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AN EXPLORATORY STUDY OF HEALTH PATTERNS AMONG
OLDER ADULTS ATTENDING TWO TYPES
OF ADULT DAY PROGRAMS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Kimberly Louise Robinson

June 2008

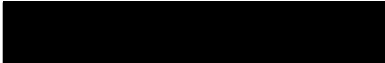
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Approved by:




Dr. Herb Shon, Faculty Supervisor
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Dr. Janet C. Chang,
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ABSTRACT

The rate of depression among the elderly is rising. This study examined the patterns of relationship between social support, depression, function level (ADL/IADL), age, gender, ethnicity, living arrangement and health status among the elderly attending an ADHC and a senior recreation center using the GDS-Short form, The LSNS-6, the Katz ADL and Lawton IADL scales and sociodemographics. The results were then compared between an ADHC and A Senior Recreation Center. Sixty non-demented members from an Adult Day Health Care Center and Norco Senior Recreation Center located in the Inland Empire region participated in the study. The variables were measured through self-administered survey questionnaires. The results showed that there were patterns of relationships between social support, function levels, depression, health status, living arrangement, age, gender and ethnicity based on involvement at an ADHC and a senior recreation center.

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I would like to acknowledge and thank my advisor, Dr. Shon, for his expertise, assistance, guidance, support and most of all patience with me. This project would not have been possible without him. I want to thank Inland Empire Adult Day Healthcare Center and Norco Senior Center for allowing me to use their facilities. I also want to thank the members of these two facilities for participating in my project. I would like to acknowledge all of the people in my cohort who allowed me to voice my frustrations and gave me words of encouragement during this process. Finally, I want to thank all of the professors, faculty and staff members of the Social Work Department for allowing me the opportunity to participate in what has been the most memorable 3 years of my life.

DEDICATION

This project is dedicated to my better half, the love of my life, and the father of my daughter. You have been there for me since day one. You have stuck by my side through all of the frustrating and stressful moments and have encouraged me in so many ways to keep going. You have been my rock and I will be forever grateful and appreciative of your kindness, and unconditional love during this time. You've afforded me this opportunity and have gone far and beyond to help make this possible. I want to thank you for being an excellent father to our child as well as being the "mommy" when I was busy working on this project. You have done an excellent job taking care of our family and I love you for it. I dedicate this project to you.

To my daughter Kaiya, you were only six months when I started this program and now you're three. Sometimes I feel like I've missed out on a lot of your growth but I want you to know that I've done all of this for you. You have been an inspiration to me from the very beginning and you always will be. I love you. You are beautiful and intelligent and I share this degree with you.

To my mother, thank you for supporting me. You have inspired me to keep going. You've always supported me no matter what and I am eternally grateful. To my sisters, Shena and Christina, you guys have supported me in many ways and I appreciate all that you've done. I dedicate this project to you all.

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CHAPTER ONE

INTRODUCTION

Chapter one presents an overview of the project. It focused on the problem statement and the purpose of the study. The significance of the project for social work practice is also discussed.

Problem Statement

The U.S. population 65 and older has gone from 4% in 1900 to 13% in 2000 (Zastrow & Kirst-Ashmann, 2004). Much of this population is facing diminished health and as a result may become isolated. The need for social support is crucial during this stage of their lives. The most common illness experienced by the elderly is depression as noted by Butler, Lewis and Sutherland (1998), afflicting up to 20% of those 65 and older.

Given such a high number of elderly affected by depression, the need to investigate possible causes for the illness is essential. The well being of those suffering from the disease are compromised and the ability to engage in life at their fullest potential becomes unattainable. Those who are in distress from a medical condition and lack social support systems are at

a greater disadvantage (Butler, Lewis & Sutherland, 1998). This study attempted to address the possibility that elderly people not receiving or insufficiently receiving social support are at greater risks for developing depression. The likelihood that health problems may lead to depression was also examined.

Depression and mood disorders represent a tremendous drain on the health lifespan (Lomastro, 2006). Depression, which ranked fourth in Disease Adjusted Life Years in 2005, will rank second in 2020 behind only heart disease according to a Harvard University researcher, Christopher Murray, and a scientist at World Health Organization, Alan D. Lopez. With knowledge of the increasing prevalence and debilitating effects of this illness among the elderly population, it is important to investigate contributing factors to depression.

Policy Context

In December of 2005 a cross section of advocates, researchers, healthcare providers, and consumers attended the White House Conference On Aging (WHCOA) held in Washington, D.C. to discuss Resolution 36 "Improve recognition, assessment and treatment of mental illness and depression among older adults" (Lomastro, 2006,

p. 1). Resolution 36 was not the most lobbied for or most supported by the Bush Administration so its success was rewarding but surprising. Prior to this, behavioral health issues such as depression and mood disorders in the elderly were not on the national agenda (Lomastro, 2006).

Mental health is viewed as a state's issue by default as a result of the federal administration making little effort to recognize it as an important issue. Discriminatory coverage and reimbursement policies for mental health care are a challenge for the elderly, especially those with modest incomes, as well as for clinicians. Other constraining policies affecting older persons with depression include inadequate access to mental health care facilities and deficient coordination of services (Lomastro, 2006).

Practice Context

With a growing number of elderly suffering from depression and the high risk for others to develop it, the social work practice should get more involved. It's crucial that the social work practice intervene and make necessary steps to help solve this pressing issue. Services on both a macro and micro level are needed to

influence federal support and provide assistance to clients.

Purpose of the Study

The purpose of the study was to examine patterns of relationships between social support, self-reported health status, functional level as measured by activities of daily living (ADL) and instrumental activities of daily living (IADL), demographic variables, and depression among the elderly by the type of older adult program subjects attended. These two programs are a senior recreation center and an adult day health care center (ADHC).

Social support is defined as the exchange of assistance through social relationships and is one of the important functions of social relationships (Berkman et al., 2000). An extensive body of research has shown that social support is an important predictor of good physical and mental health, life satisfaction and reduced risk of institutionalization among older adults (Potts, 1997). The quality of life for an elderly person may greatly diminish if social support systems aren't in tact.

According to the American Heritage Dictionary, depression is a medical illness characterized by persistent sadness, discouragement and loss of self worth. According to Conwell (2002), 20% of the American elderly suffers from depression, however, it remains an underrecognized and undertreated medical illness. Conwell (2002) also notes that major depression is a significant predictor of suicide in elderly Americans.

The research design for this project was a survey questionnaire design. A survey design was best for this study given the population that was being worked with as well as the time restraints. Also, a survey gave the participants an opportunity to choose an answer that best described them. A survey also prevented excessive writing which reduced the amount of time a participant had to spend completing it. A social support questionnaire was given to participants asking them to respond to questions about the level of support they felt they were receiving on a consistent basis. The participants were also given a questionnaire asking about their health status. Participants were asked to identify sociodemographics. Participants were then given a test to determine if they were depressed by use of a geriatric depression scale.

A sample of approximately 60 participants ages 60 and older was used in the research study. The participants were taken from a Senior Recreation Center and an Adult Day Health Care Center. Both males and females were included in the study. As many ethnicities as possible were included to ensure accurate representation. The variables used in the study are health status, social support, sociodemographics, function levels (ADL/IADL), and depression.

Significance of the Project for Social Work Practice

An important goal of the social work practice is to enhance the well being of others. Pending its findings, this study may alert geriatric social workers to different health and mental health risk patterns in older adults who participate in two different types of community programs (a senior recreation center and an adult day health care center) and aid in the assessment, planning, and provision of services to these clients.

Additionally, pending the findings of this study, there may be programmatic implications for administrators and direct practitioners who operate and staff these types of day programs. For example, to what extent are

participants of these programs lacking social support, rate their health as fair or poor, have functional impairments that may require attention, or depressive symptoms that, too, may require attention?

With information on patterns of unmet needs, social workers can become better advocates for these clients to ensure adequacy, appropriateness, relevance, and culturally competent service delivery for them. In keeping with systems theory, this knowledge and response thereto can help maintain or enhance clients' quality of life, maximize their independence and time spent in the least restrictive environments, and cut costs by avoiding premature and unnecessary hospitalizations and institutionalization.

Social work research can benefit from this study in that it will begin a discussion on the differential needs of older adults who attend two different types of day programs, and may spawn new ideas for further research.

CHAPTER TWO
LITERATURE REVIEW

Introduction

Chapter two discussed findings from previous studies conducted on this topic. It is divided into seven subsections. The first five subsections discussed health status, social support, age and function levels, living arrangement, gender and ethnicity and depression among the elderly. The last subsection is a discussion about theories related to the topic.

Health Status and Depression among Elderly

Researchers have studied the correlation between health status and depression among the elderly. Noel (2004) studied 1,801 elderly primary care patients to examine a relationship between the severity of depression and medical and health problems. A cross-sectional data as part of a treatment effectiveness trial was conducted in 8 diverse healthcare organizations. A survey was given to participants that included questions referring to 11 common medical illnesses. A scale to assess depression was also administered. Patients were questioned about illnesses such as asthma, high blood pressure arthritis,

and sensory deficits. The findings showed that depression is associated with the declines in a variety of general health problems. Limitations of the study included participating clinics not being representative of all primary care clinics. Also measures of health status were derived from self-reports (Noel, 2004).

Similarly, McDonnall conducted a study in 2005 to investigate whether the elderly experiencing hearing and/or vision loss are at greater risk for depression. Using the previous data from the National Center for Health Statistics, information was gathered from the 2001 Adult Sample. A sample size of 9,832 were asked questions through an interview survey about experience of negative feelings. Questions concerning feelings of worthlessness, hopelessness and sadness were included in the survey. As with the previous study, a link between loss of health functioning (sensory loss in this case), and symptoms of depression was found. Self-reports of all variables in this report was a limitation in this study (McDonnall, 2005).

Somatic symptoms in elderly patients with medical illnesses was studied by Drayer et al. (2005) to examine its relation to depression. Two hundred and forty eight

primary care patients 60 and older were involved in the study. Using a structured diagnostic interview and a battery of instruments covering psychiatric, physical, and psychosocial domains, patients were evaluated. Association among depression, somatization and chronic physical problems were examined using a correlations and regression modeling. The findings showed that there was a strong association between somatization and depression severity. The sample size used in the study was very small so stratified analyses by gender or age was unable to be conducted (Drayer et al., 2005).

Social Support and Depression among Elderly

The relationship between social and depression is also of importance to researchers. Koizumi et al. (2005) conducted a one-year study in Japan to examine a relationship between social support and depression among the elderly. One thousand one hundred and seventy eight subjects ages seventy and older participated in the study. They were all given a Comprehensive Geriatric Assessment (CGA). Questions about social support such as "do you have someone to consult with when you're in trouble?" and "do you have someone to take care of you

when you are ill in bed?" were asked to assess social support status. The Geriatric Depression Scale (GDS) was used to determine depression status. An interview survey was conducted to gather the subject's information. The results from the study demonstrated that there was a significant relationship between social support and depression among the elderly who participated in the study. Two limitations to the study are: study subjects were more healthier than the rest of the elderly living in the community therefore the effect of lack of social support on depression might be underestimated. Also, there were no scales adequately validated for social support in Japanese aged population (Koizumi et al., 2005).

A study was conducted with 58 subjects who were low income females 60 years and older and receiving health care to examine the relationship between depressed mood and social support. Participants were taken from a sample of women receiving home health care. The women were given a brief questionnaire about coping with medical illness to fill out that lasted no more than 45 minutes. A twelve item social support measure that assessed the number of people available to give support and satisfaction with

the support was also administered. The Geriatric Depression Scale- Short Form was used to measure depression status. Friedman et al. (2005) found that less satisfaction with social support in women fostered depressed mood which adversely impacted their quality of life. The generalizability of the results was limited given the participants were women and low income. The fact that the women were Protestant and African American also limits the generalizability of the results (Friedman et al., 2005).

Age and Function Levels and Depression among Elderly

Using a depression, life satisfaction, health status and social support scale, Cummings (2002) conducted a research to examine the well being of frail elderly people. A sample of residents of a moderate-sized, corporately owned, assisted living residence located in southeastern U.S. were used. Study instruments were pilot tested before the project began. Fifty seven residents ages 65 to 100 participated in the study Cummings, (2002).

Resident's life satisfaction was measured using a Life Satisfaction Scale Z (LSIZ) designed to measure

subjective feelings and well being and life satisfaction. Residents health status was measured by asking questions whether or not they needed assistance with a variety of functional assistance. Residents were given a standardized social support scale, were asked to rate their satisfaction with friends and social contacts, and indicate the number of activities they participated in each week. Their physical health status was assessed by asking them to rate their overall physical health. The results of this study support the findings of previous studies that a good portion of elderly people suffer from depression and well being impairment. The study also revealed that when social support was present, the effect of functional and poor health was no longer significant (Cummings, 2004).

Limitations to this study included the homogeneity and size of the sample and the scope of the variables selected. The study was conducted in one facility that caters to more affluent elderly people. Another limitation is the generalizability of the results given that all of the participants were white. The findings are questionable due to the fact that lower income and other

ethnicities were not included in the study (Cummings, 2002).

Living Arrangement and Depression among Elderly
Adams et al. (2003) studied loneliness and depression among the elderly living in a retirement community. Questionnaires were mailed out to 440 residents of which 234 responded. Participants were mailed survey questionnaires that measured depression and loneliness. The geriatric depression scale was used to assess depression status and the loneliness scale was used to determine loneliness. The loneliness scale consisted of 20 questions and was designed to identify feelings of loneliness in broad groups of adults including older adults (Adams et al., 2003).

A social network Scale was used to measure how involved one is in social, relationships, including family or relative networks, friend networks, confidant relationships, helping relationships, and living arrangements. Questions were also asked about organized activities at their facility and the type of visitors they receive each week. Health status questions consisted

of five self-rating of health such as "how would you rate your health?" (Adams et al., 2003).

The authors noted that the results indicated that loneliness due to lack of social supports system may be seen as a risk factor for developing depression. Those living in an independent living residents have a higher chance of experiencing loneliness due to lack of social support and interaction which may not necessarily cause depression but is a potential risk factor for it. Only two retirement communities were used in this study which limits generalizability to this sample or other adult samples that are very similar. Another limitation of the study is the concern that because the surveys were distributed through the mailboxes, not all of the residents targeted actually received the questionnaires (Adams et al., 2003).

Gender and Depression among Elderly

A study was done by Zunzunegui et al., (1998) that investigated gender differences and depressive symptoms among Spanish elderly. The study used data from a previous study that screened a sample of 1116 residents from a community of elders. An at-home interview that

identified depressive symptoms with use of Center for Epidemiologic Studies Scale (CES-D) was performed. Sociodemographic information, social support, And locus control and disability were measured to associate depression (Zunzunegui et al., 1998). The results indicated that 46% of the women had depressive symptoms and 19.6% of the men had depressive symptoms. The researchers concluded that because there was no significant relationship between gender and the known risk factors for depression, the higher rate of depression in women could not completely explain the gender difference in this population. One limitation to the study is that the population consisted of one group of people.

Ethnicity and Depression among the Elderly

Husaini (1997) conducted a study that examined a relationship between ethnic background and depression among the elderly. Six hundred white elderly and six hundred black elderly were randomly selected. Data on the samples were collected and included variables such depression, stressors, network size, frequency of contact, help from network, and perceived support.

Participants were asked to provide answers related to these variables. Data was collected during 1987, 1988 and 1989 for black participants and 1989, 1990 and 1991 for white participants. The times were divided into 3 categories of T1, T2, T3 and was 12 months between T1 and T2 and 6 months between T2 and T3. The results showed that the white participants had a significantly higher rate of depression during T1 and T2 and Blacks had a significantly higher rate of depression in T3 (Husaini, 1997). The overall conclusion was that depressive factors such as lack of emotional support, infrequent and small social networks; prior depression; social and medical stressors; and poor ego were similar for both the white elderly and black elderly groups (Husaini, 1997). One limitation to this study was that the sample examined only two races.

Theories Guiding Conceptualization

Social integration encompasses both social networks and support and refers to the degree to which an individual is involved with other in his or her environment. This concept captures the degree of emotional closeness, the availability of support when

needed and the perception of oneself as an individual actively engaged in social exchanges, Social integration has been used to refer to the existence of social ties (Antonucci, Sherman & Akimaya, 1996; Berkman et al., 2000; Grann, 2000).

Theories have been developed that help explain the importance of social support in the social environment .Older adults are healthier and they live longer when they are socially engaged (Blazer, 1982). Social isolation and impaired social support have also been found to be associated with both moderate and severe depressive symptoms in the elderly (Bruce, 2002; Chi & Chou, 2001; George et al., 1989). Social scientists are now convinced that social engagement and support are critical for physical and mental health.

The social support theory buffering hypothesis states that social supports positively influence health and well being by protecting people from the pathogenic effect of stressors (Cohen & Wills, 1989). This theory explains the importance of social support in the lives of the elderly. Social support is associated with how networking helps people cope with stressful events and enhances psychological well-being (Cohen & Wills, 1989).

Social support theory describes the significance positive social support systems for the elderly. This theory suggest that if social support networks are not included in the lives of the older population, their ability to function adequately is effected. Social support theory emphasizes the benefits of having a strong support system. This study investigates the possibility of a higher depression rate resulting from lack of or insufficient social support. The theory also describes the positive influence social support has on health.

Summary

This study will examine all of the aforementioned variables to explore whether any patterns exist among them by the type of program in which the subjects participated. Pending the findings of this study, they can be used to inform social work practitioners who come into contact with and work with these types of clients and their families. The findings may also help to make service delivery more attentive to any unmet needs that these types of clients may have so that services can be assured to be adequate, appropriate, and responsive to clients' needs.

CHAPTER THREE
RESEARCH DESIGN AND METHODS

Introduction

Chapter three gives an overview of the research methods used in the study of the relationship between health status, functional levels (ADL/IADLS) social support, age, ethnicity, living arrangement, gender and depression among the elderly and comparison of the results between an Adult Day Health Care Center (ADHCC) and a senior citizen recreational facility. The study's design, the sampling methods, the data collection process, the procedures and the data analysis were included in this chapter.

Study Design

This study asks: 1) what is the relationship between health status, social support, Sociodemographics, ADL/IADL functioning and depression among the elderly 2) how does the results at an Adult Day Health Care Center in the Inland Empire Region compare to results at a senior recreational facility in the Inland Empire region. A quantitative survey design was utilized with self-administered questionnaires. A survey questionnaire

design was appropriate for this study given the time constraints involved and the population that was worked with. A survey design was best because it prevented excessive writing, which in turn, reduced the amount of time required of the participants. A sample size of 60 participants was used. The variables include health status, social support, living arrangement, function levels (ADL/IADLS), depression, age, gender, and ethnicity.

One limitation to this study was the sample size. Time restraints did not allow for a larger sample size. This compromised the generalizability of the findings of the study. Another limitation was the amount of time allotted to collect the data. More time would have allowed the opportunity for a larger amount of to be collected. A third limitation to this study was participants possibly giving false answers or answers that are socially desirable. Participants may have tried giving the "right" answers or not answer as truthfully in fear of giving the "wrong" answer.

The research question was: What is relationship between health status, social support, ADL/IADL functioning, sociodemographics and depression among the

elderly and how does the results from participants in an ADHCC compare to the results from participants in a senior recreational facility?

Sampling

The sample from which data was obtained consisted of a total of sixty participants, thirty participants from Inland Empire Adult Day Health Care Center and thirty participants from Norco Senior Center both located in the Inland Empire Region. The senior center is a program offering social and recreational programming, while the ADHC offers biopsychosocial programming and services such as nursing, social work, occupational and physical therapy, nutrition consultation, as well as social and recreational activities. A senior may enroll in a senior center at will, however a senior must receive a doctor's order to qualify for an ADHC program and must demonstrate or have a history of a significant health or mental health problem that requires regular monitoring and treatment to maintain or enhance their level of functioning to avoid needing a higher level of care. Although ADHC programs can and do accept eligible participants younger than 60 years of age, sampling was

performed only on those participants who met this age requirement for inclusion into this study. The participants were current members of these facilities. Participants were men and women, included as many different ethnic backgrounds as possible, were age 60 and older, and were mentally stable. A probability convenient sample was taken. Participant names were assigned an identifying number and thirty numbers were systematically drawn from each facility.

Data Collection and Instruments

The data collected for this study was achieved through self administered questionnaires. The specific data collected included sociodemographics (e.g., age, gender, ethnicity, living arrangements), depression, social support, and ADL/IADL function level.

The age variable was collected as a continuous variable, but for the purpose of bivariate analysis, it was recoded as a categorical variable. Gender was coded as a dichotomous variable: male, female. The variable of health status was coded as a categorical variable with four levels: excellent, good, fair, and poor. The variable of health status and function level was explored

using the Katz Activities of Daily Living scale and Lawton Instrumental Activities of Daily Living scale. The variable of social support was examined using the Lubben Social Support Network Scale-6 (Lubben, 1988) and an ordinal level of measurement. The Lubben Social Support Network Scale, a 6-item scale, is used in research and practice with the elder population. It is used in hospitals, Adult Day Care Centers, assisted living facilities and doctor offices. The scale also translates into several different languages. The sociodemographic information of age, gender, ethnicity, and living arrangement were included. Depression, one of the variables, was measured by the Geriatric Depression scale (GDS, Brink, et al., 1982) short form which is a fifteen-item scale that has been used in clinical and research settings to assess depression among older adults. The scale has been translated into many different languages to broaden its use by other cultures.

Procedures

Participation for this study was solicited by informing participants verbally at both facilities about the nature of the study. They were informed that

participation was strictly voluntary and they could withdraw at any time with no consequence or penalty. They were then verbally asked if they were interested in participating. Participants were informed that the questionnaires would be filled out at the facility on a regularly scheduled day of attendance so additional travel and transportation was not necessary. They also were informed that filling out the questionnaires would be a one time, 30 minute activity.

I first received permission from the administrator at both the ADHCC and the senior citizen recreational center. A list of potential participants was obtained. They were then verbally asked if they wanted to participate in the study. Identification numbers were given to each potential participant at both facilities . Corresponding numbers were placed in a bag in which thirty identification numbers were randomly selected. The participants were chosen based on the corresponding identification numbers. The participants were then given the informed consent [Appendix A]. After agreeing to continue with the study, the health status questionnaires, social support scale, form asking about the participant's sociodemographic information and

depression scale [Appendices B, C, D, E] were given to the participants to be filled out. After completion of the questionnaires, a debriefing statement [Appendix F] was given to each participant. Data was collected at the ADHCC and senior recreational facility. This researcher collected the data. The data was collected during the months of June, 2007 through August, 2007.

Protection of Human Subjects

Measures were taken to protect the confidentiality and anonymity of the participants. The list of potential participants were kept locked away in a file cabinet at the facilities until an identification number was assigned. After the number was assigned to the name, the list of names was destroyed. The identification numbers were assigned to the informed consent forms. Names and addresses were not asked on any of the questionnaires. Data collected from questionnaires were entered into the computer under the assigned identification numbers. Upon completion of the study, the questionnaires and forms will be destroyed.

There were no direct benefits from this study. One indirect benefit however was participation in the study.

Participating in the study provided information that may assist social workers in providing additional services that will be beneficial to clients suffering from depression and attending programs such as an ADHC or a senior recreation center. There were no major foreseeable immediate or long-term risks to participants. One minor risk to the participants may have been some discomfort resulting from the nature of the questions in the surveys. Some participants may be uncomfortable answering certain personal questions such as age. Participants were informed that they were free to refuse to answer any question or withdraw at any time with no penalty or consequence. Participants were given mental health agencies' names and phone number referrals in the debriefing statement form in case they became distressed or uncomfortable as a result of participating in the study.

Data Analysis

The data was analyzed through the use of a quantitative analysis method. Frequency distributions for age, gender, ethnicity, living arrangement, self-reported health status, functional level, social support, and

depression were used to describe and summarize the data. Cross-tabulation tables were used to explore any patterns in possible associations or relationships, as well as similarities and differences, by the type of program in which the subjects participated.

Summary

This study examined patterns of possible relationships between health status, social support, age, ethnicity, gender, living arrangement, function level (ADL/IADL) and depression among the elderly based on the results between two programs: an ADHC and senior recreation center. This study may provide information that will give insight to the needs of older adults attending day programs. It may also provide information that will help social workers advocate for effective geriatric services.

CHAPTER FOUR

FINDINGS AND RESULTS

Introduction

Chapter four described the results and findings of the study using quantitative procedures. Frequencies were completed to analyze the data. Patterns for possible relationships between depression, function level (ADL/IADL), social support, age, ethnicity, gender health status and living arrangement were examined and presented. The chapter also presented a summarization of the results.

Presentation of Findings

There were a total of 60 participants, 30 from an ADHC, and 30 from a senior recreation center that comprised the sample studied. The variables were re-categorized into 3 categories due to more than 50% of the cells having less than 5 subjects. Age was recoded into 3 categories: 60-65, 66-70; 71-82 years old. Ethnicity was recoded into 3 categories with "Asian/Pacific Islander" (3) and others (1) being discarded from the chi-square analysis because even when combined their "n" is only 5. "Health status" was recoded

into: 1 = excellent, 2 = good, 3 = fair/poor because "poor" only had 2 "n". GDS was recoded for the chi-square analysis into 0 = 0 (since almost 60% of the sample scored "0"), 1 = 1-5 score, and 2 = 6-11 score. ADL/IADL was recoded into 1 = 8-18, 2 = 19-27, and 3 = 28 because 44.2% of the sample scored "28". A midway point was chosen between 8 and 27 which was 18 and 19. Social support was recoded into 1 = 0-7, 2 = 9-14, and 3 = 15-26. These scores were roughly divided into 3 even categories based on each respective category's "n".

Of the 60 sample who participated in the study, 35 (58.3%) were females and 25 (41.7%) were males. The recreation center had 6 more females than males whereas the ADHC had 4 more females than males.

Table 1. Gender of Sample and by Program Type

Gender	Sample (n = 60)	Senior Center (n = 30)	ADHC (n = 30)
Male	41.7	12	13
Female	58.3	18	17

Table 2 presents the age of the sample by program type. A larger percentage of the participants at the ADHC

were aged between 60-65 (20%) and 71-82 (26.7%). Over three fourths of the ADHC's participants were aged 66-70, compared to 43.3% of the participants at the senior center.

Table 2. Age of Sample by Program Type

	Senior Center (n = 27)	ADHC (n = 27)
Age	%	%
60-65	20.0	13.3
66-70	43.3	76.7
71-82	26.7	0.0

Table 3 represents the racial composition of the sample by program type. A great majority (90%) of the Recreation Center's participants were White. Whites had the highest percentage (36.7) at the ADHC but the racial composition was more evenly distributed.

Table 3. Ethnicity of Sample by Program Type

	Senior Center (n = 30)	ADHC (n = 27)
Ethnicity	%	%
White	90.0	36.7
Black	3.3	23.3
Latino	6.7	26.7

Table 4 presents the Living Arrangements for the sample by program type. Over half (53.3%) of the ADHC's participants were living with a family member whereas 40% of the Senior Center's participants fell in that category. A large percentage of the participants at the Recreation Center were living with their spouse compared to the ADHC's percentage of 6.7. Twenty percent of the Recreation Center participants lived alone.

Table 4. Living Arrangement of Sample by Program Type

	Senior Center (n = 30)	ADHC (n = 30)
Living Arrangement	%	%
Alone	20.0	13.3
With Family	40.0	53.3
Board & Care	0.0	26.7
With Spouse	40.0	6.7

Table 5 presents Social Support scores of the sample by program type. The participants at the Recreation Center social support scores (46.7%) were almost three times higher than the ADHC (16.7%). Half of the participants (50.0%) at the ADHC had low social support scores between 0-7 while 6.7% of the participants at Recreation Center scored the same.

Table 5. Social Support Scores by Sample and Program Type

	Sample (n = 59)	Senior Center (n = 29)	ADHC (n = 30)
Social Support Scores	%	%	%
0-7	28.3	6.7	50.0
8-14	38.3	43.3	33.3
15-26	31.1	46.7	16.7

Table 6 presents Self Reported Health Status by Sample and Program Type. Over three-fourths (86.7%) of the participants at the Recreation Center felt they had good to excellent health whereas 73.3% felt the same way at the ADHC. Only 10% of the participants felt that their health was poor at the Recreation Center compared to 26.7% participants at the ADHC.

Table 6. Self-Reported Health Status by Sample and Program Type

	Sample (n = 59)	Senior Center (n = 29)	ADHC (n = 30)
Self-Reported Health Status	%	%	%
Excellent		50.0	30.0
Good		36.7	43.3
Fair/Poor		10.0	26.7

Table 7 presents the ADL_IADL scores for the sample by the program type. The ADHC's participants scored a much higher percentage (33.3) for the "8-18 total scores" category. However, the Recreation Center's participants scored a percentage that was three times higher (64.3) than the ADHC's participants percentage for the "28 total scores" category.

Table 7. Activities of Daily Living and Instrumental Activities of Daily Living Scores by Sample and Program Type

	Sample (n = 59)	Senior Center (n = 29)	ADHC (n = 30)
ADL/IADL Scores	%	%	%
8-18	15.4	0	33.3
19-27	35.0	35.7	45.8
28	38.3	64.3	20.8

Table 8 presents the depression scores for the sample by program type. Over half the participants for Recreation Center (66.7%) scored 0 indicating no depression compared to 46.7% of the participants at the ADHC. About 20 % of the participants at the ADHC had a high depression score compared to less than 5% of the participants at the Recreation Center.

Table 8. Geriatric Depression Scale Depression Scale
Scores by Sample and Program Type

	Sample (n = 58)	Senior Center (n = 29)	ADHC (n = 29)
GDS Scores	%	%	%
0	56.7	46.7	66.7
1-5	28.3	31.0	26.7
6-11	11.7	20.0	3.3

Summary

Patterns of possible relationships between variables health, status social support, function level (ADL/IADL), depression, age, gender, living arrangement and ethnicity were looked at in this chapter. The variables were re-categorized into three sections because more than fifty percent of the cells had less than five subjects. The results were presented by program type, senior recreation center and ADHC.

CHAPTER FIVE

DISCUSSION

Introduction

This chapter provided a discussion of the results. It provided a discussion about whether patterns of possible relationships were found between depression, social support, function level (ADL/IADL), health status, ethnicity, living arrangement, gender, and age based on frequencies of scores in the senior recreation center and the ADHC. The chapter also included recommendations for social Work Practice Policy and Research. The chapter ended with a conclusion.

Discussion

The purpose of this study was to find out if there were patterns of possible relationships between the variables depression, social support, health status, gender, living arrangement, age, ethnicity, and functional level (ADL/IADL), based on participants involvement in an ADHC program or a senior recreation center. The variable age was recoded into 3 categories, 60-65, 66-70, and 71-82. Most of the participants at the ADHC were between the ages sixty-six to seventy (76.7%).

This score is 33.4% higher than the participants at the senior recreation center in the same age range. Possible reasons for a higher percentage of participants ages sixty six to seventy attending the ADHC could have been that this group recognized that were at an age where health their began to deteriorate and affected their daily functioning. Seeking services from an ADHC helped to keep their health condition under control.

Gender between the two programs was studied. The results showed that there were more women (58.3%) attending the ADHC and senior center than men (41.7%). The senior center had six more women participants than men versus four more women than men at the ADHC. The senior center had a higher number of women (18) than the ADHC (17). The ADHC had a higher number of men (13) than the senior center (12). This suggested that of this sample, women were more likely than men to seek out ways to improve their health. It also showed however, that in terms of program type, an ADHC or senior recreation center, gender was not really a factor.

Findings for living arrangement were also presented. Participants at the ADHC living with a family member represented 53.3% of the sample. This was 13.3% higher

than the participants who lived with a family member at the recreation center. Participants at the senior center who lived with a spouse were six times higher (40%) than participants at the ADHC who live with a spouse (6.7%). Zero participants at the senior center lived in a Board & Care whereas 26.7% of the participants at the ADHC lived at a Board & Care. Although there were a higher percentage of participants at the senior center than the ADHC living alone (20%), the difference was only 6.7%. The findings suggested that the participants at the senior center were more likely to live with a spouse or family member whereas participants at the ADHC were more likely to live with a family member or Board & Care. The findings suggested that the majority of the participants at both the senior center and the ADHC were living with a family member.

Ethnicity was recoded into 3 categories, discarding "Asian" and "Other" because even when combined their "n" was less than 5. An interesting finding with the variable ethnicity was that ninety percent of the participants who attended the senior center were white. The other ethnicities (Latino and Black) accounted for 10% of the participants. Collectively, the ADHC had fifty percent of

non-white participants versus 36.7% white participants. The ADHC also had a higher percentage of non-white participants (50%) than the senior center (10%). The results suggested that non-white participants utilized the services of an ADHC more than white participants and white participants utilized the services of a senior center more than non-whites.

Self reported health status was also re-categorized into 3 categories combining fair and poor due "poor" because having less than 5 "n". The results were examined for possible patterns of relationship. Fifty percent of the senior center participants rated their health as excellent. This was 20% higher than self reports from participants at the ADHC. Combined, 86.7% of the residents rated themselves as having better than fair health. ADHC participants gave themselves a lower rating of 73.3%. This suggested that the participants at the senior center felt healthier than the participants at the ADHC. A possible reason for this is that older people get, the likelier they will attend an ADHC which is designed to service adults with poor physical and/or mental health. They're aware of their health condition and the need to attend such a program. Older people

attending a senior center may not have major illnesses or require the services of an ADHC and feel it unnecessary to attend. Also, the ADHC has a higher amount of participants ranging in ages 66-70 than the senior center. These participants recognized that the reason they attended an ADHC was because of health problem(s) and may have felt less healthy than the participants who attended a senior center. They may have attended a senior center not because of existing health related issues but as a preventative measure may "feel" healthy.

Social support was recoded into three categories and scored for patterns of possible relationships. The scores for social support were higher for participants at the senior center than participants at the ADHC. About three times more participants at the senior center (46.75) than participants at the ADHC (16.7%) fell into the highest social support category. Also, fifty percent of the participants at the ADHC scored in the lowest social support category. This is eight times less than the scores at the senior center for the same category. This suggested that those at the senior center felt that they had a higher level of social support than those of the ADHC. A possible explanation for this could have been

that the participants at the ADHC may not have viewed themselves as being supported. Some of them may not have attended on a voluntary basis. Having health problems and the inability to take care of themselves or not having the appropriate assistance at home may have "forced" them into attending an ADHC. It's also possible that because the participants at the ADHC require a little more assistance to function, they may have viewed social support differently from participants at the senior recreation center.

Function levels (ADL/IADLS) were recoded into three categories and the scores were examined. About three times more participants at the senior center (64.3%) than the participants at ADHC (20.8%) fell into the highest ADL/IADL category. The participants at the senior center had a percentage of 33.3 in the lowest ADL/IADL category. This was three times higher than the percentage of the participants at the senior center who had a score of zero. This indicated that the participants at the ADHC required more help to complete their Activities of Daily Living than those of the senior recreation center. The participants at the ADHC were more dependent on others to get tasks accomplished. The results suggested that most

of the participants who attended the senior center had a higher function level than those at the ADHC. The participants at the recreation center were also more active in physical activities. This may have contributed to their physical health and their ability to complete daily living tasks alone or with minimal assistance.

Depression was re-categorized into three categories and examined for patterns of possible relationships. Over sixty six percent of the participants at the ADHC fell into the lowest depression category of "0" which indicated no depression. This was twenty percent higher than the senior center participants who fell into this category and indicated no depression. Twenty percent of the participants at the senior center fell into the highest depression score category almost seven times higher than participants at the ADHC. The participants at the ADHC scored higher (94.3%) than the participants at the senior center (77.7%) indicating not having depression. Possible explanation for this could be that the participants at the ADHC had a positive attitude about themselves. They were aware of their health issues but had an optimistic view of life.

Limitations

Limitations to this study included the time constraints placed on the researcher. The sample size was limited due to the amount of time given to complete the study so the results cannot be generalized. The questionnaires used in the study may have been confusing for the population. There were multiple questionnaires and although the researcher used the short forms, the participants may have found responding to the questions very time consuming. A test pilot of the questionnaires was not conducted. Another limitation to the study was that all questionnaires were self administered. This prevented the participants from asking questions or getting clarity. This may have affected their ability to provide accurate responses. One last limitation to this study is that questions were asked about personal feelings so participants may have answered the questions favorably in order to not be labeled or stigmatized.

Recommendations for Social Work Practice, Policy and Research

This study found some patterns of relationship between social support, depression, function level (ADL/IADL), health status, age, gender, ethnicity and

living arrangement based on two program types, a recreation center and an ADHC. It should be noted by social workers that the findings suggested that older people engaged in physical activities seemed to feel more supported. Social workers can advocate for services and programs that adequately and appropriately address the needs and well being of geriatrics in such programs. The findings of this study can provide information for geriatric social workers seeking ways to better meet the needs and demands of older adults attending an ADHC, a senior recreation and similar programs. Social workers can advocate for programs that encourages client evaluation that results in better service tailored to the needs of the population being worked with. Social workers can also advocate for a high quality, fulfilled, and self determined lifestyle for the elderly. Findings from this study also may provide information to community programmers, administrator, practitioners and staff members of these types of facilities that will aid them in program development and service planning. This study may provide information that gives insight to senior recreation center and Adult Day Healthcare Center administrators to provide affordable and sufficient

services that address the specific needs of the geriatric population at their agencies.

Conclusion

This study looked for patterns of relationship between depression, health status, gender, age, living arrangement, ethnicity, social support and functional level ADL/IADL among the elderly based on the type of program, ADHC and senior recreation center. Some patterns of relationship were found among the variables based on the type of program involved either the senior recreation center or an ADHC. Depression, for example was found to be slightly higher among participants at the senior recreation center. Another example is social support be rated higher among senior recreation center participants than ADHC participants. Further social work research is required to continue the discussion on meeting the different needs of geriatric clients attending senior recreation centers and Adult Day Healthcare Centers.

APPENDIX A
INFORMED CONSENT

INFORMED CONSENT

The research study you are being asked to participate in is trying to find out possible reasons for depression. This study is being conducted by Kimberly Robinson under the supervision of Dr. Herbert Shon, Assistant Professor in the Department of Social Work at California State University, San Bernardino. This study has been approved by the Department of Social Work Institutional Review Board Sub-Committee, California State University, San Bernardino.

In this study you will be asked to respond to several questions about health status, social support, and depression. The questionnaires should take about 20 to 30 minutes to complete. All of your responses will be held in the strictest of confidence by the researcher. Your name will not be reported with your responses. All data will be reported in group form only. You may receive the group results of this study upon completion in September, 2008 at the following locations: Pfau Library, California State University, San Bernardino, Inland Empire Adult Day Care Center, and Norco Senior Center.

No major risks are foreseeable. However, if any discomfort due to discussing your feelings occurs, a referral for counseling is provided in the debriefing statement. Your participation in this study is totally voluntary. You are free not to answer any questions and withdraw at any time during this study without penalty. When you have completed the questionnaires, you will receive a debriefing statement describing the study in more detail. The immediate benefit of this study is the ability to express your feelings. The long term benefit is providing information that may help with reducing the risk of depression among the elderly.

If you have any questions or concerns about this study, please feel free to contact Dr. Shon at (909)537- 5532.

By placing a check mark in the box below, I acknowledge that I have been informed of, and that I understand, the nature and purpose of this study, and I freely consent to participate.

Place a check mark here Today's date: _____

APPENDIX B

KATZ ACTIVITIES OF DAILY LIVING SCALE AND LAWTON
INSTRUMENTAL ACTIVITIES OF DAILY LIVING SCALE

ID# _____

Circle one score (number) for each section that best describes you.

Activity	Item	Score
Eating	Eats without assistance	2
	Needs assistance only in cutting meat or buttering bread	1
	Needs assistance in eating or is fed intravenously	0
Dressing	Gets clothes and dresses without assistance	2
	Needs assistance only in tying shoes	1
	Needs assistance in getting clothes and getting dressed	0
Bathing (sponge bath, tub bath, shower)	Bathes without assistance	2
	Needs assistance only in bathing one part of body (e.g. back)	1
	Need assistance in bathing more than one part of body or doesn't bathe	0
Transferring	Moves in and out of bed and chair without assistance (may use cane or walker)	2
	Needs assistance in getting out of bed or chair	1
	Does not get out of bed	0

ID# _____

Circle one score (number) for each section that best describes you.

Activity Item Score

Toileting	Goes to the bathroom, uses toilet, cleans self, arranges clothes and returns without assistance (may use cane or walker for support and may use bedpan or urinal at night)	2
	Needs assistance in going to the bathroom, using toilet	1
	Does not go to the bathroom to relieve bladder or bowel	0
Continence	Controls bladder and bowel completely (without occasional accidents)	2
	Occasionally loses control of bladder and bowel	1
	Needs supervision to control bladder or bowel, requires use of catheter or diaper, or is incontinent	0

ID# _____

Circle one score (number) for each section that best describes you.

Activity		Score
Can you prepare your	without help,	2
	own meals	
	with some help, or	1
are you completely unable to prepare your own meals?		0
Can you do your own housework or handyman work	without help,	2
	with some help, or	1
	are you completely unable to do any house work?	0
Can you do your own laundry	without help,	2
	with some help, or	1
	are you completely unable to do any laundry?	0
Can you take prescribed drugs	without help, (e.g., correct doses at the correct time)	2
	with some help (e.g., someone prepares the drug and /or reminds you to take it), or	1
	are you completely unable to take prescribed drugs?	0
Can you get to places beyond walking distance	without help,	2
	with some help, or	1
	are you completely unable to travel unless special arrangements are made?	0

ID# _____

Circle one score (number) for each section that best describes you.

Activity Score

Can you go grocery without help, 2
for shopping groceries

with some help, or 1

are you completely unable 0
to do any shopping?

Can you manage your own without help, 2
money

with some help, or 1

are completely unable to 0
manage your own money?

Can you use the telephone without help, 2

with some help, or 1

are you completely unable 0
to use the telephone?

APPENDIX C

LUBBEN SOCIAL SUPPORT NETWORK SCALE 6

ID# _____

Circle the number for each question that best represents you.

FAMILY Considering the people to whom you are related either by birth or marriage...

1. How many relatives do you see or hear from at least once daily?
0 1 2
3 to 4 5 to 8 9 or more
2. How many relatives do you feel at ease with that you can talk about private matters?
0 1 2
3 to 4 5 to 8 9 or more
3. How many relatives do you feel close to such that you could call on them for help?
0 1 2
3 to 4 5 to 8 9 or more

FRIENDSHIP Considering all of your friends including those who live in your neighborhood...

4. How many of your friends do you see or hear from at least once a month?
0 1 2
3 to 4 5 to 8 9 or more
5. How many friends do you feel at ease with that you can talk about private matters?
0 1 2
3 to 4 5 to 8 9 or more
6. How many friends do you feel close to such that you could call on them for help?
0 1 2
3 to 4 5 to 8 9 or more

APPENDIX D
DEMOGRAPHICS

Id# _____

Gender- Circle one: Male Female

Age: _____

Ethnicity- Circle one: White African American Asian/Pacific Islander

Latino Other _____

Living Arrangement-Circle one: Alone with Family Member

Board and Care with Spouse

Health Status- How would you rate your health? Circle one:

Excellent Good Fair Poor

APPENDIX E

GERIATRIC DEPRESSION SCALE SHORT FORM

ID# _____

Circle the answer for each question that best describes you.

- | | | |
|---|-----|----|
| 1. Are you basically satisfied with your life? | Yes | No |
| 2. Have you dropped many of your activities and interests? | Yes | No |
| 3. Do you feel that your life is empty? | Yes | No |
| 4. Do you often get bored? | Yes | No |
| 5. Are you in good spirits most of the time? | Yes | No |
| 6. Are you afraid that something bad is going to happen to you? | Yes | No |
| 7. Do you feel happy most of the time? | Yes | No |
| 8. Do you often feel helpless? | Yes | No |
| 9. Do you prefer to stay at home, rather than going out and doing new things? | Yes | No |
| 10. Do you feel you have more problems with memory than most? | Yes | No |
| 11. Do you think it is wonderful to be alive? | Yes | No |
| 12. Do you feel pretty worthless the way you are now? | Yes | No |
| 13. Do you feel full of energy? | Yes | No |
| 14. Do you feel your situation is hopeless? | Yes | No |
| 15. Do you think that most people are better off than you are? | Yes | No |

APPENDIX F
DEBRIEFING STATEMENT

DEBRIEFING STATEMENT

This study you have just completed looked at some possible reasons for depression. I am interested in finding out what experiences in your life may lead to depression such as not having enough support from friends and family and having poor health. The various questions were asked to get information on your feelings about yourself, the amount of support you receive, and how well you can do daily tasks. Thank you for your participation. If you have any questions about the study, please feel free to contact Professor Shon at (909)537-5532. If you are experiencing discomfort now or in the future please contact:

Riverside County Mental Health
9990 Countyfarm Road #3
Riverside, California 92503
(951)350-4647

OR

Catholic Charities
767 Blaine Street
Riverside, California 92503
(951)684-5597

OR

Feel free to visit your current doctor or psychiatrist.

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