u>27</u>	<u>8</u>
Total	100	30	100	30	100	30	100	30
Number of Years Enrolled								
1-10	46	14	57	17	74	22	66	20
11-20	17	5	13	4	23	7	7	2
21-30	27	8	30	9	3	1	27	8
31-40	3	1	0	0	0	0	0	0
41-50	7	2	0	0	0	0	0	0
51-60	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	100	30	100	30	100	30	100	30

The least active was the "other" group. The hospital, the school of nursing, and the "other" group were more frequently enrolled 10 years or less. Table 13 shows the frequency distribution for volunteer service by principal field of employment.

Chi Square was computed using a two by five table (df=4). Table 14 shows the Chi Square values for longevity

TABLE 12

ASSOCIATION BETWEEN TYPE OF POSITION AND VOLUNTEER SERVICE
VARIABLES USING CHI SQUARE

Volunteer Service Variables	Type of Position								Total	Chi Square
	Admin.		Supvr.		Staff		None			
	Oa	Ea	O	E	O	E	O	E		
Number of Active Years										
0-4	10	14.2	15	14.2	15	14.2	17	14.2	57	3.62
5-10	<u>20</u>	15.7	<u>15</u>	14.7	<u>15</u>	15.7	<u>13</u>	15.7	<u>63</u>	
Total	30		30		30		30		120	
Number of Years Inactive										
0-4	20	14.0	11	14.0	13	14.0	12	14.0	56	5.43
5-10	<u>10</u>	16.0	<u>19</u>	16.0	<u>17</u>	16.0	<u>18</u>	16.0	<u>64</u>	
Total	30		30		30		30		120	
Current Activity Status										
Active	19	15.7	16	15.7	15	15.7	13	15.7	63	2.44
Inactive	<u>11</u>	14.2	<u>14</u>	14.2	<u>15</u>	14.2	<u>17</u>	14.2	<u>57</u>	
Total	30		30		30		30		120	
Longest Active										
0-4 years	13	16.7	17	16.7	19	16.7	18	16.7	67	3.19
5-10 years	<u>17</u>	13.2	<u>13</u>	13.2	<u>11</u>	13.2	<u>12</u>	13.2	<u>53</u>	
Total	30		30		30		30		120	
Longest Inactive										
0-4 years	21	15.5	12	15.5	16	15.5	13	15.5	62	6.51
5-10 years	<u>9</u>	14.5	<u>18</u>	14.5	<u>14</u>	14.5	<u>17</u>	14.5	<u>58</u>	
Total	30		30		30		30		120	
Number Years Enrolled										
1-10	14	18.2	17	18.2	22	18.2	20	18.2	73	5.15
11-60	<u>16</u>	11.7	<u>13</u>	11.7	<u>8</u>	11.7	<u>10</u>	11.7	<u>47</u>	
Total	30		30		30		30		120	

^aO = observed frequency; E = expected frequency.

df=3

Chi Square significant at the 0.05 level.

TABLE 13

FREQUENCY DISTRIBUTION OF THE PRINCIPAL FIELD OF EMPLOYMENT
TO VOLUNTEER SERVICE VARIABLES

Volunteer Service Variables	Principal Field of Employment									
	Hospital		School of Nursing		Other		School Nursing		Community Health	
	%	n	%	n	%	n	%	n	%	n
Type of Red Cross Experience										
None	6	2	5	1	15	3	0	0	6	2
Teaching	42	15	40	8	35	7	35	12	28	9
Community projects	25	9	15	3	20	4	26	9	22	7
Disaster nursing	22	8	25	5	25	5	32	11	31	10
Another department	6	2	15	3	5	1	6	2	13	4
Total	101	36	100	20	100	20	99	34	100	32
Red Cross Nurse Badge Possession										
Yes	70	21	67	10	82	14	75	18	71	15
No	30	9	33	5	18	3	25	6	29	6
Total	100	30	100	15	100	17	100	24	100	21
Number of Active Years										
0	23	7	7	1	53	9	16	4	38	8
1-4	27	8	13	2	18	3	29	7	4	1
5-9	20	6	27	4	18	3	42	10	48	10
10	30	9	53	8	11	2	13	3	10	2
Total	100	30	100	15	100	17	100	24	100	21
Number of Inactive Years										
0	30	9	53	8	11	2	13	3	14	3
1-4	13	4	20	3	18	3	21	5	29	6
5-9	33	10	20	3	18	3	50	12	23	5
10	23	7	7	1	53	9	16	4	34	7
Total	100	30	100	15	100	17	100	24	100	21

TABLE 13 (Continued)

Volunteer Service Variables	Principal Field of Employment									
	Hospital		School of Nursing		Other		School Nursing		Community Health	
	%	n	%	n	%	n	%	n	%	n
Current Activity Status										
Active	50	15	87	13	35	6	50	12	52	11
Inactive	50	15	13	2	65	11	50	12	48	10
Total	100	30	100	15	100	17	100	24	100	21
Longest Active										
Never	23	7	7	1	53	9	16	4	34	7
1-4 years	30	9	27	4	30	5	42	10	14	3
5-9 years	17	5	13	2	6	1	29	7	38	8
10 years	30	9	53	8	11	2	13	3	14	3
Total	99	30	100	15	100	17	100	24	100	21
Longest Inactive										
Never	30	9	53	8	11	2	13	3	14	3
1-4 years	13	4	33	5	18	3	25	6	29	6
5-9 years	33	10	7	1	18	3	46	11	23	5
10 years	23	7	7	1	53	9	16	4	34	7
Total	99	30	100	15	100	17	100	24	100	21
Number of Years Enrolled										
1-10	70	21	67	10	65	11	38	9	48	10
11-20	10	3	20	3	6	1	33	8	38	8
21-30	20	6	13	2	30	5	25	6	10	2
31-40	0	0	0	0	0	0	4	1	0	0
41-50	0	0	0	0	0	0	0	0	0	0
51-60	0	0	0	0	0	0	0	0	4	1
Total	100	30	100	15	101	17	100	24	100	21

TABLE 14

ASSOCIATION BETWEEN PRINCIPAL FIELD OF EMPLOYMENT AND
VOLUNTEER SERVICE VARIABLES USING CHI SQUARE

Volunteer Service Variables	Principal Field of Employment										Total	Chi Square	
	Hospital		School of Nursing		Other		School Nursing		Community Health				
	Oa	Ea	O	E	O	E	O	E	O	E			
Number of Active Years													
0-4	15	14.0	3	7.0	12	7.9	11	11.2	9	9.8	50	8.67	64
5-10	<u>15</u>	15.9	<u>12</u>	7.9	<u>5</u>	9.0	<u>13</u>	12.7	<u>12</u>	11.1	<u>57</u>		
Total	30		15		17		24		21		107		
Number of Inactive Years													
0-4	13	12.8	11	6.4	5	7.3	8	10.3	9	9.0	46	7.93	
5-10	<u>17</u>	17.1	<u>4</u>	8.5	<u>12</u>	9.6	<u>16</u>	13.7	<u>12</u>	11.9	<u>61</u>		
Total	30		15		17		24		21		107		
Current Activity Status													
Active	15	15.9	13	7.9	6	9.0	12	12.7	11	11.1	57	8.27	
Inactive	<u>15</u>	14.0	<u>2</u>	7.0	<u>11</u>	7.9	<u>12</u>	11.2	<u>10</u>	9.8	<u>50</u>		
Total	30		15		17		24		21		107		
Longest Active													
0-4	16	16.5	5	8.2	14	9.3	14	13.2	10	11.5	59	8.59	
5-10	<u>14</u>	13.4	<u>10</u>	6.7	<u>3</u>	7.6	<u>10</u>	10.7	<u>11</u>	9.4	<u>48</u>		
Total	30		15		17		24		21		107		

TABLE 14 (Continued)

Volunteer Service Variables	Principal Field of Employment										Total	Chi Square
	Hospital		School of Nursing		Other		School Nursing		Community Health			
	O ^a	E ^a	O	E	O	E	O	E	O	E		
Longest Inactive												
0-4	13	13.7	13	6.8	5	7.7	9	10.9	9	9.6	49	12.53*
5-10	<u>17</u>	16.2	<u>2</u>	8.1	<u>12</u>	9.2	<u>15</u>	13.0	<u>12</u>	11.3	<u>58</u>	
Total	30		15		17		24		21		107	
Number of Years Enrolled												
1-10	21	17.1	10	8.5	11	9.6	9	13.6	10	11.9	61	7.42
11-60	<u>9</u>	12.8	<u>5</u>	6.4	<u>6</u>	7.3	<u>15</u>	10.3	<u>11</u>	9.0	<u>46</u>	
Total	30		15		17		24		21		107	

^aO = observed frequency; E = expected frequency.

df=4

*Significant at the 0.05 level.

of service. Chi Square for longest inactive was 12.53 and significant at the .05 level. This findings was largely due to the results of the school of nursing group. This significance was likely due to the combined effects of level of education and type of occupation.

The results indicated that the most typical demographic profile of an active volunteer is a female, aged 19-38, who is equally single or married, resides in northwest Houston, attended a baccalaureate nursing program, attained a higher degree, and works at a school of nursing. These results are somewhat similar to the profile reported by Action (1974).

Table 15 is a cumulative frequency distribution of the volunteer service variables for longevity of service. The following pattern of participation can be established: Most volunteers will have equal periods of active and inactive participation, the active periods will be shorter than the inactive periods, the active volunteers will likely be those enrolled for 10 years or less.

Summary

Chapter IV has presented a description of the data collected for this study with a statistical analysis of the findings. Chi Square was used to determine the association

TABLE 15

CUMULATIVE FREQUENCY DISTRIBUTION OF LONGEVITY OF SERVICE
BY DEMOGRAPHIC CHARACTERISTICS

Longevity of Service	Demographic Characteristics							Total	
	Age	Marital Status	Resi- dence	Basic Nursing Education	Highest Degree Held	Type of Posi- tion	Field	n	%
Number of Active Years									
0-4	76	29	57	43	30	57	50	342	48
5-10	64	31	63	47	43	63	57	368	52
Number of Inactive Years									
0-4	55	26	53	48	36	56	46	320	45
5-10	85	34	67	42	37	64	61	390	55
Current Activity Status									
Active	65	28	62	44	41	63	57	360	51
Inactive	75	32	58	46	32	57	50	350	49
Longest Active									
0-4	88	28	59	49	34	67	59	384	54
5-10	52	32	61	41	39	53	48	326	46
Longest Inactive									
0-4	60	27	54	41	39	62	49	332	47
5-10	80	33	66	49	34	58	58	378	53
Number of Years Enrolled									
1-10	68	32	66	53	49	73	61	402	57
11-60	72	28	54	37	24	47	46	308	43

between selected demographic characteristics and the longevity of service given by professional nurses. Findings indicated that selected demographic characteristics, age, education, and principal field of employment were statistically significant to longevity of service in this study. Education was the most significant of the three variables.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

A retrospective, epidemiological approach was used to survey the volunteer service records of professional nurse volunteers at the Houston-Harris County, American Red Cross. The purposes of this study were: (1) to determine the association between demographic characteristics and longevity of service, (2) to identify selected factors influencing attrition, and (3) to discover any patterns indicated in the volunteer profile that would aid efforts in recruitment and retention of professional nurse volunteers.

The population for this study consisted of the volunteer service records of 164 professional nurses, both male and female. Each nurse met the minimum requirements for enrollment and had been enrolled a minimum of one fiscal year during the period of July 1, 1967 to June 30, 1977. The population included both active and inactive volunteers.

A census type instrument was developed to collect the data. The census consisted of two parts: demographic data and volunteer service data. The Chi Square statistic

was used to determine the statistical significance of the results.

Conclusions

Based on the findings of this study it can be concluded that demographic characteristics can be employed to predict who will participate and the rate of participation in voluntary organizations. From this study of demographic characteristics, guidelines for volunteer recruitment and volunteer personnel administration can be developed for the agency under study.

The hypotheses for this study were: (1) there is no relationship between demographic characteristics and longevity of volunteer service given by professional nurses, and (2) there is no difference between the various demographic characteristics and duration of active volunteerism. The association was significant at the .01 level for highest degree earned and at the .05 level for age and principal field of employment. Thus both hypotheses are rejected.

Based on the findings of this study, a demographic profile can be described for the most active volunteer and factors identified which influence attrition of volunteers.

Implications

Volunteer personnel are needed to fill manpower shortages and provide services other than those provided by professional staff (Hayler 1975). Since maintaining a stable group of volunteer personnel is often a difficult task for an organization, it behooves the organization to consider the potential benefits of selecting volunteers by demographic characteristics. Hayler (1975) stated that a volunteer program can become a solid, smooth functioning part of an agency if it is built around the needs of the agency and the volunteers. The use of demographic characteristics in volunteer recruitment often has been limited to use as a screening technique for volunteer placement (Fine, Knight-Webb, and Breau 1976). Based on the study findings, the usage of demographic characteristics could be effectively expanded to use as a recruitment tool for volunteer selection.

The most active volunteer was defined as a female, aged 19-38, either single or married, with residence in northwest Houston, who attended a baccalaureate nursing program, had earned a graduate degree, and was employed in a school of nursing. Recruitment campaigns could be designed to attract individuals possessing these characteristics. It would be impractical to limit volunteers to only those possessing these characteristics because they would be few

in number. However, recruitment of "active" types could provide a stable core of volunteer personnel upon which an agency could rely.

Several guidelines can be developed for effective volunteer personnel administration. From the findings of this study, the factor most influential on the attrition of volunteer personnel was the length of time on active status. It can be anticipated that a high volunteer turnover is likely to occur approximately every four years. Thus, planning for training needs of volunteers and timely recruitment campaigns can be implemented to offset these effects. Volunteers with advanced degrees should be placed in more leadership positions and/or leadership development programs than non-degreed volunteers. Furedy and Kirshner (1975) report that volunteers can be of enormous value but the high cost of training, and unreliable volunteers are snares which can trap volunteer programs. A stable volunteer group will reduce the cost of training and provide a more reliable, trusted help to clients (Furedy and Kirshner 1975).

Most nurses had periods on active and inactive status during their service as volunteers. A system of periodically contacting inactive volunteers would be of merit in encouraging them to return to active status. Involving volunteers

as student nurses also could be valuable. This group possesses many of the characteristics and has the potential for possessing most of the desirable characteristics that would make them ideal volunteers.

From the findings of this study two changes were indicated for the volunteer service records: (1) add a category for sex specification, as the potential for male volunteer nurses is increasing as more males enter the field of nursing, (2) establish a procedure for updating education on the record. During the study it was found that the educational information was not usually updated.

Babchuk and Booth (1969) have reported that several characteristics can be found in organizations which have low membership turnover. (1) They are groups which have sizeable memberships and thus can accommodate a variable amount of participation. (2) The individual can change his level of participation at any time and be active for a short period, then inactive or be a nominal member over a long period. (3) The organization had multiple objectives, thus members could choose among a wide range of activities. (4) The organization could be expected to remain solvent for a long period of time. The American Red Cross possesses all of these characteristics and perhaps this is the reason it has been successful as a volunteer organization.

Recommendations

The following recommendations are made for future studies. It would be useful to repeat this study to validate this study's findings by replication of its results. A study to test the effectiveness of recruiting by demographic characteristics would be useful to test the utility of this approach. Factors, such as, placement, training, recognition, and supervision showed an effect on the stability of volunteers in agency programs. A study to test the reliability and significance of these factors could provide useful information to volunteer organizations on how to structure volunteer programs.

APPENDIX A
DATA COLLECTION CENSUS

DATA COLLECTION CENSUS

PART I. DEMOGRAPHIC CHARACTERISTICS

Birthdate

month day yearMarital Status (Circle one)

single married

Area of Residence (Circle one)

central NW SW NE SE

EducationBasic Nursing Educational Preparation (Circle one)

diploma associate degree baccalaureate

Highest Degree Held (Circle one)

associate baccalaureate master's doctorate none

EmploymentType of Position (Circle one)

administration supervision staff not working

Principal Field of Employment (Circle one)

hospital nursing home school of nursing private duty

school nurse occupational health nurse office nurse

community health other_____

PART II: RED CROSS VOLUNTEER SERVICE HISTORY

Type of Red Cross Experience (Circle all that apply)

teaching community projects disaster nursing
another Red Cross department

Red Cross Nurse Badge Possession (Circle one)

yes no

Number of Active Years (Circle one)

0 1 2 3 4 5 6 7 8 9 10

Number of Inactive Years (Circle one)

0 1 2 3 4 5 6 7 8 9 10

Status of Current Activity (Circle one)

active inactive

Longest Period on Active Status (Circle one)

0 1 2 3 4 5 6 7 8 9 10

Longest Period on Inactive Status (Circle one)

0 1 2 3 4 5 6 7 8 9 10

Date of Enrollment

____/____/____
mo da yr

APPENDIX B

DATA CARD

THE AMERICAN NATIONAL RED CROSS
NURSE ENROLLMENT RECORD

NAME (Last, first, middle)		MAIDEN NAME		DATE OF BIRTH		NAME OF SPOUSE	
PRESENT ADDRESS (Number and street, city and state, ZIP code)						TELEPHONE	
PRESENT POSITION, MILITARY RANK			EMPLOYER AND ADDRESS			TELEPHONE	
PERMANENT ADDRESS (Number and street, city and state, ZIP code)				NEAREST RELATIVE IN U.S. (Name, address, relationship)			
EDUCATION	SCHOOL OF NURSING AND LOCATION			DATE OF GRADUATION		DIPLOMA OR DEGREE	
	NAME OF COLLEGE OR UNIVERSITY		DATES ATTENDED OR GRADUATED		DEGREE		LANGUAGES SPOKEN OTHER THAN ENGLISH
RED CROSS EXPERIENCE	AMERICAN RED CROSS DISASTER OPERATION (Specify type)			DID YOU RECEIVE A RED CROSS STUDENT NURSE ACHIEVEMENT CARD? <input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> TEACHING <input type="checkbox"/> BLOOD PROGRAM <input type="checkbox"/> COMMITTEE <input type="checkbox"/> COMMUNITY PROJECTS <input type="checkbox"/> OTHER (Specify)						
REGISTRATION NUMBER AND STATE		LICENSE NUMBER AND STATE		VERIFICATION OF LICENSE (Signature and title)			STATUS OF LICENSE
I understand that enrollment as a Red Cross nurse offers me an opportunity to serve my fellowman and identifies me as part of the worldwide Red Cross humanitarian movement, and I agree to keep my local chapter informed of any change of address or status that may affect my availability for service.							
DO YOU HAVE, OR HAVE YOU EVER HAD, A RED CROSS NURSE'S BADGE? <input type="checkbox"/> YES <input type="checkbox"/> NO			DATE		SIGNATURE		
CHAPTER NAME AND ADDRESS				BADGE	DATE REQUESTED	DATE RECEIVED	BADGE NUMBER

• OVER •

AMERICAN RED CROSS FORM 2824 (REV. 11-75)

APPENDIX C
INSTRUCTIONS TO INVESTIGATORS AND JURY

INSTRUCTIONS TO THE INVESTIGATORS

A census type instrument has been developed to collect the data needed for this study. The instrument consists of two parts. Part I contains selected demographic characteristics. It includes the categories of birthdate, marital status, area of residence, education, and employment. Part II contains categories on Red Cross volunteer service. It includes type of Red Cross experience, Red Cross Nurse Badge possession, number of years active, number of years inactive, status of current activity, longest period on inactive status, and date of enrollment. These categories correspond with selected categories on the volunteer service record, Form 2824.

Please test the reliability of this instrument by using it to collect data from twenty volunteer records. The following procedure should be used.

1. Review the definition of terms for this study.
2. Review the volunteer service record, Form 2824.
3. Review the census instrument.
4. Complete one census for each record.
5. Record the information from the volunteer record exactly as it is written.
6. Locate the area of residence by looking up the address recorded on the record in a key map.

If you have any questions, please feel free to ask.
Thank you.

Delberta Williams Hayward

INSTRUCTIONS TO THE JURY

Please evaluate the contents of this instrument to determine its validity for use in this study. The following criteria should be considered:

1. Is this instrument suitable for collecting data from the volunteer record, Form 2824?
2. Does this instrument provide for the gathering of data appropriate to answer the question under investigation?
3. Does this instrument provide for the gathering of data appropriate to test the hypothesis of this study?
4. Are the categories of the instrument lucid?
5. Should any categories be added or deleted?

The problem, purposes, hypotheses, and definition of terms employed in this study can be found in the prospectus. After reviewing this information, please feel free to ask questions. Thank you.

Delberta Williams Hyland

APPENDIX D
AGENCY PERMISSION

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS 76204

84

DALLAS CENTER
1810 INWOOD ROAD
DALLAS, TEXAS 75235

HOUSTON CENTER
1130 M. D. ANDERSON BLVD.
HOUSTON, TEXAS 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE American Red Cross

GRANTS TO Debbora Hayward
a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Is there a correlation between demographic characteristics of professional nurses and the longevity of service they give as volunteers? This general problem will be investigated in view of a more specific question. If indeed demographic characteristics correlate with longevity of service, which characteristics are they?

The conditions mutually agreed upon are as follows:

1. The agency (may) (~~may not~~) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (~~may not~~) be identified in the final report.
3. The agency (wants) (~~desires~~) a conference with the student when the report is completed.
4. The agency is (willing) (~~would like~~) to allow the completed report to be circulated through interlibrary loan.
5. Other _____

Date: 31 May 78

Debbora Williams Hayward
Signature of Student

Robert Simpson, Manager
Signature of Agency Personnel
Mary Elizabeth Benedict
Signature of Faculty Advisor

* Fill out and sign three copies to be distributed as follows: Original-Student;
First copy - agency; Second copy - TWU College of Nursing.

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