

THE RELATIONSHIP BETWEEN SELECTED DEMOGRAPHIC
VARIABLES AND PARTICIPATION IN VOLUNTARY
ACTIVITIES BY MATURE WOMEN

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CHAPTER I

INTRODUCTION

Women in the United States have served in voluntary associations for many years. These associations have a vital role in society by "providing a setting for expressive activities, a vehicle to implement special personal interests, and affectual support for individuals" (Babchuck and Booth, 1969, p. 31).

The increasing number of women in the work force suggests that women will have fewer available hours for volunteer activities. However, in spite of these growing demands on a female's time, women have increased their participation in volunteer work (Schram and Dunsing, 1981).

Relatively little research attention has focused on the characteristics of females who participate in voluntary associations. With the expanding concerns for the continuance of volunteer programs, largely due to increased number of employed females and proposed federal budget cuts, a need arises to examine the characteristics of those women involved in volunteerism.

Statement of the Problem

Volunteer work is one nonmarket activity that can influence the levels of consumption and living by providing

nonmoney returns to consumers now and in the future (Schram and Dunsing, 1981). Participants may expend time, money, and energy to gain personal satisfaction and marketable skills. However, little is known about the number of hours spent in volunteer work, persons who volunteer, the types of organizations or activities in which they participate, and what influences that participation.

The majority of the research on volunteerism has described the family's role rather than the characteristics of the typical female volunteer. Time devoted to voluntary activities expends hours that could be available for other activities, including employment or household production. As more females enter the labor force, the possibility of reducing the supply of volunteers evolves. Recent governmental cutbacks have increased the interest in volunteers to supplement federal and state funding (Volunteers, 1982). Research is needed to determine if a sufficient resource of volunteer hours is available to meet the perceived demand.

This study was designed to provide a profile of the mature female's participation in voluntary activities and the types of organizations in which they participate. Subjects were between the ages of 30 and 44 in 1967. Information gained from this study can also serve as a basis for additional study in this area. With the demand for

volunteers expected to increase due to the diminishing federal support for social programs (Volunteers, 1982) and the growing number of females in the labor force, organizations need to know the characteristics of women who volunteer.

Purpose

The purpose of this study was to determine the relationship between selected demographic characteristics--age, education, health, home ownership, labor force attachment, marital status, number of dependents, race, and total family income--and the mature female's participation in volunteer activities.

Objectives

The objectives of this study were (1) to identify the demographic characteristics of mature women involved in volunteer activities, (2) to determine the amount of time spent in volunteer activities by mature women, and (3) to determine the types of organizations with the greatest number of mature women participants.

Data

Data for this study were obtained from the National Longitudinal Surveys (NLS) conducted by the Center for

Human Resource Research at Ohio State University for the United States Department of Labor. These surveys were designed to collect information related to labor market experiences and behavior of four cohorts. This study used the mature women cohort composed of females aged 30-44 in the NLS from 1967 to 1977.

Variables

Dependent Variables

Volunteer activities: Represented by the following components which were treated separately:

Hours per week of volunteer work done in the past year, 1977

Organization respondent did unpaid volunteer work for in the past year, 1977

Independent Variables

Age of respondent, 1967

Education of respondent, 1977

Health of respondent, 1977

Home ownership of respondent, 1977

Labor force attachment of respondent, 1977

Marital status of respondent, 1977

Number of dependents, 1977

Race of respondent, 1967

Total family income, 1977

Hypotheses

The following null hypotheses were tested:

1. There is no significant relationship between age and the amount of time allocated to volunteer activities by mature women.
2. There is no significant relationship between educa-tion and the amount of time allocated to volunteer activi-ties by mature women.
3. There is no significant relationship between health and the amount of time allocated to volunteer activities by mature women.
4. There is no significant relationship between home ownership and the amount of time allocated to volunteer activities by mature women.
5. There is no significant relationship between labor force attachment and the amount of time allocated to volun-teeer activities by mature women.
6. There is no significant relationship between mari-tal status and the amount of time allocated to volunteer activities by mature women.
7. There is no significant relationship between number of dependents and the amount of time allocated to volunteer activities by mature women.

8. There is no significant relationship between race and the amount of time allocated to volunteer activities by mature women.

9. There is no significant relationship between total family income and the amount of time allocated to volunteer activities by mature women.

10. There is no significant relationship between age and the type of volunteer work by mature women.

11. There is no significant relationship between education and the type of volunteer work by mature women.

12. There is no significant relationship between health and the type of volunteer work by mature women.

13. There is no significant relationship between home ownership and the type of volunteer work by mature women.

14. There is no significant relationship between labor force attachment and the type of volunteer work by mature women.

15. There is no significant relationship between marital status and the type of volunteer work by mature women.

16. There is no significant relationship between number of dependents and the type of volunteer work by mature women.

18. There is no significant relationship between total family income and the type of volunteer work by mature women.

Definition of Terms

For the purpose of this study, the following definitions were used:

Age: Age of respondent, 1967 (Center for Human Resources Research, 1981).

Career Pattern: Labor force attachment (LFA) scores will be categorized into the following patterns:

<u>Career Pattern</u>	<u>Score</u>
<u>Home</u> (no significant paid employment during the years from 1967-1977)	0-19
<u>Mixed</u> (not continuously employed but had some employment experience during the years from 1967-1977)	20-59
<u>Labor force</u> (fulltime employment during the years from 1967-1977)	60-100

(Chenoweth and Maret, 1980).

Dependents: Number of children of respondent, 1977.

Education: Highest grade completed, 1977.

Health: Respondents' health status in 1977 determined by their perceived existence of any of the following health conditions: pain; tiring easily (no energy); weakness (lack of strength); aches, swelling, sick feeling; fainting spells,

dizziness; nervousness, tension, anxiety, depression, shortness of breath, trouble breathing.

Home ownership: Respondent owns or rents house or apartment, 1977.

Income: Total family income, 1977.

Labor force attachment: Labor force attachment (LFA) will be determined by the following formula:

$$LFA = [(A/B) + (C/48) + (D/48)] 50$$

A = number of years in which the respondent worked at least 6 months between leaving regular school and 1977

B = number of years since the respondent left regular school and 1977

C = number of hours worked per week between 1967 and 1977

D = number of weeks worked per year between 1967 and 1977

(Chenoweth and Maret-Havens, 1978).

Marital Status: Marital status of respondent, 1977.

Mature women: Women ages 30-44 in 1967 who participated in the National Longitudinal Surveys.

Race: Race of respondent, 1967.

Volunteer activities: Unpaid work by respondent, 1977.

CHAPTER II

REVIEW OF LITERATURE

Literature related to volunteerism was reviewed to provide a background for this study. The variables directly related to this study are discussed, including age, education, health, home ownership, labor force attachment, marital status, number of dependents, race, and total family income.

Time Use Studies in the United States

Volunteerism is one manner in which individuals use their discretionary time. Because of this relationship, the study of volunteerism is based in time use studies. Time use studies began in the United States in the 1920's and increased in scope since then. Initial studies were undertaken to determine the workload of rural homemakers (Wilson, 1929). Sociologists, economists, home economists, and other professionals are concerned with topics such as family time use (Goebel, 1981; Nickols and Fox, 1980; Robinson, 1977), life satisfaction and time use (Havighurst, 1957; Pfieffer and Davis, 1971), and household tasks and time allocation (Sanik, 1981; Walker and Woods, 1976).

The length of the average workweek in the United States has decreased since these time use studies began. Hedges and Taylor (1980) reported that the average workweek dropped from about 53 hours to 44 hours between 1900 and 1946. More recently, the researchers found that the weekly hours of full-time workers declined about one-half hour per week between 1968 and 1979. They noted that for both males and females, workweeks of 35 to 39 hours were more prevalent and those of 41 to 48 hours were less prevalent than in 1968. The researchers added that if the number of part-time workers were included in the average workweek, the number of hours worked would drop slightly more. In addition, both men and women were more inclined to work part-time in 1979 than in 1968.

The decreasing workweek has focused attention upon the use of leisure time in society. Researchers have divided leisure into various categories such as physical, religious, or creative activities in order to determine which, if any, have the greatest concentration of participation. Based upon previous studies of leisure participation, the researcher examined the area of volunteerism, focusing on the amount of time allocated to volunteering, the types of organizations in which females participate, and the variables affecting their participation in such activities.

Terms Related to Volunteerism

Manser and Cass (1976) defined volunteerism as "those activities and agencies arising out of a spontaneous, private effort to promote or advance some aspect of the common good" (p.42). This common good is determined by the perception of the participants themselves. The researchers also emphasized that volunteerism is related to private endeavors rather than governmental projects. Persons involved in such activities are called volunteers, which were further defined as "those persons motivated by varying degrees of altruism and self-interest who freely choose to give of their time and talents" (p.42).

In a 1968 study, Booth, Babchuck, and Knox defined voluntary organizations as expressive associations designed to "prevent deviance, reaffirm values, and provide mechanisms for coping with failure and frustrations" (p. 428). The researchers noted that those organizations may be more necessary for the lower and working classes because of the nature of the services delivered. Furthermore, the researchers contended that voluntary associations contribute to the performance of functionally important tasks in society.

Loeser (1974) defined volunteerism as the "free giving of one's time and talents for work deemed socially or politically beneficial" (p. 1). In another study, Smith (1974)

defined a volunteer as someone who belonged to a voluntary association of some kind. Additionally, Smith concluded that the voluntary sector of the United States can be defined as a composite of voluntary associations, volunteer programs, other voluntary organizations, and individuals acting as volunteers. Smith further used voluntary action as a synonymous term with citizen involvement, citizen participation, voluntarism, and volunteerism.

Enders and Fanslow (1981) accepted a commonly used definition for volunteer services, defining them as activities a person is free--not coerced-- to pursue in order to achieve a goal for which he/she is not paid. This definition exemplifies the difficulty in precisely defining volunteerism. Schram and Dunsing (1981) also addressed the complexity of the term by noting that other related phrases in literature include participation in organizations and community welfare activities.

Volunteerism in the United States

Volunteer service was integrated into the American society through participation in organizations involving education, welfare, health, politics, economics, religion, recreation, leisure, environment, urban problems, and various national causes. Historians have described Americans

as a nation of "joiners" (Hausknecht, 1962), while more recent studies indicated that adults in the United States tend to have only union association affiliations (Curtis, 1971; Hyman and Wright, 1971).

Four Stages of Volunteerism in the United States

The development of volunteering in the United States has undergone four transition and growth stages (O'Connell, 1978). Each period marked changes in the nature of the activity.

The first era began in the early days of colonization when banding together was a means of survival. Churches and town councils played the primary roles in promoting voluntary activities (O'Connell, 1978).

The second stage of volunteerism began during the Civil War years and lasted until the 1930's, a span of almost 75 years (Jones and Herrick, 1976; O'Connell, 1978). During these years, Americans saw the development of organized groups such as the American Red Cross, the Family Service Association of America, the Young Men's Christian Association, the American Public Health Association, among others. The growth of these organized volunteer efforts was increased with World War I and the depression years.

Historians identified the beginning of the third stage of voluntary growth as the establishment of the March of

Dimes in 1938 (Jones and Herrick, 1976; O'Connell, 1978). During this period, volunteer service was integrated into the middle class of America and monetary support of non-profit organizations increased. This period lasted approximately 20 years and was the foundation for the current stage of citizen involvement.

Another phase of volunteerism occurred in the early 1960's, marking the beginning of the fourth and present era of volunteer service. Persons of all races and classes of society began participation in organizations that address various aspects of life. In the process, Americans raised money and votes for "a staggering array of causes" (O'Connell, 1978, p. 197). Researchers in the 1970's found that a larger proportion of the population was involved in volunteer efforts than at any other time in American history (Manser and Cass, 1976; Smith, 1974).

Types of Voluntary Organizations

Volunteer organizations maintain a "formal structure at least nominally controlled by the membership and pursue the common interests of the membership through voluntary, unpaid activities" (Curry, 1980, p. 26). This description does not exclude the large, complex associations such as international trade unions that have a full-time paid staff.

Gordon and Babchuck (1959) developed a typology of voluntary associations dividing all such groups into three classifications: expressive, instrumental, and instrumental-expressive. Expressive organizations have a primary goal of providing direct or immediate gratification through personal contact. This type of voluntary association generally exists for its own sake and is not oriented toward achieving external goals. Examples of expressive associations are card clubs, discussion groups, bowling teams, and church-related groups.

Instrumental associations were described as those groups attempting to produce some change or effect upon an external society, such as a specific segment of society, the community, or the general public. Because of the need for coordination and mobilization of resources, instrumental associations are usually more formally organized than expressive groups (Edwards and Booth, 1973). Special interest groups, unions, political parties or clubs, and trade and professional organizations are examples of instrumental associations.

The third type of association was a combination of the two previous classifications. The instrumental-expressive associations would, therefore, incorporate both functions. Members tend to identify with the organization because of

the fellowship it provides as well as the special objectives it maintains (Gordon and Babchuck, 1959). Groups such as fraternal groups, civic clubs, and self-help associations fall into this category.

Babchuck and Booth (1969) conducted a study on membership in volunteer associations dividing the associations into the following categories: church-related groups, job-related organizations, recreational groups, fraternal service organizations, adult leadership of youth programs, and other. The researchers found that 84% of the adults surveyed belonged to one or more associations, with greater participation in groups having multiple objectives, a long history, and a large membership.

McPherson (1983) said that participation in organizations is generally more influenced by broad social, geographical, and institutional factors than by attitudes toward the organization. The researcher explained that individuals unaware of an association or its availability in their area will not join the organization even though they may be in agreement with its functions. Furthermore, the researcher found that organizational size is strongly related to town size, the availability of local affiliations, and the economic activity, stability, and centrality of the organization. These findings also relate to time

allocated to volunteer work because the above mentioned factors may influence the individual's desire to participate in the activities of the volunteer organization.

Profile of Volunteer Participation

Because of the difficulty in defining voluntary associations, researchers have debated the total number of participants in non-paid activities. Hyman and Wright (1971) found that 36% of the adults in the United States in 1965 did belong to non-union organizations, while this percentage increased to 43% in 1968. In a 4-year study initiated in 1961, Babchuck and Booth (1969) found that 84% of the persons surveyed were affiliated with one or more associations. Hausknecht (1962) reported that no more than 25% of the population belonged to more than one association.

Robinson (1977) discovered that time allocated to organizations increased from 2.8 hours in 1965 to 3.8 hours in 1975, while Smith (1974) found that the average total time per person per week spent in organized activity was only 45 minutes. Smith further estimated that about 100 million persons in the United States belonged to voluntary associations in 1967 with an increase to 107 million by 1974. However, Manser and Cass (1976) found that one of four Americans over 13 years of age--approximately 37 million people--did some form of volunteer work.

Profile of Female Volunteers

Throughout the years women have served in volunteer activities. Even in recent years when women were increasing their labor force participation, they were increasing their participation in volunteer work (Schram, 1979). In 1965, 18.5% of all women had participated in volunteer work during the year (U.S. Department of Labor, 1969). By 1974, participation had increased to 24% (ACTION, 1975).

A national study in 1965 found that the typical volunteer was 1) a married woman, 2) aged 25-44, 3) a high school graduate, 4) not employed in the labor force, and 5) in the \$5,000-\$7,500 income range (U.S. Department of Labor, 1969). By 1974, this profile had changed in two ways: although still female, she was now a college graduate and in the upper income bracket.(ACTION, 1975).

Variables Affecting Female Participation in Volunteerism

Based upon a review of literature, this study will examine nine variables affecting the female's participation in voluntary activities. These variables are age, education, health, home ownership, labor force participation, marital status, number of dependents, race, and total family income.

Age and Volunteerism

Researchers have determined that age can be a significant factor in the female's participation in voluntary associations (Babchuck and Booth, 1969; Curtis, 1971; Enders and Fanslow, 1981; Hausknecht, 1962; McPherson and Lockwood, 1980; and Schram, 1979). However, Eitzen (1970) determined that age was not significant.

Hausknecht (1962) found that as an individual advanced toward middle age, there was a tendency to become a joiner; but as that person grew older, there was a tendency to withdraw from voluntary associations. In addition, Hausknecht concluded that when age was controlled, men under 40 had a higher rate of membership than women; but after age 40, women participated more often. The researcher found that 61% of the men between 30 and 39 belonged to such groups while 57% of the females were members. Between the ages of 50 and 59, the difference reversed: 55% of the men were members and 62% of the females were members. In his final conclusions, Hausknecht determined that the youngest and oldest age groups had the lowest participation rates with a peak in volunteer participation occurring between the ages of 35 and 45.

Other researchers agree with this segment of Hausknecht's findings (Curtis, 1971; Eitzen, 1970; McPherson

and Lockwood, 1980). However, Curtis (1971) found that membership in voluntary associations rose gradually with age, reached its peak, and leveled off in the 50-59 age group.

However, these findings are not consistent with those of Babchuck and Booth (1969), Enders and Fanslow (1981), or Schram (1979). Babchuck and Booth (1969) found that young women between the ages of 20 to 29 were not only more likely to become members, but also to add, drop, or change memberships. Robinson (1977) noted that the 18-25 age group contributed the most time (8.4 hours per week) to organizations whereas age groups over 35 contributed about three hours per week. In agreement with that study, Schram (1979) found that the homemaker's age was the most important determinant in volunteer participation, with the younger age groups having the most active interest in involvement. ACTION (1975) reported that the highest participation (35%) was among those aged 25-44. Participation was lowest among those aged 18-24 (20%) and among those aged 65 and older (16%).

However, Enders and Fanslow (1981) determined that older Americans who were more educated and in higher income levels had the greatest participation rates. They found that less than 19% of the youngest group listed no volunteer hours while 45% of those over age 56 contributed more than

13 hours per week. Age, therefore, does not seem to be a consistent predictor of volunteer participation.

Education and Volunteerism

Education was the second independent variable studied. A person's level of education can be a determinant in his/her volunteer activities (ACTION, 1975; Schram, 1979). Studies have indicated that neither sex nor income had as strong an effect upon affiliation as education or the length of residence (McPherson and Lockwood, 1980).

Hagedorn and Labovitz (1968) found a direct relationship between formal education and participation in volunteerism at a .70 correlation, while Hausknecht (1962) concluded that membership in voluntary associations increased as the educational level increased. Curry (1980) found that education was most strongly and consistently related to participation in voluntary associations.

Education was also positively related to participation in volunteer work in the study conducted by ACTION (1975). While 17% of those women with less than four years of high school volunteered, 49% of those women with four years or more of college volunteered. Therefore, education should be a strong predictor of volunteer participation.

Health and Volunteerism

The relationship between health and volunteer participation has received little attention from researchers.

Since Schram (1979) concluded that volunteer work could improve the emotional and physical health of both employed and non-employed females, this relationship should be studied. Therefore, for the purpose of this study, the relationship between paid employment and health will be used to examine the relationship between volunteer work and health.

Women are the primary consumers of health care in the United States, for themselves and their families (Moore, 1980). The pattern of utilization, however, was mixed and varied according to age. Moore (1980) reported that women between the ages of 15 and 44 had considerably more operations than men of that age group. The time spent in hospitals or illness can decrease the available hours for volunteer activities.

Males had an average of 16.9 days of restricted activities while females averaged 21.1 days in 1979 (U.S. Bureau of the Census, 1980). Males also experienced fewer workloss days than females, with 5.6 days for men and 7.8 days for women. Moore (1980) attributed the difference to the female's responsibility for childcare.

The amount of labor supplied by women was affected by conditions of health, especially for black females (Maret, 1982). Maret (1982) also found that health was a significant factor in labor force attachment of white women,

although the relationship was not as strong for black women. In addition, the researcher discovered that interracial differences in the amount of labor supplied were greater among women whose health was excellent or good, and smaller among those whose health was fair or poor. Health, therefore, may influence the amount of time a mature female allocates to volunteer work.

Home Ownership and Volunteerism

Researchers indicated that home owners had a significantly higher rate of membership in voluntary activities regardless of the size of the community (Eitzen, 1970; Hausknecht, 1962; Scott, 1957). Hausknecht (1962) found that the rate for renters, however, rose significantly only in the least urbanized areas. Home ownership, therefore, should have a significant relationship with participation in volunteer activities.

Labor Force Attachment and Volunteerism

The degree of labor force attachment can also have an effect upon voluntary activities of individuals. Little research has focused on labor force attachment which examines an individual's participation in the labor force over an extended period of time (Chenoweth and Maret, 1980). Therefore, for the purpose of this study, information available on labor force participation was also examined.

Hausknecht (1962) studied the rate of participation in volunteerism by different occupations and reported the percentage of each group's involvement. The researcher found that 53% of the upper middle class, the majority of whom were professionals and managers, participated in volunteer activities while 41% of those in clerical and sales occupations, 32% of the skilled workers, 27% of those in service occupations, and 21% of the unskilled workers volunteered. If the assumption were made that employees in higher status occupations have a greater labor force attachment, then it could be concluded that persons with more labor force attachment contribute more time to volunteer organizations. Furthermore, these figures may also be indicative of the greater number of opportunities for memberships available to those in higher positions than to those workers in subordinate roles.

This assumption was supported by a study on the size of organizations (McPherson, 1983). The researcher concluded that persons whose jobs reinforce their membership in an organization would be more likely to participate in that organization. These persons may also tend to participate in those volunteer activities which supplement or relate to their work.

Labor force participation was also studied in the national survey on volunteerism in 1965 (U.S. Department of Labor, 1969). The study indicated that a higher percentage of those usually employed part-time (21%) than full-time (16%) engaged in volunteer work. Nineteen percent of those women not in the labor force were involved in volunteer activities. The occupations of the employed women were also examined. White collar workers had the highest participation at 21%, service workers followed with 14%, and blue-collar workers were lowest with 10%. These findings were consistent with Hausknecht's 1962 study.

Volunteerism among retired persons and unemployed persons has also been examined. Enders and Fanslow (1981) found that retired and unemployed respondents volunteered more time than employed individuals. Approximately 87% of the retired and 85% of those not employed gave some time to volunteer service, while 83% of the employed gave some time to volunteer service.

When comparing the organizational involvement of employed women and housewives, Robinson (1977) found that employed married females contributed 2.2 hours per week and married housewives contributed 4.8 hours per week to volunteerism. For single women, however, the results were reversed. Single employed women participated 4.4 hours per

week while single housewives participated 3.0 hours per week. Each category, except single housewives, showed an increase in participation between 1965 and 1975. These findings indicated that other variables combined with labor force attachment may have a greater effect than the one variable alone.

Smith (1983) studied the labor force activity of females and found that single women had a greater tendency to be employed than married women. She also found that widows were employed longer hours than married women and that divorced females had the longest average work schedule of those studied. Therefore, these findings indicate that married women may have more available hours for volunteer activities than single women, with divorced women having the least amount of available hours for such activities due to labor force participation.

In a related area of study, Jenner (1981) examined volunteerism as an aspect of women's work lives and concluded that the role of volunteer work for females may be that of consciously chosen primary work, as a supplement to primary work, or as a means of entering or returning to the workforce. Based on these studies, labor force attachment was not a consistent predictor of participation in volunteer activities.

Marital Status and Volunteerism

Researchers indicated that a person's marital status did affect the amount of time allocated to voluntary activities. Enders and Fanslow (1981) found that the single individual contributed less volunteer time than either married, divorced, widowed, or separated respondents. Approximately 88% of the married persons contributed some hours to volunteer work while the remaining 12% indicated no participation. The rate of participation was similar for the divorced, widowed, and separated respondents. About 23% of the single respondents contributed no hours to volunteer service and the other 77% participated for some hours.

These findings are consistent with those from other studies. Curtis (1971) reported that married respondents tended to be slightly more frequent joiners than non-marrieds, whether in union or non-union activities. Hausknecht (1962) found that 57% of married individuals, 53% of the widowed, 46% of the divorced, and 44% of the single respondents were members of service organizations.

In a multivariate analysis of data from a previous study conducted by Babchuck and Booth in 1969, McPherson and Lockwood (1980) discovered that divorced, widowed, or separated persons added more affiliations than either the single or married persons. The researchers concluded that

individuals undergoing significant life changes tended to alter their pattern of affiliation more frequently than those in stable relationships. However, in the 1969 study, Babchuck and Booth concluded that the influences of one spouse on the other might contribute to the higher rate of participation of the married respondents as compared with the single, divorced, widowed, or separated individuals. Based on these studies, marital status should be a predictor of participation in volunteer work with married persons having greater involvement than other groups.

Number of Dependents and Volunteerism

Few researchers have studied the effect of children or dependents on the female's participation in volunteer work. Enders and Fanslow (1981) found that individuals with children volunteered more time than those without children. About 42% of the respondents with three or more children indicated they contributed more than 12 hours of service per week while 35% of those with no children volunteered the same amount of time.

Finlayson (1969) determined that volunteer participation was found to vary with the number and age of children. Fifty-three percent of the women with three or more children volunteered while 32% of the women with no children volunteered. The researcher added that the difference in

participation rates may be attributed to the additional opportunities for volunteer service for women with children by participating in school related activities. The number of dependents, therefore, should affect the amount of time spent in volunteer work as well as the type of organizations in which mature women participated.

Race and Volunteerism

Race of the participant has also been studied. Wright and Hyman (1959) found that 46% of the white females surveyed and 63% of the white individual respondents maintained no memberships in volunteer associations, compared with 60% of black females and 73% of the black adults. More recent studies, however, determined that race was irrelevant to the amount of voluntary participation (Curry, 1981; Enders and Fanslow, 1981; Hausknecht, 1962; Klobus-Edwards and Edwards, 1979). These findings indicated that as more blacks have entered the labor force at higher levels, their memberships in various organizations have also increased. In addition, federal legislation has decreased the barriers to minority memberships in various associations (Curry, 1981). Based on these findings, race should not have a significant relationship with volunteerism.

Total Family Income and Volunteerism

Hyman and Wright (1971) concluded that whether income, education, the occupation of the head of household, home ownership, or the respondents' perceived level of living was considered, persons of higher status positions belonged to more voluntary associations than those of lower status. Therefore, for the purpose of this study, income will be used as an indicator of social status.

Membership in voluntary associations was directly related to current socioeconomic position in studies by Eitzen (1970), Hausknecht (1962), and Hyman and Wright (1971). Findings indicated that as a person's income increased, so did his/her rate of membership. An individual's current economic position appeared to have more effect upon membership than a person's "station of origin" (Hyman and Wright, 1971). Eitzen (1970) noted that the higher the socioeconomic status, the lower the level of alienation, which implied greater involvement in organizational activities.

Enders and Fanslow (1981) found that females of all income levels participated in volunteer activities. Their findings indicated that about 52% of those individuals earning in excess of \$20,000 volunteered 1-12 hours per week, while 31% of this group volunteered 13 or more hours

per week. Those respondents in the middle income category (\$10,000-\$19,999) had somewhat less participation, with 47% volunteering from 1-12 hours per week and 39% volunteering more than 13 hours per week. Lower percentage rates were given for those in the \$5,000-\$9,000 income range. This bracket showed that 44% of the respondents volunteered from 1-12 hours per week and 38% volunteered 13 or more hours. These findings are relevant to this study because the majority of the respondents were female.

The findings reviewed did not indicate if persons with higher income level volunteer more frequently because it was expected of them or if they had more discretionary time to allocate to such activities. Regardless of the reason for volunteering, research indicated that persons with higher income levels did tend to volunteer more frequently than those persons from lower income brackets.

Summary

Literature was reviewed to provide a background and conceptual framework for relating the nine demographic characteristics of women to their volunteer activities. Numerous studies were found that addressed different aspects of these relationships; however, further study is needed to identify significant characteristics of females influencing their volunteer activities.

CHAPTER III

PROCEDURES

The overall design, population and sample, data collection, and analysis of the data for this study are discussed in this chapter.

General Design

The United States Department of Labor contracted with the Center for Human Resource Research at Ohio State University to conduct the National Longitudinal Surveys (NLS) in early 1965. These surveys were designed to collect information on the labor market experience and behavior of four cohorts within this country's population. The age-sex characteristics of the cohorts included: men 45 to 59 years of age; women, 30 to 44 years of age; and young men and women, 14 to 24 years of age.

Data used for this study were obtained from the mature women cohort, those aged 30 to 44 years at the beginning of the study, in the NLS from 1967 to 1977. The data were of specific interest because the collected information related to women's labor market experience and various sociodemographic data. Due to the long-term significance of the

data, which will expand the information available on volunteer activities as related to women's labor force participation and provide a basis for further study, age of the data was not a problem. As ex post facto analysis was used to determine the effects of specified demographic and economic characteristics on voluntary behavior of mature women.

Population and Sample

The cohort of mature women was represented by a national probability sample of approximately 5,000 women. The samples were selected by the Bureau of the Census from the primary sampling units that had been chosen for the experimental Monthly Labor Survey conducted between early 1964 and late 1966. In order to provide statistically reliable estimates for black women, a sampling ratio was used that was three to four times larger for black women than for white women (Center for Human Resource Research, 1981).

Sampling procedures represented the mature women cohort by a multi-stage probability sample located in 235 sample areas in 485 counties and independent cities representing every state and the District of Columbia. The sample areas were selected by grouping all counties and independent

cities involved into about 1,900 primary sample units. The 1,900 units were formed into 235 strata of one or more primary sampling units that were relatively homogeneous according to socioeconomic characteristics (Center for Human Resource Research, 1981).

Data Collection

Data were collected with a variety of survey techniques to avoid the problem of test-wiseness of the respondents over an extended period of time (Fox, 1969). Trained census interviewers were assigned to collect the data. Specific interviewing procedures used to secure the data are given below:

<u>Year</u>	<u>Procedure</u>
1967	Interview
1968	Mail Survey
1969	Interview
1971	Interview
1972	Interview
1974	Telephone Survey
1976	Telephone Survey
1977	Interview

Sample attrition rates were small in the NLS. The completion rate for the 10-year survey of the mature women cohort was 78% (Center for Human Resource Research, 1981).

Variables

Dependent Variables

Volunteer activities: Represented by the following components which are treated separately:

Hours per week of volunteer work done in the past year, 1977

Organization respondent did unpaid volunteer work for in the past year, 1977

Independent Variables

Age of respondent, 1967

Education of respondent, 1977

Health of respondent, 1977

Home ownership of respondent, 1977

Labor force attachment of respondent, 1977

Marital status of respondent, 1977

Number of dependents, 1977

Race of respondent, 1967

Total family income, 1977

Coding of the Variables

Coding of the variables for statistical analysis is discussed in this section of the chapter. Each variable is explained individually.

Voluntary Activity Variables

Amount of Time in Volunteer Work. The hours per week spent in voluntary activities were divided into the following groupings: (a) no hours, (b) 1-19 hours, (c) 20-39 hours, and (d) 40 or more hours. Groupings were determined in accordance with the distribution of the data.

Type of Voluntary Activity. Organizations given as options for volunteer service included (a) hospitals/clinics; (b) schools; (c) churches; (d) political organizations; (e) groups such as Community Chest, United Fund, etc.; (f) Boy Scouts, Girl Scouts, Little League, etc.; (g) civic or community action groups; (h) social welfare, and (i) others. The classification of organizations was given by the NLS researchers.

Demographic Variables

Age. Respondent's age in 1967 was divided into the following groupings: (a) 30-34, (b) 35-39, and (c) 40-44. Groupings were based on the even distribution of the sample.

Education. Respondent's highest grade completed was converted into years of schooling actually completed by 1977 to determine the educational level. Respondents were divided into three categories: (a) 0-11, (b) 12, and (c) 13-18. These categories were determined by the

distribution of the sample and were in accordance with previous studies (Schram, 1979 and Curry, 1980).

Health. Health of the respondent was separated into two categories: (a) some health problems and (b) no health problems. Persons experiencing any of the following conditions were classified as having some health problems: pain; tiring easily, weakness; aches, swelling, sick feeling; fainting spells, dizziness; nervousness, tension, anxiety, depression; and shortness of breath and trouble breathing. Persons not experiencing any of the listed problems were classified as having no health problems. The two categories of the variable were as given in the NLS'code book.

Home Ownership. Home ownership was entered in three categories: (a) owned house; (b) rented house or apartment, and (c) other living arrangements. Categories were divided in accordance with NLS procedure.

Labor Force Attachment. The LFA of the respondent was divided into (a) home, (b) mixed, and (c) labor force. Classification of the variable was based on previous research (Chenoweth & Maret, 1980).

Race. Race of the respondent was placed in the following groupings: (a) white, (b) black, and (c) other. Since the sampling ratio for blacks was three to four times

as large as whites, the white variable was weighted three times in the statistical analyses. Race was self-determined and based on data available through NLS.

Total Family Income. The total family income of the respondent was separated into five categories: (a) less than \$10,000; (b) \$10,000-\$14,999; (c) \$15,000-\$19,999; (d) \$20,000-\$24,999, and (e) \$25,000 and over. Income groupings were based on the distribution of the data.

Analysis of the Data

Methods used to analyze the data included frequency distributions, chi-square with gamma option, multiple regression and analysis of variance. The following computer programs in Statistical Packages for the Social Sciences (SPSS) were performed: FREQUENCIES and CROSSTABS (Nie, et al., 1975) and NEW REGRESSION and DISCRIMINANT (Hull and Nie, 1981).

Frequency distributions were compared with documentation of the variables in the NLS Codebook (Center for Human Resource Research, 1981) to ensure that variables were input correctly. Sample description was determined by basic distributional characteristics and central tendencies of the variables.

Chi-square analyses were computed to determine the relationship, if any, between the variables. Gamma was

used to examine the direction and strength of the relationship between the variables.

Multiple regression statistics were used to analyze the variables by compiling a series of linear equations, each containing an added significant variable. The added variables were the ones making the greatest reduction in the error of the sum of squares. Only individual variables with F-ratios equal to or greater than 3.64 were included in the equation. Therefore, only the variables significant at the .05 level were included in the analysis. Variables listed as independently significant in the stepwise multiple regression procedure were those contributing to the reduction of the error of the sum of squares while not being highly correlated with another selected variable. R-square was used to determine the proportion of the variance of the independent variable on the dependent variable and to measure the strength of the relationship between the two variables.

An analysis of variance or independent t-test was performed on selected variables to determine significant differences between hours spent in volunteer activities. Student-Newman-Kuel procedure was performed when a significant analysis of variance was obtained.

The discriminant function was used to examine the multicollinearity among the independent variables. According to Nie, et. al. (1975), multicollinearity can affect the regression procedure by skewing the results of the analysis. A high level of multicollinearity can influence the unique determination of the coefficients as well as causing the regression coefficients to fluctuate greatly from sample to sample. Therefore, the greater the intercorrelation of the independent variables, the less reliable the results of the analysis.

Summary

Descriptive statistics and correlational procedures were used to analyze the data obtained from the NLS between 1967 and 1977. Dependent variables included those relating to volunteer participation while independent variables were demographic characteristics of the mature female respondents in the NLS. The SPSS computer programs FREQUENCIES, CROSSTABS, NEW REGRESSION, and DISCRIMINANT were used to test the null hypotheses.

CHAPTER IV

RESULTS

This chapter is divided into four sections: a description of the sample, a summary of the voluntary participation of the respondents, and the results of the statistical analysis of the data. Data for the study were obtained from the NLS conducted by the Center for Human Resource Research at Ohio State University between 1967 and 1977. Statistical procedures used to analyze the data included frequency counts, chi-square, and multiple regression.

Description of the Sample

Demographic characteristics of the mature woman cohort were studied, including age, education, health, home ownership, labor force attachment, marital status, number of dependents, race, and total family income. Variables related to volunteerism were the amount of time allocated to volunteer activities and the types of activities in which respondents participated. Frequency counts were computed to determine the following descriptions.

Sample procedures of the NLS resulted in an even percentage distribution of respondents in the age categories.

In 1967, 35% of the respondents were 30-34 years old, 31% were 35-39, and 34% were 40-44. The respondents had a mean age of 37 at the time the data collection began. The average of the female population in the United States at that time was 28; therefore, the women in this sample were older than the national average.

Education

Thirty-five percent of the respondents had less than a high school education, 47% had completed high school, and 18% had completed up to six years of education beyond high school. Findings indicated that a high school education was the mean level of education for the respondents. According to the U.S. Bureau of the Census (1980), a high school education was also the mean level in 1977 for this age group of the female population in this country.

Health

Sixty-nine percent of the respondents reported some physical problems while 31% reported none. Therefore, the majority of the women sampled had either major or minor physical problems. In comparison with the national averages for this population, females averaged 72 days of disability in 1977 and made 5.4 visits to the doctor in that year (U.S. Bureau of the Census, 1980). These averages tend

to indicate that many females in 1977 experienced some health problems.

Home Ownership

The majority of the respondents (78%) owned their houses and 18% rented a house or apartment. The remaining 4% had other living arrangements. These percentages were in accordance with the national averages in 1977 (U.S. Bureau of the Census, 1980).

Labor Force Attachment

Thirty percent of the respondents had a home career pattern of labor force attachment, indicating they had no significant labor force participation, and 28% had a labor force career pattern, meaning they were employed outside the home on a continuous, fulltime basis. The remaining 42% had a mixed career pattern, indicating some significant labor force participation. The mean labor attachment score was 49, which was a mixed career pattern. According to data available from the U.S. Bureau of the Census (1980), about 60% of the females in this age group were employed either full-time or part-time outside the home in 1977 with the remaining 40% not employed in the labor force. The labor force characteristics of this sample were, therefore, congruent with the national averages.

Marital Status

The largest percentage of the respondents (78%) were married. Of those not married, 12% were divorced or separated, 6% were widowed, and 4% were never married. These percentages were similar to the national averages for this age group of females in 1977, differing slightly for widowed which was 3% and never married, which was 7% (U.S. Bureau of the Census, 1980).

Number of Dependents

Thirty-five percent of the respondents had no children, 22% had one child, 19% had two children, and 24% had three or more children. Therefore, a total of 65% of the respondents had children. Based on data from the U.S. Bureau of the Census (1980), the total percentage with children was higher than national figures in 1977. Approximately 53% of the females in this age group had one or more children and 47% had no children.

Race

Eighty-eight percent of the respondents were white, 12% were black, and 1% were other races. The total percentage exceeds 100 due to rounding. These percentages were the same for the female population in the United States in 1977 (U.S. Bureau of the Census, 1980).

Total Family Income

Twenty-seven percent of the respondents had a total family income of less than \$10,000 while 25% had an income of \$25,000 or more. Other category percentages included: 17% between \$10,000 and \$14,999, 18% between \$15,000 and \$19,999, and 14% between \$20,000 and \$24,999. Respondents had a mean total family income of \$17,000. In comparison with the national averages for this population, families averaged about \$19,000 per year in 1977; however, the percentages were similar. Respondents in the sample, therefore, had a total family income below the national average at that time.

Summary Profile

Based on frequency counts and means, the following demographic characteristics provided a profile of the "typical" respondent in this study: 37 years of age in 1967, a high school graduate, some physical problems, a homeowner, mixed labor force attachment, married, one child, white, and a total family income of \$17,000. The typical respondents were very similar to the general U.S. population of women in 1977.

Voluntary Participation of Respondents

Twenty-six percent of the respondents indicated they spent 1-19 hours in volunteer work, while 1% participated

20-39 hours, and another 1% participated 40 or more hours per week. However, a total of 72% of the females did not allocate any hours to volunteer activities. Results are shown in Table 1.

Of those respondents participating in volunteer activities, the majority worked in either church (38%) or school-related activities (14%). Twelve percent volunteered in Community Chest, United Fund, etc., and 10% in civic or community action programs. As reported in Table 2, the remaining participants volunteered in hospitals/clinics (6%); Boy Scouts, Girl Scouts, Little League, etc. (7%); political organizations (1%); social welfare activities (1%), or others (11%).

Findings

Chi-Square Analysis

A chi-square analysis was used to determine the relationship between the nine independent variables and the two dependent variables. A description of the results and accompanying tables follow.

Age and Volunteer Time. The analysis of data with the variable of age resulted in a χ^2 of 22.85 with 6 degrees of freedom, significant at .001. Results are shown in Table 3. A gamma of -.105 was given. Null hypothesis 1, which

Table 1

Number of Hours Per Week Allocated to Volunteer
Activities by Mature Females

<u>Hours</u>	<u>Percent</u>	<u>Ns</u>
0	72	4,036
1-19	26	984
20-39	1	41
40 or more	1	22
Totals	100	5,083

Table 2
Types of Organizations in Which
Mature Females Participated

<u>Organizations</u>	<u>Percent</u>	<u>Ns</u>
Boy Scouts, Girl Scouts, Little League, etc.	7	59
Churches	38	413
Civic/Community Action	10	101
Community Chest, United Fund, etc.	12	131
Hospitals/Clinics	6	69
Political Organizations	1	12
Schools	14	157
Social Welfare	1	20
Other	11	124
Totals	100	1,086

Table 3
 Amount of Volunteer Time of Mature Females
 Per Week, 1977, By Age, 1967*
 (Percent by Column)

Amount of Volunteer Time Per Week	Age*		
	30-34	35-39	40-44
0 Hours	69	71	76
1-19 Hours	29	27	22
20-39 Hours	1	1	1
40 or more Hours	1	1	1
Percent of Total	35	31	34
Mean Number of Hours Volunteered	5.8 ^a	6.8 ^a	6.2 ^a

$\chi^2 = 22.85$ with 6 df

Significance = .001

Gamma = -.105

*Age when data collection began

^aValues within a row with the same superscript are not significantly different with $p < .05$

predicted no significant relationship between age and the amount of time allocated to volunteer activities, was rejected.

Education and Volunteer Time. The relationship between these two variables had a x^2 of 444.56 with 6 degrees of freedom and was significant at .001. As shown in Table 4, the relationship was fairly strong with a gamma of .475. Therefore, null hypothesis 2, predicting no relationship between education and the amount of time allocated to volunteer activities by mature women, was rejected.

Health and Volunteer Time. This analysis resulted in a x^2 of 107.84 with 3 degrees of freedom. The significance level was .001, with a gamma of -.287. (See Table 5.) Based on these findings, null hypothesis 3 which predicted no significant relationship between health and the amount of time allocated to volunteer activities by mature women was rejected.

Home Ownership and Volunteer Time. As indicated in Table 6, the results of this analysis revealed a x^2 of 150.78 with 6 degrees of freedom and a significance level of .001. However, the significance level is inflated because 17% of the valid cells had an expected cell frequency less than 5. The gamma was -.440, which predicts a fairly strong relationship between the two variables. Null

Table 4
 Amount of Volunteer Time of Mature Females
 Per Week, 1977, By Education, 1977
 (Percent by Column)

Amount of Volunteer Time Per Week	Years of Education		
	0-11	12	13-16
0 Hours	86	70	51
1-19 Hours	13	28	46
20-39 Hours	1	1	1
40 or more Hours	0	1	2
Percent of Total	35	47	18
Mean Number of Hours Volunteered	5.5 ^a	6.2 ^a	6.8 ^a

$\chi^2 = 444.56$ with 6 df

Significance = .001

Gamma = .475

^aValues within a row with the same superscript are not significantly different with $p < .05$

Table 5
 Amount of Volunteer Time of Mature Females
 Per Week, 1977, By Health, 1977
 (Percent by Column)

Amount of Volunteer Time Per Week	Health	
	Some Physical Problems	No Physical Problems
0 Hours	68	80
1-19 Hours	30	17
20-39 Hours	1	2
40 or More Hours	1	1
Percent of Total	70	30
Mean Number of Hours Volunteered	6.2 ^a	6.4 ^a

$\chi^2 = 107.84$ with 4 df

Significance = .001

Gamma = -.287

^aValues within a row with the same superscript are not significantly different with $p < .05$

Table 6
 Amount of Volunteer Time of Mature Females
 Per Week, 1977, by Home Ownership, 1977
 (Percent by Column)

Amount of Volunteer Time Per Week	Home Ownership		
	Own	Rent	Other
0 Hours	69	86	82
1-19 Hours	29	12	16
20-39 Hours	1	1	1
40 or more Hours	1	1	1
Percent of Total	78	18	4
Mean Number of Hours Volunteered	6.1 ^a	7.1 ^a	7.8 ^a

$\chi^2 = 150.78$ with 6 df

Significance = .001

Gamma = -.440

^aValues within a row with the same superscript are not significantly different with $p < .05$

hypothesis 4, predicting no significant relationship between home ownership and the amount of time allocated to volunteer activities by mature women, was rejected.

Labor Force Attachment and Volunteer Time. Results of the analysis provided a x^2 of 21.57 with 6 degrees of freedom, significant at .002. The gamma for labor force attachment was -.084. (See Table 7.) Null hypothesis 5, which predicted no significant relationship between labor force attachment and the amount allocated to volunteer activities by mature women, was rejected.

Marital Status and Volunteer Time. The analysis with marital status resulted in a x^2 of 139.35 with 9 degrees of freedom and a significance level of .001. In the contingency tables, 31% of the valid cells had expected cell frequency less than 5. The gamma was -.361, as shown in Table 8. Based on these findings, null hypothesis 6 predicting no significant relationship between marital status and the amount of time allocated to volunteer activities, by mature women, was rejected.

Number of Dependents and Volunteer Time. This relationship resulted in a x^2 of 168.90 with 9 degrees of freedom. The significance level was .001 with a gamma of .248. Results are given in Table 9. Null hypothesis 7, which predicted no significant relationship between the number

Table 7

Amount of Volunteer Time of Mature Females
Per Week, 1977, by Labor Force Attachment,
1977 (Percent by Column)

Amount of Volunteer Time Per Week	Labor Force Attachment		
	Home	Mixed	Labor Force
0 Hours	69	72	75
1-19 Hours	29	26	23
20-39 Hours	1	1	1
40 or more Hours	1	1	1
Percent of Total	28	43	29
Mean Number of Hours Volunteered	5.6 ^a	6.7 ^a	6.4 ^a

$\chi^2 = 21.57$ with 6 df

Significance = .002

Gamma = -.084

^aValues within a row with the same superscript are not significantly different with $p < .05$

Table 8
 Amount of Volunteer Time of Mature Females
 Per Week, 1977, by Marital Status, 1977
 (Percent by Column)

Amount of Volunteer Time Per Week	Marital Status			
	Married	Widowed	Divorced/ Separated	Never Married
0 Hours	69	82	86	80
1-19 Hours	29	17	12	16
20-39 Hours	1	1	1	1
40 or more Hours	1	0	1	3
Percent of Total	78	6	12	4
Mean Number of Hours Volunteered	5.9 ^a	5.4 ^a	8.7 ^a	13.1 ^b

$\chi^2 = 139.35$ with 9 df

Significance = .001

Gamma = -.361

^aValues within a row with the same superscript are not significantly different with $p < .05$

^bValues within a row with a different superscript are significantly different with $p < .05$.

Table 9

Amount of Volunteer Time of Mature Females
Per Week, 1977, by Number of Dependents,
1977 (Percent by Column)

Amount of Volunteer Time Per Week	Number of Dependents			
	0	1	2	3 or more
0 Hours	81	72	67	64
1-19 Hours	17	26	31	34
20-39 Hours	1	1	1	1
40 or more Hours	1	1	1	1
Percent of Total	35	22	19	24
Mean Number of Hours Volunteered	6.4 ^a	6.9 ^a	7.3 ^a	5.3 ^a

$\chi^2 = 168.90$ with 9 df

Significance = .001

Gamma = .248

^aValues within a row with the same superscript are not significantly different with $p < .05$

of dependents and the amount of time allocated to volunteer activities by mature women, was rejected.

Race and Volunteer Time. Results of the analysis with race are shown in Table 10 indicating a x^2 of 72.44 with 6 degrees of freedom. The significance level was .001. However, 25% of the valid cells had an expected cell frequency of less than 5. Gamma indicated a fairly strong relationship at $-.408$. Therefore, null hypothesis 8, predicting no significant relationship between race and the amount of time allocated to volunteer activities by mature women, was rejected.

Total Family Income and Volunteer Time. As shown in Table 11, the relationship between income and volunteer time yielded a x^2 of 353.62 with 12 degrees of freedom and a significance level of .001. The gamma was $.370$, indicating a moderately strong relationship between the two variables. Null hypothesis 9, which predicted that there was no significant relationship between total family income and the amount of time allocated to volunteer activities by mature women, was rejected.

Age and Type of Activity. The analysis revealed a x^2 of 101.27 with 16 degrees of freedom and a significance of .001. These results were inflated due to 17% of the valid cells having expected cell frequency of less than 5. Gamma

Table 10
 Amount of Volunteer Time of Mature Females
 Per Week, 1967, by Race, 1967
 (Percent by Column)

Amount of Volunteer Time Per Week	Race		
	White	Black	Other
0 Hours	70	86	73
1-19 Hours	28	13	27
20-39 Hours	1	1	0
40 or more Hours	1	0	0
Percent of Total*	88	12	1
Mean Number of Hours Volunteered	6.3 ^a	5.3 ^a	5.7 ^a

$\chi^2 = 72.44$ with 6 df

Significance = .001

Gamma = -.408

*Total exceeds 100 due to rounding

^aValues within a row with the same superscript are not significantly different with $p < .05$

Table 11
 Amount of Volunteer Time of Mature Females
 Per Week, 1977, by Total Family Income,
 1977 (Percent by Column)

Amount of Volunteer Time Per Week	Total Family Income				
	less than \$10,000	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000- \$24,999	\$25,000- and more
0 Hours	86	79	68	67	58
1-19 Hours	13	19	29	31	40
20-39 Hours	1	1	2	1	1
40 or more Hours	0	1	1	1	1
Percent of Total	27	17	17	14	25
Mean Number of Hours Volunteered	5.2 ^a	5.8 ^a	6.3 ^a	7.3 ^a	6.3 ^a

$\chi^2 = 353.62$ with 12 df

Significance = .001

Gamma = .370

^aValues within a row with the same superscript are not significantly different with $p < .05$

for age was .043. Results are given in Table 12. Null hypothesis 10, predicting no significant relationship between age and the type of volunteer work by mature women, was rejected.

Education and Type of Activity. Results of the analysis with education are shown in Table 13. The x^2 of 72.15 with 16 degrees of freedom and significance level of .001 was inflated because 11% of the valid cells had expected cell frequency less than 5. A gamma of .045 was determined. Null hypothesis 11, which predicted no significant relationship between education and the type of volunteer work by mature women, was rejected.

Health and Type of Activity. The relationship between health and the type of volunteer work yielded a x^2 of 19.43 with 8 degrees of freedom. As shown in Table 14, the significance level was .013. Results are inflated because 11% of the valid cells had expected cell frequency less than 5. A gamma of .071 was given. Therefore, null hypothesis 12, which predicted no significant relationship between health and the type of volunteer work by mature women, was rejected.

Home Ownership and Type of Activity. Results of this analysis indicated a x^2 of 62.00 with 16 degrees of freedom and a significance of .001 inflated because 33% of the

Table 12
 Type of Volunteer Organization of Mature Females,
 1977, By Age, 1967*
 (Percent by Column)

Type of Volunteer Organization	Age*		
	30-34	35-39	40-44
Boy Scouts, Girl Scouts, Little League, etc.	11	6	2
Churches	31	41	45
Civic/Community Action	10	9	9
Community Chest, United Fund, etc.	9	14	15
Hospitals/Clinics	6	6	6
Political Organizations	1	1	2
Schools	21	11	7
Social Welfare	1	1	2
Other	10	11	12
Percent of Total	38	32	30

$\chi^2 = 101.27$ with 16 df

Significance = .001

Gamma = .043

*Age when data collection began

Table 13

Type of Volunteer Organization of Mature Females,
1977, by Education, 1977
(Percent by Column)

Type of Volunteer Organization	Years of Education		
	0-11	12	13-16
Boy Scouts, Girl Scouts, Little League, etc.	5	7	8
Churches	40	35	42
Civic/Community Action	7	10	11
Community Chest, United Fund, etc.	20	14	5
Hospitals/Clinics	6	6	6
Political Organizations	1	1	1
Schools	12	16	11
Social Welfare	1	1	1
Other	8	10	15
Percent of Total	18	50	32

$\chi^2 = 72.15$ with 16 df

Significance = .001

Gamma = .045

Table 14

Type of Volunteer Organization of Mature Females,
1977, by Health, 1977
(Percent by Column)

Type of Volunteer Organization	Health	
	Some Physical Problems	No Physical Problems
Boy Scouts, Girl Scouts, Little League, etc.	6	11
Churches	40	34
Civic/Community Action	9	12
Community Chest, United Fund, etc.	11	14
Hospitals/Clinics	6	5
Political Organizations	1	1
Schools	14	13
Social Welfare	1	2
Other	12	8

$\chi^2 = 19.43$ with 8 df

Significance = .013

Gamma = .071

valid cells had expected cell frequency of less than 5. Gamma for home ownership was .173, as reported in Table 15. Null hypothesis 13, predicting no significant relationship between home ownership and the type of volunteer work by mature women, was rejected.

Labor Force Attachment and Type of Activity. A χ^2 of 54.57 with 16 degrees of freedom was given for this relationship. The significance level was .001 and 30% of the valid cells had a frequency less than 5. As shown in Table 16, the gamma was .127. Null hypothesis 14, which predicted no significant relationship between labor force attachment and the type of volunteer work by mature women, was rejected.

Marital Status and Type of Activity. As shown in Table 17, the relationship between marital status and the type of volunteer activity yielded a χ^2 of 115.34 with 24 degrees of freedom and a significance level of .001. Results are inflated because 31% of the valid cells had expected cell frequency less than 5. A gamma of .330 was given, which indicates a moderately strong relationship. Therefore, null hypothesis 15, predicting no significant relationship between marital status and the type of volunteer work, was rejected.

Table 15

Type of Volunteer Organization of Mature Females,
1977, by Home Ownership, 1977
(Percent by Column)

Type of Volunteer Organization	Home Ownership		
	Own	Rent	Other
Boy Scouts, Girl Scouts, Little League, etc.	8	4	0
Churches	40	29	20
Civic/Community Action	9	17	13
Community Chest, United Fund, etc.	12	7	15
Hospitals/Clinics	6	3	8
Political Organizations	1	2	0
Schools	13	13	23
Social Welfare	1	0	0
Other	10	23	21
Percent of Total	89	9	2

$\chi^2 = 62.00$ with 16 df

Significance = .001

Gamma = .173

Table 16

Type of Volunteer Organization of Mature Females,
1977, by Labor Force Attachment, 1977
(Percent by Column)

Type of Volunteer Organization	Labor Force Attachment		
	Home	Mixed	Labor Force
Boy Scouts, Girl Scouts, Little League, etc.	7	9	4
Churches	40	38	37
Civic/Community Action	8	9	12
Community Chest, United Fund, etc.	11	13	12
Hospitals/Clinics	5	7	4
Political Organizations	1	1	2
Schools	18	13	10
Social Welfare	1	1	3
Other	9	9	16
Percent of Total	32	42	26

$\chi^2 = 54.47$ with 16 df

Significance = .001

Gamma = .127

Table 17

Type of Volunteer Organization of Mature Females,
1977, by Marital Status, 1977
(Percent by Column)

Type of Volunteer Organization	Marital Status			
	Married	Widowed	Divorced/ Separated	Never Married
Boy Scouts, Girl Scouts, Little League, etc.	8	10	3	0
Churches	39	37	36	26
Civic/Community Action	9	10	18	6
Community Chest, United Fund, etc.	12	15	12	6
Hospitals	6	6	0	13
Political Organizations	1	0	0	0
Schools	15	6	0	9
Social Welfare	1	0	3	6
Other	9	16	28	34
Percent of Total	87	4	6	3

$\chi^2 = 115.34$ with 24 df

Significance = .001

Gamma = .330

Number of Dependents and Type of Activity. Results showed a x^2 of 127.07 with 24 degrees of freedom and significance of .001. Findings, which are given in Table 18, are inflated because 17% of the valid cells had expected cell frequency less than 5. Gamma for number of dependents was -.090. Null hypothesis 16, which predicted no significant relationship between number of dependents and the type of volunteer work, was rejected.

Race and Type of Activity. The relationship with race revealed a x^2 of 18.86 with 16 degrees of freedom. The significance level of .276 was inflated since 41% of the valid cells had expected cell frequency less than 5. The gamma level for race was .003. (See Table 19.) Null hypothesis 17, predicting no significant relationship between race and the type of volunteer work, was accepted.

Total Family Income and Type of Activity. Results of the analysis are given in Table 20. The relationship had a x^2 of 109.20 with 32 degrees of freedom and a significance level of .001. Results are inflated because 18% of the valid cells had expected cell frequency less than 5. The gamma was -.036. Null hypothesis 18, predicting no significant relationship between total family income and the type of volunteer work by mature women, was rejected.

Table 18

Type of Volunteer Organization of Mature Females,
1977, by Number of Dependents, 1977
(Percent by Column)

Type of Volunteer Organization	Number of Dependents			
	0	1	2	3 or more
Boy Scouts, Girl Scouts, Little League, etc.	3	5	4	13
Churches	43	41	35	35
Civic/Community Action	10	10	10	9
Community Chest, United Fund, etc.	12	11	16	10
Hospitals/Clinics	7	6	8	4
Political Organizations	1	2	2	0
Schools	5	12	15	20
Social Welfare	2	2	1	1
Other	17	11	9	8
Percent of Total	24	23	22	31

$\chi^2 = 127.07$ with 24 df

Significance = .001

Gamma = -.090

Table 19
 Type of Volunteer Organization of Mature Females,
 1977, by Race, 1967
 (Percent by Column)

Type of Volunteer Organization	Race		
	White	Black	Other
Boy Scouts, Girl Scouts, Little League, etc.	8	1	0
Churches	38	43	20
Civic/Community Action	10	7	20
Community Chest, United Fund, etc.	12	18	30
Hospitals/Clinics	6	4	10
Political Organizations	1	0	0
Schools	14	12	20
Social Welfare	1	1	0
Other	11	14	0
Percent of Total	93	6	1

$\chi^2 = 18.86$ with 16 df

Significance = .276

Gamma = .003

Table 20

Type of Volunteer Organization of Mature Females,
1977, by Total Family Income, 1977
(Percent by Column)

Type of Volunteer Organization	Total Family Income				
	less than \$10,000	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000- \$24,999	\$25,000- and more
Boy Scouts, Girl Scouts, Little League, etc	4	5	5	11	3
Churches	36	48	43	32	36
Civic/Community Action	15	9	10	10	7
Community Chest, United Fund, etc.	9	12	9	18	12
Hospitals/Clinics	5	5	3	3	3
Political Organizations	0	1	3	0	1
Schools	12	12	14	17	13
Social Welfare	1	0	1	2	2
Other	18	8	12	7	12
Percent of Total	14	12	19	17	38

$\chi^2 = 109.20$ with 32 df

Significance = .001

Gamma = -.036

Analysis of Mean Differences

The difference in the mean number of hours volunteered each week for the nine independent variables was tested for significance. A one-way analysis of variance was performed on the various categories of eight independent variables-- age, education, home ownership, labor force attachment, marital status, number of dependents, race, and total family income. A t-test was used to examine the significance of the mean difference of health.

No significant differences were obtained for the number of hours allocated to volunteer work each week for the various categories of age, education, health, home ownership, labor force attachment, number of dependents, race, and total family income. A significant difference ($p < .01$) for the number of hours volunteered each week for the various classifications of marital status. Those never married exhibited a significantly higher number of hours in volunteer activities ($p < .05$) than the married, divorced/separated, or widowed females.

Multiple Regression Analysis

The two variables related to volunteerism were regressed on age, education, health, home ownership, labor

force attachment, marital status, number of dependents, race, and total family income. Results of the analysis are reported in this section.

Volunteer Time regressed on demographic variables. The amount of time spent in volunteer activities, 1977, was regressed on the nine demographic variables. Predictor variables found significant at the .05 level were, in descending order of importance:

1. Education, 1977
2. Total Family Income, 1977
3. Number of Dependents, 1977
4. Home Ownership, 1977
5. Labor Force Attachment, 1977
6. Health, 1977
7. Race, 1967

An R^2 of .096 was obtained for the regression analysis, with an F-value of 85.67, significant at .05. Therefore, the independent variables of education, income, number of dependents, home ownership, labor force attachment, health, and race accounted for about 10% of the variance in the amount of time allocated to voluntary activities. Education was the strongest predictor with an R^2 change of .07. Results of the analysis are shown in Table 21. Variables

Table 21
 Stepwise Multiple Regression of Amount
 Of Volunteer Time on Independent Variables

Variable	R Square Change	Beta Coefficient ¹	Standardized Regression Coefficient
Education	.069	.193 (.010)	.263
Total Family Income	.018	.049 (.005)	.144
Number of Dependents	.006	.035 (.006)	.080
Home Ownership	.001	-.047 (.014)	-.046
Labor Force Attachment	.002	-.028 (.009)	-.041
Health	.001	-.035 (.015)	-.031
Race	.001	-.041 (.020)	-.028
	Constant	1.05	

$$R^2 = .098^2$$

¹ Standard error in parentheses

² Statistically significant at .05

not significant for inclusion in the regression equation were age and marital status.

Type of Voluntary Activity regressed on demographic variables. The type of organizations in which participants volunteered, 1977, was regressed on the nine demographic variables. Two predictor variables were found significant at the .05 level.

1. Marital Status, 1977
2. Labor Force Attachment, 1977

An R^2 of .037 was obtained for the regression analysis, with an F-value of 30.97 and significant at .05. Approximately 4% of the variance in the type of volunteer organizations in which females participated can be attributed to marital status and labor force attachment. Table 22 reports the results of the analysis. Variables not included were age, education, health, home ownership, number of dependents, race, and total family income.

Multicollinearity Among Independent Variables

The test for intercorrelation of the independent variables did not indicate a high level of relationship between the nine dependent variables. Results are given in Table 23. Multicollinearity was strongest between the age of the respondent and the number of dependents, with a correlation

Table 22
 Stepwise Multiple Regression of Type
 Of Volunteer Work on Independent Variables

Variable	R Square Change	Beta Coefficient ¹	Standardized Regression Coefficient
Marital Status	.033	.614 (.083)	.183
Labor Force Attachment	.005	.210 (.080)	.068
	Constant	3.21	

$$R^2 = .038^2$$

¹ Standard error in parentheses

² Statistically significant at .05

Table 23

Correlation Among Independent Variables

	Age	Education	Health	Home Ownership	Labor Force Attachment	Marital Status	Number of Dependents	Race	Total Family Income
Age	1.00								
Education	-0.35	1.00							
Health	0.06	-0.20	1.00						
Home Ownership	0.03	-0.06	0.13	1.00					
Labor Force Attachment	0.08	0.03	-0.01	0.11	1.00				
Marital Status	0.01	0.06	0.02	0.38	0.27	1.00			
Number of Dependents	-0.42	0.09	-0.10	-0.12	-0.25	-0.23	1.00		
Race	0.04	-0.16	0.04	0.12	0.09	0.15	-0.02	1.00	
Total Family Income	-0.11	0.27	-0.20	-0.33	-0.08	-0.32	0.22	-0.19	1.00

of $-.42$. Therefore, correlation between the independent variables was not a problem in this study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter includes a summary of the purposes and procedures of the study, a discussion of the findings, limitations of the study, and recommendations for future research.

Summary

The purpose of this study was to determine the relationship between selected demographic characteristics--age, education, health, home ownership, labor force attachment, marital status, number of dependents, race, and total family income--and the mature female's participation in volunteer activities. The objectives of the study were

1) to identify the demographic characteristics of mature women involved in volunteer activities, 2) to determine the amount of time spent in volunteer activities by mature women, and 3) to determine the types of organizations with the greatest number of mature women participants.

Nine demographic variables related to characteristics of mature females were correlated with two variables

indicating voluntary participation to determine which characteristics were significant identifiers of female volunteers. The independent variables were age, education, health, home ownership, labor force attachment, marital status, number of dependents, race, and total family income. The number of hours per week in voluntary activities and the type of volunteer organizations in which females participated were the dependent variables.

Data used in the study were collected by the NLS from 1967 to 1977 on the mature women cohort, ages 30-44 in 1967. Labor force attachment of the mature women was computed as a longitudinal variable from 1967 to 1977. Data on other variables, with the exception of age and race, were obtained in 1977.

An ex post facto analysis was made to determine relationships between the variables. Analysis procedures included chi-square and multiple regression.

Discussion

A discussion of the results of the chi-square and multiple regression analyses used to determine the relationship between the selected demographic variables and the voluntary activities of mature women is presented in this section.

Analyses of the data pertaining to age indicated that the variable did have a significant relationship with the voluntary activities of mature women. Since the gamma score was low, the variable was not a strong predictor of voluntary behavior. While the results of the chi-square analysis indicated that age had a significant relationship with the two dependent variables, age did not have a substantial impact in the amount of time volunteered nor the the type of volunteer work. Women who were 30 years old in 1967 were as likely to volunteer as were 44-year-old women. The mean number of hours volunteered by each group differed, but the difference was not significant. The results of these findings were congruent with the review of other studies (Curtis, 1971; Eitzen, 1970; McPherson and Lockwood, 1980; Schram, 1979), suggesting that age is not a consistent predictor of voluntary participation of females.

The results of the findings of this study related to age may be affected by the low variance in the age of the respondents. Mature women in the sample were aged 30-44 at the beginning of the study, or age 40-54 in 1977.

Education

Education was found to have a significant relationship with the amount of time spent in volunteerism and the type

of volunteer work. Gamma scores indicated a relatively strong positive relationship between the amount of education and the number of hours per week volunteered. In the multiple regression procedure, education was the best predictor, accounting for seven of the ten percent value of R^2 . (See Table 21.) While the variable had a significant relationship with the type of volunteer work, education did not have a substantial impact on that relationship. This lack of importance was reflected in the low gamma score.

The mean number of hours volunteered for the three levels of education ranged from 5.5 for those with less than a high school education to 6.8 for those with a college education. However, the difference was not significant. These findings suggest a positive correlation between the amount of time in volunteer activities and the female's level of education. Based on studies by Curry (1981), Hagedorn and Labovitz (1968), Hausknecht (1962), and Schram (1979), this conclusion was anticipated because persons with more education tend to have more opportunities to become involved in various activities and have a greater awareness of opportunities available.

Health

The chi-square analysis indicated that health was a significant predictor of volunteerism. The gamma score for

health and the amount of volunteer time indicated that persons with some health problems tended to volunteer more than those with no health-related problems. That conclusion is consistent with the mean number of hours volunteered for the two groups, as given in Table 5. However, the strength of the relationship was not strong. This finding was supported by the multiple regression analysis.

The gamma score for the relationship between health and the type of volunteer work was also low. The direction of the relationship, however, was positive, which suggested that absence of health problems in females may be a predictor of the type of organizations in which they participate. These findings tend to indicate that health problems among females may restrict their physical abilities or limit their potential to participate in some volunteer activities. Health did not appear to be a substantial predictor of voluntary activity in mature women. Since the relationship between health and volunteerism had not been previously examined, these findings can serve as a basis for future research in this area.

Home Ownership

Analysis of the relationship between home ownership and volunteerism showed that the independent variable had a significant correlation with the amount of time volunteered.

The gamma score indicated a fairly strong relationship between the two variables. However, this relationship was not verified in the multiple regression analysis. Results of the analysis with the type of organizations was similar.

The mean number of hours volunteered suggested that those persons with other living arrangements spent the most time in such activities, followed by renters. Those women which were home owners spent almost two hours per week less in volunteer work than those with other living arrangements and one hour less than renters. However, the time difference was not significant. Based on these findings, home ownership is not a consistent predictor of voluntary participation among females. This conclusion does not agree with other studies by Eitzen (1970), Hausknecht (1962), or Scott (1957), suggesting that economic and social conditions may be changing the lifestyle of females.

Labor Force Attachment

Findings related to volunteerism and labor force attachment revealed that there was a significant relationship between the variables. The correlation of the amount of time in volunteer work and labor force activity had a negative gamma, indicating that women with low labor force attachment tended to volunteer more frequently than those with high labor force attachment. However, since the gamma

value was extremely low, this variable was not a strong predictor of the amount of time volunteered.

The mean number of hours yielded different results. Females with a mixed career pattern averaged the most number of hours in volunteer work, followed closely by those with a high labor force attachment. Those with low labor force attachment averaged the least number of hours per week in volunteer activities. The difference, however, was not significant. (See Table 7.) These findings tend to indicate that even though women not employed outside the home volunteer more frequently than other females, those with high labor force attachment tend to spend a greater amount of actual hours in volunteer work

The results of the analysis with the variables of labor force attachment and type of volunteer work were similar. However, these findings suggested that while the relationship was not strong, a higher labor force attachment was a better predictor of the type of organizations in which women volunteer than either the mixed or the home career patterns of labor force attachment for females. Results of this analysis suggested that women with high labor force attachment were more selective in their choices of volunteer work. Furthermore, these females may be volunteering in

organizations which allow them to utilize their special skills and techniques. These findings are in agreement with previous studies (Hausknecht, 1962; McPherson, 1983; Robinson, 1977; Smith, 1983) showing that labor force activity was not a consistent predictor of voluntary participation among females.

Marital Status

The results of the chi-square analysis of marital status and voluntary participation indicated a significant relationship between the variables; however, the importance of marital status to the two dependent variables was different. The marital status of females was the best predictor of the type of volunteer work, even though the R^2 was .03. The strength of the relationship between marital status and the amount of time in voluntary activities was not verified in the multiple regression analysis.

The mean number of hours spent in volunteer work ranged from 5.4 for widowed women to 13.1 for never married females. These findings suggest that never married females spend significantly ($p < .05$) more hours in volunteer work than other mature females even though fewer of them volunteer.

The results of these analyses were expected because previous studies had indicated that married women tended to participate more frequently in voluntary activities than

nonmarried women (Curtis, 1971; Enders and Fanslow, 1980; Hausknecht, 1962). However, the findings of this study suggest that marital status is not a consistent predictor of volunteer behavior.

Number of Dependents

The relationship between the number of dependents and the two variables relating to volunteerism were significant. The gamma score for the analysis of the number of dependents and the amount of time in volunteer work indicated a positive relationship between the two variables. This finding indicated that women with more children tended to volunteer more hours than women with no children. However, in the mean number of hours volunteered, this relationship was different. Mature women with no dependents spent an average of almost seven hours in volunteer work, while those with more than two dependents spent less than six hours volunteering. Women with one dependent indicated that most hours in volunteer work, averaging over seven hours per week. Results are shown in Table 9.

The importance of this variable was minimal in the multiple regression analysis, however, even though the correlation was significant. In addition, the number of dependents was not important in predicting the type of volunteer work. These results agree with the study by Finlayson (1969).

Race

Analyses of this variable revealed that race had a significant relationship with the amount of time volunteered, but was not significantly related to the type of organizations in which females participated. The gamma score suggested a moderately strong relationship between race and the amount of time, with white females contributing more hours per week than black or other races. The mean number of hours volunteered was also highest for white women; however, the difference was not significant.

The regression analysis procedure indicated that race did not have a substantial impact on volunteerism. These findings are consistent with other studies (Curry, 1981; Enders and Fanslow, 1981; Hausknecht, 1962; Klobus-Edwards and Edwards, 1979) that determined race was not an adequate predictor of volunteer behavior.

Total Family Income

Total family income was found to have a significant relationship with the amount of time in volunteer work as well as the type of volunteer activity. The gamma value for the amount of time and family income indicated a fairly strong positive relationship between the two variables. In the multiple regression analysis, total family income was

the second best predictor; however, the impact of the variable was not substantial.

The mean number of hours volunteered supported these findings. Those females with lower incomes averaged less hours per week in volunteer work than those with higher incomes. The \$20,000-\$24,999 income group averaged the most hours per week, with over seven hours. However, the difference in time allocated was not significant.

The correlation between total family income and the type of volunteer work had a low gamma score and was not significant in the multiple regression procedure. Therefore, total family income was not a consistent predictor of volunteer work.

These findings agreed with previous research (Eitzen, 1970; Enders and Fanslow, 1981; Hausknecht, 1962; Hyman and Wright, 1971) indicating that persons with higher income levels tended to volunteer more frequently than those from lower income brackets. However, this study did not determine that total family income had a substantial impact on women's volunteer behavior.

Limitations

Limitation to the data was encountered during analysis of the selected variables. When responses to the NLS

questionnaire were collected, many were recorded as missing data, resulting in inflated chi-square values for several variables. These inflated values include the correlation between the amount of volunteer time and two independent variables, race and marital status, and between the type of volunteer work and the nine independent variables, including age, education, health, home ownership, labor force attachment, marital status, number of dependents, race, and total family income. Some categories could have been collapsed to reduce the inflated chi-square values, but this process would not have affected the level of significance.

The age range of the subjects in this study also limits the generalization of the findings to other age groups. Previous research, however, has indicated that middle-aged females tend to volunteer more frequently than other age groups.

While 72% of the sample did not participate in volunteer activities, this percentage should not be considered a serious limitation. These findings are in agreement with recent studies on volunteerism indicating that less than 30% of the population in the United States is involved in volunteer work (ACTION, 1975 and Manser and Cass, 1976).

Conclusions and Implications for Future Research

A total of 28% of the women in the study were involved in volunteer activities. These findings are in agreement with recent studies indicating that even though more women are in the work force, their participation in volunteer work is not declining (Schram, 1979). The types of organizations in which women participate, however, remain the traditional activities, such as churches and schools.

The nine selected demographic variables in this study accounted for approximately 10% of the motives influencing the amount of time allocated to volunteerism. In addition, these variables explained only 4% of the involvement in various types of volunteer organizations. Therefore, the results of this research indicate that other variables are involved in the female's decision to participate in volunteer activities.

Based on these findings, very little is known about the typical female volunteer or what influences that volunteer behavior. Results of the study determined that some variables--age, education, health, home ownership, labor force attachment, marital status, number of dependents, race, and total family income--have a significant relationship with the amount of time allocated to volunteer activities by mature women. However, these variables accounted

for less than 10% of the variance in the amount of time volunteered. Caution should be used when generalizing these results because of the weak correlation between the independent and dependent variables.

The relationships of the independent variables, with the exception of race, and the type of volunteer work were also significant. However, the correlation between the independent variables and the type of volunteer activities was also weak. The multiple regression analysis indicated that marital status and labor force attachment accounted for less than 4% of the variance. Making generalizations from these results should be cautioned.

Further research is needed to identify other demographic variables as well as social-psychological variables affecting women's volunteer behavior. Future studies could concentrate on intrinsic rewards such as the prestige of belonging to specific groups, the opportunities to serve others, association with peers and superiors, or the desire for learning experiences and self-development. The influence of the attitude of other family members, specifically the husband and children, could be examined.

Additional analysis could determine if married women participate in volunteer organizations whose benefits are consumed by the family or if single females participate in

those organizations designed to benefit the individual. More research is also needed to determine if females with lower labor force attachment scores are more concerned with obtaining human capital skills through volunteer work than those with higher labor force attachment scores. If leaders of volunteer organizations were aware of the types of skills or the benefits persons hoped to obtain by participating in specific groups, they could appeal to those persons and attempt to match the needs of the individual with the needs of the organizations. Explaining the reasons women volunteer could supply additional knowledge to government entities, private individuals, and the business sector of society.

Information gained from such studies could provide a valuable service to organizations and agencies in need of voluntary assistance by identifying those persons available to perform unpaid work. Continued trends in federal cut-backs to the social service increases the need for voluntary participation. The President's Task Force on Private Sector Initiatives (1982) said that volunteers are a cost-effective supplement to paid helpers. Furthermore, the Task Force challenged individual volunteer leaders to promote effective volunteer involvement.

Research in this area could also examine the type of work performed by volunteers and identify the human capital

returns on the time invested. Women, therefore, could recognize the skills gained through volunteerism and transfer these skills to employment possibilities or academic credit.

Since the investigation of volunteer work is related to time use studies, future research could update the existing information on women's use of time. Increased hours spent in voluntary activities may have an impact upon the female's pattern of consumption and allocation of resources. This knowledge would assist professionals involved in consumer-related fields to better understand and meet the demands for their goods and services.

Longitudinal studies would also be needed to determine the female's pattern of volunteer work over time. Information obtained from such studies could relate to the length of membership in various organizations, changes in volunteer participation over the life cycle, and the influence of professional changes on volunteer work. Findings from these studies would produce a broader understanding of the female's volunteer participation and the variables affecting that involvement from early adulthood until old age. A longitudinal approach which examined volunteer behavior at different stages in the life cycle could reflect the changes

in demands placed on women throughout their life time as well as their changing needs for volunteer work.

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