

8-3-2006

# Predictors of Job Satisfaction among Staff in Assisted Living

Guangya Liu

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# **Predictors of Job Satisfaction among Staff in Assisted Living**

**Under the Direction of Frank Whittington**

## **ABSTRACT**

Using findings from a statewide study of satisfaction and retention of 294 direct-care staff in 39 assisted-living facilities (ALFs) in Georgia, this study examines the effect of sociodemographic, job, and attitudinal characteristics on overall job satisfaction and its various dimensions. The results show age has a negative effect on promotion satisfaction. Whites are more satisfied than non-whites with overall job, work, supervision, and pay. Urban workers are less satisfied with overall job, supervisor, coworker, promotion, and pay than their rural counterparts. Education negatively affects coworker satisfaction. Workers with children are less satisfied with supervisor relationships, and pay than childless persons. Pay is positively associated with pay satisfaction. Perceived workload is negatively associated with overall job satisfaction and each of its dimensions. Finally, perceived autonomy is positively associated with promotion satisfaction. The results of this study emphasize the need for new strategies to improve job satisfaction among workers in ALFs.

**KEY WORDS:** Job satisfaction, Assisted living

**Predictors of Job Satisfaction among Staff  
in Assisted Living**

by

GUANGYA LIU

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

Georgia State University

2006

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August 2006

## **Acknowledgement**

I would like to thank all my committee members Dr. Frank Whittington, Dr. Mary Ball, Dr. Heying Jenny Zhan, and Dr. Kirk Elifson for their efforts on my thesis. Their suggestions helped to improve the quality of this research. I am grateful to my thesis Chair Dr. Frank Whittington. His dedication and thoughtfulness have enriched my professional development. His sense of humor and encouragement helped to take pressure off my shoulder. I would like to thank Primary Investigate of the grant Dr. Mary Ball for generously allowing me to use the data. I am indebted to Dr. Heying Jenny Zhan, a good friend and mentor, who has influenced my area of interests and guided me through my graduate study. I wish to express my sincere thanks to Dr. Kirk Elifson who provided statistical guidance for my study. I also want to thank Dr. Molly Perkins who I have worked closely as research assistant for her understanding and kind help with my research.

I would like to express my gratitude to the faculty and staff at Department of Sociology and Gerontology Institute for your help during my graduate school.

I am thankful to Matthew Dupre, my fiancé, love, best friend, buddy, and companion for his love, support, and encouragement. Life is full of sunshine and so much fun with him. My deep thanks go to my parents Fazeng Liu and Qingshu Yu who have given me enthusiasm and love and motivated me to move forward and not to give up no matter what happens.

## TABLE OF CONTENTS

LIST OF TABLES	v
LIST OF FIGURES	vi
CHAPTER	
I INTRODUCTION	1
II LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK	6
III METHODS	14
IV RESULTS	20
V DISCUSSION AND CONCLUSION	30
REFERENCES	39

## LIST OF TABLES

TABLE 1	DISTRIBUTION OF STAFF IN ASSISTED LIVING	20
TABLE 2	CHARACTERISTICS OF JIG AND JDI	21
TABLE 3	REGRESSION COEFFICIENTS FOR OVERALL (JIG) AND WORK SATISFACTION	23
TABLE 4	REGRESSION COEFFICIENTS FOR SUPERVISOR AND COWORKER SATISFACTION	25
TABLE 5	REGRESSION COEFFICIENTS FOR PROMOTION AND PAY SATISFACTION	27

## **LIST OF FIGURES**

FIGURE 1 CONCEPTUAL FRAMEWORK OF THE STUDY

12



# CHAPTER I

## INTRODUCTION

The number of people who need long-term care (LTC) continues to increase as large numbers of people survive into old age. Although the majority of older adults still live at home, the number of people who need paid LTC services will increase accordingly. U.S. Department of Health and Human Services (HHS) and U.S. Department of Labor (DOL) (2003) estimate that the number of people who need paid LTC services will increase from 15 million in 2000 to 27 million in 2050. Therefore, increased attention has been given to frontline care workers because of growing concerns of the quality of care for the elderly in LTC settings over the last two decades.

Frontline care workers include “nursing assistants, home health and home care aides, personal care workers, and personal care attendants” (Stone & Wiener, 2001). They provide hands-on care to the elderly and younger people with chronic diseases and disabilities in nursing homes, assisted living, private homes, and other health care settings. The frontline care workers are characterized as unmarried, middle-aged women (mostly with children) with low education and low income (General Accounting Office, 2001). According to U.S. Bureau of Labor Statistics (BLS) data, 55 percent of nursing assistants are white, 35 percent are black, and 10 percent are Hispanic (Stone & Wiener, 2001).

There are about two million care workers in the current LTC workforce (Stone & Wiener, 2001). To maintain the ratio of care workers to the increasing number of older adults who need LTC (due to demographic changes), it is estimated that between 5.7 and 6.5 million care workers in total will be needed in the LTC workforce by 2050 (HHS &

DOL, 2003). In addition to the difficulty of attracting and recruiting qualified care workers (due to the negative images of caregiving jobs such as low pay, lack of benefits, and heavy work load), poor retention and high turnover rates are worsening the crisis. In 2003, 34 out of 44 states reported that they experienced issues of direct care vacancies (Paraprofessional Healthcare Institute (PHI) and North Carolina Department of Health and Human Services (NCDHHS, 2004). Annual turnover rates have been found to range from 39% to 100% (Harrington, 1991). Banaszak-Holl and Hines (1996) found that the average turnover rate was 32% in only 6 months in 254 facilities in 10 metropolitan areas.

High turnover has tremendous negative effects on residents, facilities, and remaining staff members. First, turnover negatively affects the “quality, consistency, and stability of services” provided to residents (Barak, Nissly & Levin, 2001). Halbur and Fear (1986) found that turnover rates were positively associated with residents’ discharge and death rates among 122 North Carolina nursing homes. The frequent changes of caregivers may create stress for residents. Second, the cost of recruiting and training new staff members is expensive and time-consuming (see Seavey, 2004). In a study that included 112 nursing homes and 100 certified home health agencies in Ohio, Straker and Atchley (1999) found that, among those that examined the turnover costs, the estimated cost per new worker ranged from \$1,885 to \$2,100 for nursing homes and \$951 to \$1,242 for home health agencies. Finally, the remaining staff members may have to increase their workload and help inexperienced coworkers without receiving additional salary. This can create stress and dissatisfaction, which may result in further job turnover among the remaining staff members.

An assisted living facility (ALF) is a residential long-term care setting that “provides or coordinates personal services, 24-hour supervision and assistance (scheduled and unscheduled), activities, and health related services; designed to minimize the need to move; designed to accommodate individual residents’ changing needs and preferences; designed to maximize residents’ dignity, autonomy, privacy, independence, and safety; and designed to encourage family and community involvement.” (Assisted Living Quality Coalition, 1998) The type of ALFs varies (see Mollica, 2001 for four proposed models) and the new model attempts to maximize residents’ privacy, independence, and dignity. Hawes and her colleagues (2003) find that the average bed size is 53 beds; 67% of the ALFs have 11–50 beds; 21% have 51–100 beds; and 12% have more than 100 beds nationwide. ALFs serve less frail and disabled persons than nursing homes and are more homelike living environments (Ball et al., 2004). According to the National Academy for State Health Policy, there are 32,886 licensed assisted living residences with 795,391 units of beds nationwide (Mollica, 2000). The residents do not need extensive medical or nursing care from a nursing facility but need some assistance on activities of daily living (ADLs). A national survey of ALFs by National Center for Assisted Living (NCAL, 2000) shows 20% need help with only one ADL, 18% need help with two, and 15 percent needed help with three ADLs. Nineteen percent need no help with ADLs, while 27 percent of residents need help with four or five ADLs. As one of the fastest-growing industries, assisted living faces critical staff shortage issues. In 2001, a national study found average turnover rates of 40% for personal care workers, 39% for CNAs, 30% for universal workers, and 38% for medication aides in ALFs (Kraditor, 2001). The typical work of an ALF staff member includes housekeeping, meal service, cleaning, and doing

laundry. The job is generally unskilled, which does not require a high level of education or systematic training.

Job satisfaction has been of great interest for researchers, administrators and supervisors, and policy-makers and since the 1940s has been one of the most researched topics (Michell & Larson, 1987; Rice et al., 1991). Recently, growing attention has been focused on job satisfaction among frontline care workers. Researchers have shown considerable interest in job satisfaction because of its positive association with productivity and job performance (Ostroff, 1992), resident satisfaction (Chou, Boldy, & Lee, 2003), organizational commitment (Matheiu & Zajac, 1990; Williams & Hazer, 1986; Sikorska-Simmons, 2005), and staff retention in long-term care (Waxman et al., 1984). In addition, job satisfaction also has been inversely linked to worker absenteeism (Cohen-Mansfield & Noelker, 2000), burnout (Kalliath & Morris, 2002), intention to leave the job (Carsten & Spector, 1987; Tett & Meyer, 1992; Hellman, 1997; Gleason-Wynn & Mindel, 1999), and subsequent turnover (Barber, 1986; Gleason-Wynn, 1994; Poulin & Walter, 1992; Siefert, Jayaratne & Chess, 1991; Vinokur-Kaplan et al., 1994).

The most-cited definition of job satisfaction was proposed by Locke (1983: 1328): job satisfaction “results from the appraisal of one’s job as attaining or allowing the attainment of one’s important job values. Producing these values is congruent with, or helps to fulfill, one’s basic needs.” Job satisfaction is generally considered to be the sum of feelings workers have about their job or job experiences (Balzer et al., 2000).

However, Siegel and Lane (1982) argued that no uniform definition of job satisfaction exists. The measurement and conceptualization of job satisfaction vary for different purposes. In some studies, job satisfaction is used as an independent variable to predict

job performance, turnover intention and turnover. Job satisfaction is employed as a dependent variable or a mediating variable in other studies, while a few studies consider job satisfaction as both a dependent and an independent variable (e.g., Kiyak, Namazi, & Kahana, 1997).

In this study, job satisfaction is conceptualized as a multi-dimensional measure on a continuum ranging from not satisfied at all to very satisfied and is composed of several components such as satisfaction with pay, promotion opportunities, and relationships with management and coworkers. The assumption is made that people will not like all aspects of their jobs equally. Many researchers state that it is inappropriate to sum different facet scales to arrive at an overall measure of job satisfaction (Ironson et al., 1989; Balzer et al., 2000). To maximize understanding of different facets of job satisfaction, I use both the Job Descriptive Index (JDI) and Job in General (JIG) scales (Balzer et al., 2000) in this study. The JDI and JIG scales have been frequently used in various employee settings and are considered the most valid standardized instruments for measuring job satisfaction (DeMeuse, 1985; Landy & Shankster, 1994:271). JIG is used to examine the respondents' overall feelings about their work. The JDI measures respondents' feelings about specific aspects of their work such as the work itself, opportunities for promotion, relationships with coworkers, pay, and relationships with supervisors.

To date, much of the care worker research has been conducted in nursing homes, and little has addressed job satisfaction among the staff in ALFs (Hawes & Philips, 2000). The level of job satisfaction and the predictors of job satisfaction among staff in ALFs may be different from those of staff in nursing homes. For instance, because ALFs

serve less frail and disabled persons than nursing homes and are more homelike living environments (Ball et al., 2004), the environment may be less stressful, and the staff in ALFs may be more satisfied than those in nursing homes.

This study has several objectives. First, the purpose of this research is to identify the predictors of job satisfaction among care workers and provide empirical insights on how to improve job satisfaction in ALFs. Secondly, I assess whether job satisfaction is higher among some groups than others. Thirdly, this study examines the predictors of satisfaction with the work itself, pay, supervision, promotion opportunities, and coworkers. Finally, by understanding predictors of job satisfaction, this study aims to contribute to our understanding of how to enhance job satisfaction, increase job recruitment and retention, and decrease turnover intention and actual turnover.

## CHAPTER II

### LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

#### Literature Review

Despite the burgeoning research on LTC, the mechanisms by which individual and structural factors account for job satisfaction among LTC workers remain unclear. The most studied sociodemographic variables, job characteristics, and attitudinal factors used to explain variations in job satisfaction are discussed respectively. Since the LTC workforce is predominantly composed of females, most of the studies have excluded males because of the small number of men working as direct care aides, and this study will do likewise.

#### *Age*

Among the personal characteristics studied, age has been one of the most important predictors of job satisfaction for direct care workers. For instance, in Kiyak, Namazi and Kahana's (1997) study, age is the only personal characteristic that impacted job satisfaction of women working in six nursing homes and 12 community service agencies serving older people. Some studies consistently show that older care workers are more satisfied than their younger counterparts (Gleason-Wynn, 1994; Kalleberg & Loscocco, 1983; Lee & Wilbur, 1985). Two explanations given to account for the positive relationship between job satisfaction and age are the *cohort* and the *life cycle explanations*. According to the *cohort explanation*, different age cohorts experience different social conditions and are socialized in different education systems as they mature. Therefore, they develop different feelings and attitudes toward jobs and other life situations that result in variations in job satisfaction between older workers and

younger workers. The explanation provided by *life cycle theory* states that older workers are more satisfied because they are likely to have better and more rewarding jobs than younger workers. Older workers tend to receive higher salaries, more benefits, and longer vacations, which may improve their job satisfaction. However, given limited benefits in most caregiving settings, older workers' better job conditions and opportunities for job mobility may not result in a high level of satisfaction. Thus, this study will attempt to determine if the well-documented positive relationship between age and job satisfaction exists for direct care workers in assisted living.

### ***Marital Status***

The relationship between marital status and job satisfaction is not consistent in the literature. Some evidence shows that married care workers are more satisfied than unmarried workers (Kiyak et al., 1997). This may be because married people are more likely to receive support with family responsibilities and other social support that mediates job stress, helping to improve their job satisfaction. Other evidence suggests that the effects of marital status on job satisfaction are not significant (Williamson, 1996). However, since the studies aimed at explaining this relationship are limited, Brush, Moch, and Podyan (1986) suggest that future research should examine the relationship between marital status and job satisfaction.

### ***Race and Nativity***

Numerous studies have been conducted to examine the differences in job satisfaction across racial groups. However, the findings regarding the relationship between race and job satisfaction are inconsistent. Some researchers argue that racial groups do not differ in job satisfaction, while others find that black workers are less



satisfied than white workers (Feldman, Sapienza & Kane , 1990). One structural explanation given to account for the racial differences in job satisfaction states that job satisfaction results from differential organizational treatment of employees (Gold, Web & Smith, 1982). In other words, different racial groups are not equally treated in promotion opportunities. However, the studies that addressed this issue are limited in LTC, justifying a new look at this relationship. Since a large proportion of care workers in LTC is composed of blacks and Hispanics (45%), understanding the differences in job satisfaction across racial groups among care workers is critical to improve teamwork and encourage cohesion in overall LTC.

Some researchers identified foreign workers (workers who emigrate from other countries to the U.S.) and New Americans (immigrants, refugees, and other aliens who have come to the U.S.) as potential recruiting resources (e.g., Bryant, 2001). However, restrictive visa classifications and immigration policies may make targeting foreign workers difficult. Thus, Priester and Reinardy (2003) argued that making efforts to recruit, train, and retain New Americans for positions in LTC could be an effective strategy to help solve the LTC workforce crisis. Despite the increasing number of immigrants in LTC, no studies have symmetrically investigated the relationship between job satisfaction and nativity in ALFs. Are immigrant workers more satisfied with their jobs than their native counterparts? What factors may contribute to immigrant care workers' higher/lower satisfaction? This study takes the first step to explore the effects of nativity on job satisfaction in ALFs.

### ***Education***

The findings regarding the relationship between education and job satisfaction are mixed. Some researchers argue that education has little significant effect on job satisfaction (Himle & Jayaratne, 1990; Poulin & Walter, 1992; Ross & Reskin, 1992; Gleason-Wynn & Mindel, 1999). Gleason-Wynn and Mindel (1999) state that education was not a significant predictor for job satisfaction among nursing home social workers. Some studies show that people with higher education are more satisfied (Agho, Mueller, & Price, 1993; Martin & Shehan, 1989), whereas others suggest that people with higher education are less satisfied (Burris, 1983; Glenn & Weaver, 1982).

The explanations that account for the contrary arguments are *human capital theory* (Fitzsimons & Peters, 1994) and *expectation theory* (Vroom, 1964). According to human capital theory, the investment in education brings the economic and social returns to people in later life, such as high wages and promotion opportunities. Therefore, people with higher education are likely to be more satisfied than those with lower education, whereas, the expectation theory argues that education increases expectations, which results in dissatisfaction. People with higher education are less satisfied because they have higher expectations and less tolerance for low pay, poor management, and limited benefits.

### ***Rural/Urban Residence***

Rural/urban residence affects job satisfaction. Rural settings have a smaller employment base due to geographic and distance factors (Christianson & Moscovice, 1993). In contrast, urban facilities tend to attract workers because of higher salaries, more employment opportunities for workers as well as their family members (LaSala, 1995).

Consequently, rural workers are less likely to leave their jobs than their urban counterparts. For example, Ingersoll, Olsan, Drew-Cates, DeVinney, and Davies (2002) find that nurses employed in the urban county are significantly less committed to the organization than nurses employed in the rural areas. However, limited research has examined the rural and urban differences in job satisfaction among care workers.

### ***Job Characteristics***

Job characteristics such as work shift, job tenure, and pay are important predictors of job satisfaction. Research indicates that evening shifts in nursing homes have significantly higher turnover rates and more resident disruptive behavior than day shifts (Burgio et al., 2004). A study of 3024 registered nurses (RNs) in 39 private psychiatric hospitals reveals that RNs working nights shifts are significantly less satisfied than those working other shifts (Aronson, 2005). It is probably because staff members on evening/night shifts suffer from more stress and receive fewer rewards and promotion opportunities due to a lack of interaction with management, which results in dissatisfaction. In particular, working evening/night shifts makes it emotionally difficult for those with children.

Some evidence shows that job tenure is positively related to job satisfaction. The longer job tenure, the more likely workers are satisfied with their jobs (Gellis, 2001). The reason is that workers with longer job tenure have more work experience and control over their jobs, and are more likely to receive organizational support than newcomers (Gellis, 2001). Yet, other studies suggest that job tenure has a negative effect on job satisfaction and a positive effect on stress (Aronson, 2005). The negative relationship between job tenure and job satisfaction may be due to a long period of working overload

under pressure in caregiving setting. Furthermore, pay is identified to be an important determinant of job satisfaction/dissatisfaction. For instance, Noelker and Ejaz (2001) found that low pay ranked as the top source of job dissatisfaction among nursing assistants.

### ***Attitudinal Factors***

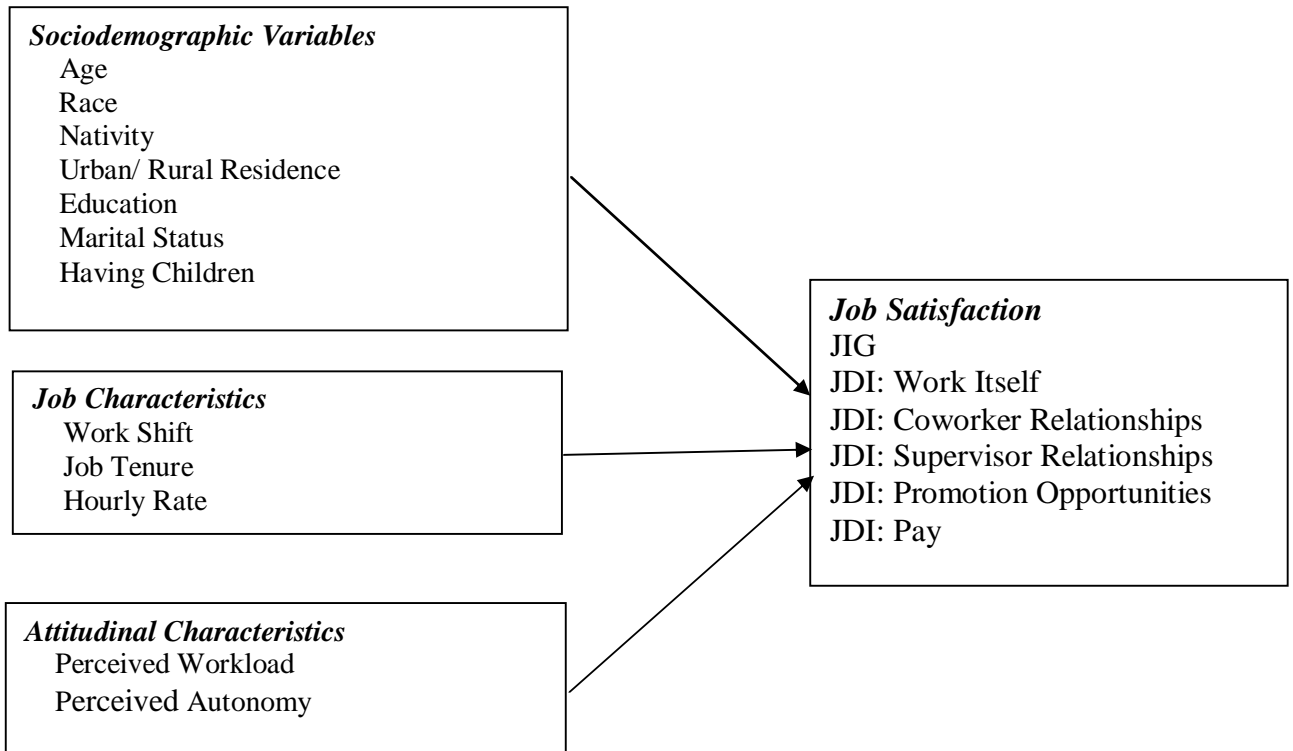
Existing research links attitudinal factors such as satisfaction in pay (Gleason-Wynn, 1994; Locke, 1976), coworker support (Poulin & Walter, 1992), involvement in decision making (Caudill & Patrick, 1991, Banaszak-Holl & Hines, 1996), and autonomy (Gleason-Wynn & Mindel, 1999) to job satisfaction. For example, by examining social workers from 326 licensed Texas nursing homes, Gleason-Wynn and Mindel (1999) found that attitudinal factors are significant predictors of job satisfaction (perceived supervisor support, satisfaction with clients, autonomy, and perceived coworker support), although none of the personal variables was significantly related to job satisfaction.

### **Conceptual Framework**

The conceptual framework for this study is based on the research findings of Kiyak, et al. (1997), Lambert, Hogan, and Barton (2001), and Banaszak-Holl and Hines (1996). A body of literature suggests that sociodemographic characteristics are important predictors of job satisfaction (e.g., Kiyak et al., 1997; Gleason-Wynn & Mindel, 1999). Other studies show that job characteristics such as work shifts (e.g., Aronson, 2005) are associated with job satisfaction. In addition, some researchers find that attitudinal factors predict job satisfaction (Gleason-Wynn & Mindel, 1999). Figure 1 presents the conceptual framework for this study. The conceptual framework shows three groups of variables, including sociodemographic variables, job characteristics, and attitudinal

factors, predict overall job satisfaction, as well as its several dimensions such as pay satisfaction.

**FIGURE 1. CONCEPTUAL FRAMEWORK OF THE STUDY**



I include age, race, nativity, urban/rural residence, education, marital status, and having children as sociodemographic characteristics. Job characteristics include work shift, job tenure, and hourly rate. I also consider perceived workload and autonomy as the attitudinal factors to predict overall job satisfaction. In doing so, this study attempts to disentangle the complex relationships between sociodemographic factors, job characteristics, and attitudinal factors with overall job satisfaction and satisfaction with different aspects of the job. Guided by the previous findings cited in the Literature Review, the following hypotheses are proposed:

### *Sociodemographic Characteristics*

**Hypothesis 1:** Older staff members are more satisfied with their jobs than their younger counterparts.

**Hypothesis 2:** White staff members are more satisfied than black staff members and staff members in other race categories.

**Hypothesis 3:** Native-born staff members are more satisfied than their foreign-born counterparts.

**Hypothesis 4:** Married staff members are more satisfied than those who are not married.

**Hypothesis 5:** Staff members with children are less satisfied with those without children.

**Hypothesis 6:** Urban staff members with children are less satisfied with their rural counterparts.

### *Job Characteristics*

**Hypothesis 7:** Staff members on afternoon, night, and combined shifts are less satisfied than those on morning shifts.

**Hypothesis 8:** Staff members with longer job tenure are more satisfied than staff members with shorter job tenure.

**Hypothesis 9:** Staff members with a higher hourly rate of pay are more satisfied than those with a lower hourly rate.

### *Attitudinal Factors*

**Hypothesis 10:** Staff members who have a higher perceived workload are less satisfied than those with lower perceived workload.

**Hypothesis 11:** Staff members with greater level of perceived job autonomy are more satisfied than those with a lower level of perceived job autonomy.

## **CHAPTER III**

### **METHODS**

#### **Research Design and Sample**

A cross-sectional survey design was used to collect the data between October 2004 and May 2006. The current study includes about 77 percent of all project data collected by December 2005. The study was supported by a grant from the National Institute on Aging (R01 AG021183-01A1), entitled “Job Satisfaction and Retention of Direct-Care Staff in Assisted Living.” The research team includes the principal investigator Dr. Mary Ball, three co-investigators Dr. Frank Whittington, Dr. Molly Perkins, and Dr. Robert Adelman, research associate Carole Hollingsworth, and nine graduate research assistants at Georgia State University.

The sample frame was all assisted-living facilities in Georgia with 16 beds or more and, for travel convenience and budget, located within 150 miles of Atlanta. The sample was stratified by size of facility (16-25; 26-50; 51+ residents) and geographic area. Geographic strata are based on Georgia’s 12 planning and service areas (PSAs). Nine of the 12 PSAs that are within the distance limitation were combined into 3 strata. Area 1 (PSA3), contains the 10-county Atlanta region and includes 135 ALFs in the sample pool. Area 2 contains the five PSAs (4, 6, 7, 8, & 9) south, southwest, southeast, and east of Atlanta and includes 81 ALFs in the sample pool. Area 3 contains 39 counties northeast, northwest, and north of Atlanta (PSAs 1, 2, & 5), and includes Gainesville, Athens, and the mountain areas of Georgia (Ball, 2004).

Project investigators selected the facilities from a comprehensive list of small, medium and large facilities. Two to five staff members were randomly selected from



each small facility (16-25 residents), while 8-10 staff members were chosen from each medium-size facility (26-50 residents), and 12-14 staff members from each large facility (+51 residents). Eight large facilities were included in the sample. 10 small and 10 medium facilities were selected. The proportion of our large facilities is similar to the national sample. Overall, the selected participants include 284 direct-care staff in 39 assisted living facilities.

## **Variables**

**Dependent Variables.** The dependent variables include overall job satisfaction and various dimensions of job satisfaction. The Job Descriptive Index (JDI) and Job in General (JIG) scales are used to measure job satisfaction within the ALFs in this study. The JDI and JIG scales have been used in various employee settings, including with health care workers and nursing home aides, and are the most frequently used and the most valid standardized instruments for measuring job satisfaction (DeMeuse, 1985; Landy & Shankster, 1994:271). However, no previous research has used these scales with ALF workers.

The JDI measures five dimensions of job satisfaction: 1) satisfaction with the job itself, 2) opportunities for promotion, 3) relationship with coworkers, 4) satisfaction with pay, and 5) relationship with supervisors. Job satisfaction in work, supervision and coworkers all were measured with 18 items each, and job satisfaction in pay and promotion were each measured with nine items (Balzer et al., 2000). The pay scale was designed and tested to be reliable among the general population. However, care workers generally have low income and limited opportunities to advance, which may limit their ambition and expectations from their jobs. A pattern emerged in the responses to

questions comprising the pay scale. Preliminary analyses suggest that the pay index is comprised of two different dimensions: workers' answers regarding their relative satisfaction to pay (e.g., fair or insecure) and responses related to their absolute earnings (e.g., well paid and income provides luxuries). Therefore, I chose to include only five of the nine items from the pay scale to capture the relative satisfaction of workers within care facilities and to maintain high internal reliability for the scale.

The JIG employs 18 items to evaluate overall job satisfaction. For both JDI and JIG, each item consists of five words or less with a "Yes," "No" and "?" (i.e., uncertain) response format. The positively worded items are scored as 3, while agreement with the negatively worded items are scored 0, and the items with "?" are scored as 1. The "?" response receives 1 point because it has shown to be closer to an unfavorable attitude, which receives 0 points, than to a favorable attitude, which receives 3 points (Balzer et al., 2000). Possible scores for JIG and each of the JDI scales range from 0 to 54 with a high score indicating high satisfaction. According to Balzer and his colleagues, mean scores of 32 and above indicate being satisfied and mean scores of 22 and below indicate being unsatisfied.

JDI and JIG were kept distinct and administered separately as suggested by Balzer et al. (2000). The respondents circled the answers, and the interviewers explained the meaning of some items if the respondents did not understand. As recommended by Balzer et al. (2000), if three or fewer responses for the 18-item scales (i.e., JDI Work, Supervision, and Coworkers, and JIG), and two or fewer for the 9-item scales (i.e., JDI Pay and Promotion) were missing, the responses were treated as "?" and scored as 1.

Since no studies have used JDI and JIG in ALFs, I established the reliability of these scales by calculating Cronbach's alpha coefficients for each scale. Previous studies indicate that the internal reliability analyses of each scale yield alpha coefficients ranging from .86 to .90 and above (Balzer et al., 2000). Table 1 presents Cronbach alpha values of JIG and JDI. The Cronbach alphas of the scales range from 0.71 to 0.91, indicating moderately high internal consistency (Nunnally, 1978). JIG, supervision, coworker, and promotion scales yield higher internal consistency with values of 0.87, 0.90, 0.91, and 0.85, respectively. Work and pay scales yield lower internal consistency with values of 0.71 and 0.75, respectively.

**Independent Variables.** The independent variables included 1) sociodemographic factors, including age (in years), race (white=1, other=0), nativity (native=1, non-native=0), education (in years), marital status (married=1, unmarried=0), urban/rural residence (urban=1, rural=0), and having children (having children=1, other=0); 2) job characteristics, including work shifts (afternoon shift=1, morning shift=0; night shift=1, morning shift=0; combined shift=1, morning shift=0), job tenure (in months), and hourly pay rate (in dollars); 3) attitudinal variables, including perceived workload and attitudes toward job autonomy. Perceived workload was gauged by the question: "On a scale of 1-10 where 1 is 'often' and 10 is 'never,' how often do you feel pushed to get all of your work done?" Attitude toward job autonomy was measured by the question: "On a scale of 1-10 where 1 is 'often' and 10 is 'never,' how often do you make decisions about how you do your job, such as deciding when and how certain tasks are done?" Both attitudinal variables were reverse recoded so the higher values indicate a higher level of perceived workload and job autonomy.

## **Data Collection**

In-person structured interviews with direct-care staff were conducted at respondents' workplaces with a few exceptions. Data were collected on individual demographic characteristics, attitudes toward work, coworkers, management, and residents, facility characteristics, and community characteristics. The length of the interviews ranged from 45 minutes to one and a half hours.

## **Analysis**

The first step in the analysis is calculating both mean and median scores of JDI and JIG and comparing them with the national norm. The mean scores of JIG and JDI are also calculated to assess if workers are satisfied with their jobs and its several dimensions. Cohen-Mansfield and Noelker (2000) reviewed assessment instruments used to investigate staff satisfaction in LTC and argued that there is a "lack of norms or benchmarking from a large number of facilities to which data for specific job titles" could be compared. To begin filling this gap, I will compare median scores on JIG and JDI among staff in ALFs with non-management workers from a national sample.

Second, the mean values of continuous variables and percentages of categorical variables are calculated to fully describe the staff members' individual characteristics. Finally, using multiple regression models, I examine the effects of sociodemographic variables, job characteristics, and attitudinal variables on overall job satisfaction (JIG), and the five dimensions of the JDI: job satisfaction in the job itself, pay, promotion opportunities, relationships with and coworkers, and relationships with supervisors. Four models are constructed for each dependent variable. For example, Model 1 examines the effects of sociodemographic variables on overall job satisfaction. Model 2 tests the

effects of job characteristics on overall job satisfaction. In Model 3, attitudinal variables are included to predict overall job satisfaction. All the variables are entered together in Model 4. The effects of the independent variables are examined respectively for the JIG and five JDI dimensions. The models are compared to identify which factors are associated with overall job satisfaction and its dimensions. I realize that some of the independent variables such as perceived workload and attitudes towards job autonomy may be highly correlated (i.e., multicollinearity). However, multicollinearity can be detected by examining the correlation coefficients of the independent variables and examining the value of  $R^2$  that results from regressing each of the predictor variables against all the others (Chatterjee, Hadi & Price, 2000). The *variance inflation factor* (VIF) is examined to judge the relationship between the independent variables. Since the VIF values of all the independent variables are less than 10, no independent variables are dropped from the models. Analyses are conducted using SPSS 10.0.

## CHAPTER IV

### RESULTS

Table 1 presents descriptive statistics for the study sample. The age of staff members ranges from 18 to 75 with a mean age of 40 (SD: 13.4) years. Over three-fourths of the respondents (77.9%) live in urban areas. Just over half (56.8%) of staff members are black, thirty-seven percent are white, and about six percent are other races. Over four-fifths of the sample (81.6%) is native born. The average level of education is beyond high school level (12.7 years). While forty-one percent of staff members are married, over half (52.7%) have children. Thirty-eight percent of the respondents work morning shifts, 28.4% on afternoon shifts, 20.2% on night shifts, and 13.0% on combined shifts. The job tenure ranges from half a month to 20 years with a mean job tenure of about two and a half years (30.5 months, SD: 33.2). The hourly pay

***TABLE 1. DISTRIBUTION OF STAFF IN ASSISTED LIVING FACILITIES***

<b>Variable</b>	<b>Mean/%</b>	<b>Variable</b>	<b>Mean/%</b>
<b><i>Age (years)</i></b>		<b><i>Have Children</i></b>	
Mean (SD)	40.3 (13.4)	Yes	52.7%
Range	18-75	<b><i>Work Shift</i></b>	
<b><i>Urban/Rural</i></b>		Morning shift	38.0%
Urban	77.9%	Afternoon shift	28.4%
<b><i>Race</i></b>		Night Shift	20.2%
White	37.4%	Combined shift	13.0%
Black	56.8%	<b><i>Job Tenure (months)</i></b>	
Other	5.8%	Mean (SD)	30.5 (33.2)
<b><i>Nativity</i></b>		Range	0.5-240
Native Born	81.6%	<b><i>Hourly Rate (\$)</i></b>	
<b><i>Education (years)</i></b>		Mean (SD)	8.4 (1.7)
Mean (SD)	12.7 (1.8)	Range	5.3-17.5
Range	7-20	<b><i>Perceived Workload</i></b>	
<b><i>Marital Status</i></b>		Mean (SD)	4.5 (3.2)
Married	41.2%	<b><i>Perceived Autonomy</i></b>	
		Mean (SD)	7.2 (2.5)

rate ranges from \$5.3 to \$17.5 with a mean hourly pay rate of \$8.40 (SD: 1.7). The workers have a low level of perceived workload and do not feel pushed to get their work done, scoring only 4.5 on a 10-point scale (SD: 3.2). They indicate a high level of job autonomy with a mean score of 7.2, also on a 10-point scale (SD: 2.5).

Table 2 presents the care workers' mean and median scores on overall job satisfaction and its several dimensions, along with median scores for a nationally representative sample of non-managerial workers (labeled "National Norm"). The caregivers in ALFs are satisfied with the work itself, their relationship with coworkers and supervisors, and job in general, with mean scores of 38.0 (SD: 7.8), 39.3 (SD: 13.6), 39.3 (13.4), and 42.0 (SD: 10.9), which are all above 32. Care workers report scores of 21.0 and 22.1 on satisfaction with their opportunities for promotion and pay, with mean scores at or below the point Balzer and his colleagues (2000) suggest to demarcate low satisfaction (22). This suggests that staff members are not very satisfied with promotion and pay.

**TABLE 2. CHARACTERISTICS OF JIG AND JDI**

	<b>Cronbach Alpha</b>	<b># of Items</b>	<b>Mean (SD)</b>	<b>Median (National Norm)</b>
<b><i>JIG</i></b>	.87	18	42.0 (10.9)	45.0 (41)
<b><i>JDI</i></b>				
<b><i>Work</i></b>	.71	18	38.0 (7.8)	39.0 (37)
<b><i>Supervision</i></b>	.90	18	39.3 (13.4)	45.0 (34)
<b><i>Coworker</i></b>	.91	9	39.3 (13.6)	43.5 (37)
<b><i>Promotion</i></b>	.85	9	21.0 (15.6)	18.0 (10)
<b><i>Pay</i></b>	.75	5	22.1 (17.3)	21.6 (28)

According to Balzer et al. (2000), JDI and JIG comparisons of local samples with their national sample of workers should be made only for subgroups, since scores of the many subcategories of workers vary so much. They also suggest that medians are more appropriate than mean scores because means are subject to differential distribution

effects. So, in Table 2 are also found median scores for each of the scales and subscales and Balzer's national norm scores. Unexpectedly, the medians of JIG and job satisfaction with the work itself, opportunities for promotion, relationship with coworkers, and relationship with supervisors among staff in ALFs are higher than those of other non-manager workers in the nation when comparing with the national norm (Balzer et al., 2000). For example, staff members' supervision satisfaction (45) is 11 points higher than that of the national norm (34). However, the median of satisfaction with pay among staff in ALFs is over six points lower than that of other non-manager workers nationally (21.6 vs. 28).

In the upper panel of Table 3 are regression coefficients for predictors of overall job satisfaction (JIG). Model 1 shows the effects of sociodemographic characteristics on JIG. Race is the only sociodemographic characteristic that has a significant effect: whites are much more likely to be satisfied with their jobs than non-whites ( $\beta = 4.8, p \leq .001$ ). Model 2 adds measures of job characteristics, although none of these has a significant effect on overall job satisfaction. Model 3, including both personal and attitudinal variables, but not job characteristics, shows that perceived workload has a significantly negative effect on overall job satisfaction, indicating that the more people feel pushed to get their work done, the less satisfied they are. Perceived autonomy has a significantly positive effect on overall job satisfaction, which indicates that the more control people feel they have over their jobs, the more satisfied they are. The inclusion of attitudinal characteristic variables in the model increases the adjusted  $R^2$  from 0.08 to 0.16.

Model 4 includes all measures of sociodemographic, job, and attitudinal



**TABLE 3. REGRESSION COEFFICIENTS FOR OVERALL (JIG) AND WORK SATISFACTION**

	Model 1	Model 2	Model 3	Model 4
<b>JIG</b>				
<i><b>Sociodemographic Variables</b></i>				
Age	0.03	0.01	0.01	-0.01
Whites (Non-Whites)	4.82***	4.88***	5.25***	5.30***
Native (Foreign-Born)	2.81	2.26	2.91	2.21
Urban (Rural)	-2.18	-2.56	-2.59	-3.19*
Education (in years)	-0.19	-0.52	-0.09	-0.44
Marital Status (Non-Married)	-0.88	-0.42	-0.67	-0.23
Have Children (No)	-1.39	-1.45	-1.48	-1.70
<i><b>Job Characteristics</b></i>				
Afternoon shift (Morning Shift)		-1.19		-1.56
Night shift (Morning Shift)		-0.70		-1.56
Combined Shift (Morning Shift)		-1.39		-2.28
Job Tenure (in months)		0.00		0.01
Hourly Rate		0.18		0.35
<i><b>Attitudinal Characteristics</b></i>				
Perceived Workload			-0.84***	-0.89***
Perceived Autonomy			0.53*	0.46
<b>Adjusted R<sup>2</sup></b>	0.08	0.07	0.16	0.16
<b>JDI: Work Itself</b>				
<i><b>Sociodemographic Variables</b></i>				
Age	0.07*	0.09*	0.06	0.08
Whites (Non-Whites)	4.15***	4.28***	4.41***	4.54***
Native (Foreign-Born)	1.52	0.92	1.61	0.95
Urban (Rural)	-1.57	-1.61	-1.77	-1.94
Education (in years)	0.05	-0.16	0.10	-0.12
Marital Status (Non-Married)	-0.14	0.05	-0.01	0.17
Have Children (No)	0.28	0.10	0.24	-0.02
<i><b>Job Characteristics</b></i>				
Afternoon shift (Morning Shift)		-0.52		-0.67
Night shift (Morning Shift)		-1.68		-2.08
Combined Shift (Morning Shift)		-2.38		-2.86
Job Tenure (in months)		-0.02		-0.02
Hourly Rate		-0.13		-0.03
<i><b>Attitudinal Characteristics</b></i>				
Perceived Workload			-0.42**	-0.45**
Perceived Autonomy			0.18	0.13
<b>Adjusted R<sup>2</sup></b>	0.10	0.11	0.13	0.14

\*  $p \leq .05$ , \*\*  $p \leq .01$ ; \*\*\*  $p \leq .001$

characteristics. The effect of race on overall job satisfaction continues strong when taking into account both job characteristics and attitudinal characteristics ( $\beta = 5.3, p \leq .001$ ). The effect of urban/rural residence becomes significant in the final model, indicating that urban workers are less satisfied with their jobs than their rural counterparts ( $\beta = -3.2, p \leq .05$ ). In addition, the negative effect of perceived workload remains significant in the final model. In the lower panel of Table 3 are regression coefficients for satisfaction with the work itself. In Model 1, regarding the relationship between race and work satisfaction ( $\beta = 4.2, p \leq .001$ ), the findings are similar to those for the JIG, indicating that whites are significantly more satisfied than non-whites. However, age also is significantly and positively associated with work satisfaction ( $\beta = 0.7, p \leq .05$ ). For every additional year of age, work satisfaction increases by a unit of 0.1, so the older caregivers are more satisfied than the younger ones. The sociodemographic variables explain approximately 10 percent of the variance in satisfaction with the work itself. Similar to the JIG analysis, job characteristics do not have significant associations with work satisfaction in Model 2.

Model 3 shows that care workers who have greater levels of perceived workload are less satisfied than those with lower levels ( $\beta = -0.4, p \leq .01$ ). The effects of race and perceived workload still remain in the full model.

Table 4 presents regression models for predicting supervisor and coworker satisfaction, using the same sets of independent variables. We can see from Model 1 in the upper panel that race and urban/rural residence are related to the staff members' satisfaction with their relationship with their supervisors. When job characteristics are included in Model 2, none of the job characteristics has significant effects, but the effect

**TABLE 4. REGRESSION COEFFICIENTS FOR SUPERVISOR AND COWORKER SATISFACTION**

	Model 1	Model 2	Model 3	Model 4
<b>JDI: Supervisor Relationships</b>				
<i>Sociodemographic Variables</i>				
Age	0.03	0.00	0.01	-0.03
Whites (Non-Whites)	4.11*	3.84*	4.81**	4.51**
Native (Foreign-Born)	1.24	1.21	1.06	0.82
Urban (Rural)	-4.87*	-5.53**	-5.38**	-6.42***
Education (in years)	-0.18	-0.43	-0.13	-0.42
Marital Status (Non-Married)	-0.57	0.15	-0.10	0.59
Have Children (No)	-3.03	-3.22*	-3.06*	-3.49*
<i>Job Characteristics</i>				
Afternoon shift (Morning Shift)		-1.94		-2.36
Night shift (Morning Shift)		0.44		-0.46
Combined Shift (Morning Shift)		-1.35		-2.75
Job Tenure (in months)		0.00		0.01
Hourly Rate		0.17		0.46
<i>Attitudinal Characteristics</i>				
Perceived Workload			-1.23***	-1.30***
Perceived Autonomy			-0.53	-0.44
<b>Adjusted R<sup>2</sup></b>	0.06	0.05	0.16	0.16
<b>JDI: Coworker Relationships</b>				
<i>Sociodemographic Variables</i>				
Age	0.04	0.02	0.04	0.02
Whites (Non-Whites)	0.62	0.62	1.33	1.37
Native (Foreign-Born)	-1.46	-2.65	-1.46	-2.77
Urban (Rural)	-4.63*	-4.42*	-4.96*	-5.14*
Education (in years)	-0.70	-1.11*	-0.68	-1.12*
Marital Status (Non-Married)	-0.46	0.03	0.00	0.50
Have Children (No)	-0.74	-1.00	-0.73	-1.17
<i>Job Characteristics</i>				
Afternoon shift (Morning Shift)		-2.16		-2.26
Night shift (Morning Shift)		-1.47		-1.84
Combined Shift (Morning Shift)		-2.55		-3.73
Job Tenure (in months)		0.01		0.02
Hourly Rate		-0.48		-0.23
<i>Attitudinal Characteristics</i>				
Perceived Workload			-0.83***	-0.92***
Perceived Autonomy			-0.13	-0.26
<b>Adjusted R<sup>2</sup></b>	0.01	0.02	0.04	0.06

\*  $p \leq .05$ , \*\*  $p \leq .01$ ; \*\*\*  $p \leq .001$

of having children becomes significant ( $\beta = -3.2, p \leq .05$ ). In Model 3, perceived workload again is a significant predictor of supervisor satisfaction. In the final model, race, urban/rural residence, having children, and perceived workload are found to affect supervisor satisfaction. The inclusion of both job and attitudinal characteristic variables in the model increases the adjusted  $R^2$  from 0.06 to 0.16.

In the lower panel of Table 4 are presented regression coefficients for satisfaction with relationships with coworkers. Model 1 indicates that urban/rural residence is the only sociodemographic characteristic that has a significant effect, so that urban residents are less likely to be satisfied with the relationships with their coworkers than rural residents ( $\beta = -4.6, p \leq .05$ ). Note that race is not a predictor of coworker satisfaction. When taking into account job characteristics in Model 2, education becomes a significantly negative predictor for coworker satisfaction ( $\beta = -1.1, p \leq .05$ ). For every additional year of education, workers' satisfaction in relationships with their coworkers decreased by a unit of 1.1.

Model 3 shows that staff members with higher levels of perceived workload are less satisfied, while education is no longer significant. In Model 4, urban/rural residence, education, and perceived workload all significantly affect satisfaction with coworkers. Although the final model only explains six percent of the variance in coworker satisfaction, the inclusion of attitudinal and job characteristics in the model increases the adjusted  $R^2$  (.01) in the first model by roughly 500%. Yet, job characteristics and attitudinal variables, together with the control variables in the equation, have accounted for only 6% of the total variance in satisfaction with coworker relationships.

**TABLE 5. REGRESSION COEFFICIENTS FOR PROMOTION AND PAY SATISFACTION**

	Model 1	Model 2	Model 3	Model 4
<b>JDI: Promotion Opportunities</b>				
<i>Sociodemographic Variables</i>				
Age	-0.18**	-0.17*	-0.21**	-0.20**
Whites (Non-Whites)	1.35	1.26	1.50	1.51
Native (Foreign-Born)	0.98	0.29	0.68	-0.07
Urban (Rural)	-5.89*	-6.25*	-6.20**	-6.79**
Education (in years)	-0.55	-1.20*	-0.52	-1.17
Marital Status (Non-Married)	0.44	0.95	0.59	1.11
Have Children (No)	-2.94	-3.09	-2.98	-3.29
<i>Job Characteristics</i>				
Afternoon shift (Morning Shift)		-0.90		-1.35
Night shift (Morning Shift)		-1.66		-2.49
Combined Shift (Morning Shift)		-0.52		-1.32
Job Tenure (in months)		-0.04		-0.04
Hourly Rate		0.29		0.45
<i>Attitudinal Characteristics</i>				
Perceived Workload			-0.77**	-0.88**
Perceived Autonomy			0.87*	0.74*
<b>Adjusted R<sup>2</sup></b>	0.04	0.05	0.09	0.10
<b>JDI: Pay</b>				
<i>Sociodemographic Variables</i>				
Age	0.05	-0.01	0.04	-0.03
Whites (Non-Whites)	11.23***	10.55***	11.85***	11.55***
Native (Foreign-Born)	1.51	1.88	1.66	2.02
Urban (Rural)	-4.51	-7.20**	-4.92*	-8.23***
Education (in years)	-0.34	-1.03	-0.25	-0.95
Marital Status (Non-Married)	-0.32	-0.06	0.02	0.45
Have Children (No)	-3.70	-4.07*	-3.76*	-4.39*
<i>Job Characteristics</i>				
Afternoon shift (Morning Shift)		3.23		2.99
Night shift (Morning Shift)		3.66		2.81
Combined Shift (Morning Shift)		-0.78		-2.34
Job Tenure (in months)		0.02		0.03
Hourly Rate		2.13***		2.45***
<i>Attitudinal Characteristics</i>				
Perceived Workload			-0.90**	-1.29***
Perceived Autonomy			0.23	-0.13
<b>Adjusted R<sup>2</sup></b>	0.14	0.18	0.16	0.23

\*  $p \leq .05$ , \*\*  $p \leq .01$ ; \*\*\*  $p \leq .001$

Table 5 presents regression coefficients for satisfaction with opportunities for promotion and pay. Among all the sociodemographic characteristics, only age ( $\beta = -0.2, p \leq .01$ ) and urban/rural residence ( $\beta = -5.9, p \leq .05$ ) are significantly related to satisfaction with promotion opportunities. As with other aspects of care work, urban residents are less satisfied with promotion opportunities than rural residents. In contrast to work satisfaction, older workers are less satisfied with promotional opportunities than their younger counterparts. For every added year of age, promotion satisfaction decreases by a unit of 0.2. Once job characteristics are entered in Model 2, education becomes a significant predictor. Workers with higher education are less satisfied with their promotion opportunities than those with lower education. However, none of the job characteristics has statistically significant effects on satisfaction with promotion chances.

Similar to the results for overall satisfaction, Model 3 shows perceived workload and job autonomy significantly affect satisfaction with promotion opportunities. People who perceive a heavier workload are predictably less satisfied than those who do not ( $\beta = -0.8, p \leq .01$ ). Also as expected, persons with higher levels of perceived job autonomy are more satisfied with their promotion opportunities than those with lower levels of perceived autonomy ( $\beta = 0.9, p \leq .05$ ). The results of the full model indicate that age, urban/rural residence, perceived workload, and job autonomy are significant predictors of promotion satisfaction. The directions of these effects are found to be consistent with previous findings. By including job and attitudinal characteristic variables (Model 4), the adjusted  $R^2$  increases from 0.04 (with only sociodemographic variables) to 0.10, suggesting that the full model explains about six percent more of the variance in satisfaction with promotion opportunities than Model 1.

In the lower panel of Table 5 are found the relationships between satisfaction with pay and the independent variables. Model 1 depicts how sociodemographic characteristics alone predict level of satisfaction with pay. Whites have dramatically higher pay satisfaction than non-whites ( $\beta = 11.2, p \leq .001$ ). Among job characteristics, neither the shift nor job tenure is related, but although hourly pay rate does not affect overall job satisfaction or its other dimensions, it does predict level of satisfaction with pay. Not surprisingly, staff members with higher hourly rates are more likely to be satisfied than those with lower pay. For every additional dollar in hourly rate, pay satisfaction increases by 2.1 units.

When attitudinal variables are added in Model 3, we see that people with a greater level of perceived workload are less likely to be satisfied than people with a lower level. However, perceived autonomy does not predict level of satisfaction with pay, suggesting that people who are satisfied with their pay may not consider job autonomy important to them. In Model 4, all the significant predictors of previous models – race, urban/rural residence, hourly pay rate, and perceived workload – remain significant. The  $R^2$  value of 0.23 indicates that all the selected independent variables together account for 23% of the total variance in pay satisfaction.

## **CHAPTER V**

### **DISCUSSION AND CONCLUSION**

This research examines the factors associated with job satisfaction among staff in assisted living facilities in Georgia. Overall, I find that staff members in ALFs are satisfied with the work itself, their relationship with coworkers and supervisors, and their job in general. Yet, they are not very satisfied with their pay or their opportunities for promotion. Surprisingly, the medians of JIG and job satisfaction with the work itself, opportunities for promotion, relationship with coworkers, and relationship with supervisors among staff in Georgia ALFs are higher than those of other non-manager workers in the nation. This suggests that the workers in this study may not have alternative employment opportunities, so they are satisfied with their jobs despite heavy workload and lack of benefits. Another reason may be due to a selection effect. That is, individuals who choose to work in assisted living facilities or other long-term care settings generally value helping others, and thus, are satisfied with their jobs. However, a lower level of pay satisfaction than the national norm indicates a need for efforts to improve their pay and benefits.

The results reveal that race, urban/rural residence, perceived workload, and perceived autonomy have significant effects on overall job satisfaction (JIG). Age, race, and perceived workload affect satisfaction with the work itself. An interesting finding is that having children is found to be significantly associated with supervision satisfaction, together with race, urban/rural residence, and perceived workload. It may be that staff members with children are less satisfied than those without children because they may



attribute undesirable work schedules or low pay to their supervisors, making it difficult to raise their children.

Although urban/rural residence, education, and perceived workload are found to significantly affect coworker satisfaction, the low  $R^2$  value suggests that future research is needed to identify other predictors. The findings show that perceived autonomy is significantly and positively related to promotion satisfaction, together with age, urban/rural residence, and perceived workload. This indicates that workers who feel they have greater control over their job are more satisfied with their promotion opportunities. One possible explanation is that staff members who feel that they have a high level of autonomy are those who may have been previously promoted and perhaps are more likely to anticipate being promoted in the future.

Race, rural/urban residence, having children, hourly rate, and perceived workload are important predictors of satisfaction with pay. An interesting result is that hourly pay rate is significantly predictive of pay satisfaction, in contrast to overall job satisfaction and its other dimensions. In other words, staff members with a lower hourly rate are less satisfied with pay, but not necessarily less satisfied with their supervisors, coworkers, chances for promotion or the work itself than those with a higher hourly rate. This finding is noteworthy for policy-makers and management that salary increases may increase care workers' satisfaction with pay but not their satisfaction with other aspects of the job or with the job as a whole.

Support for my hypotheses is mixed. Older staff members are more satisfied with the work itself, but less satisfied with promotion opportunities than their younger counterparts. However, age is not a significant predictor of other dimensions of job

satisfaction. The positive relationship between age and work satisfaction supports *Life cycle theory*, suggesting that older workers may be more familiar with their jobs and feel less pressure to get work done or receive higher benefits, so they are more satisfied than younger workers. A second explanation is possibly because older workers may have reached their career potential and may have more realistic expectations and know better than younger workers the reality of the general absence of promotion opportunities in most ALFs. This finding supports Hypothesis 1. The negative relationship between age and promotion satisfaction, however, tends to reject Hypothesis 1. It may be that older staff members have more years of work experience and have contributed more to their facilities and thus are more likely to anticipate promotion than younger ones.

Race is an important predictor of overall, work, supervision, and pay satisfaction, and whites are more likely to be satisfied than non-whites. Additional analyses (not presented) show that whites are older, have less education, and longer job tenure, yet have higher hourly rates than non-whites. This suggests that whites tend to be satisfied with their current position and do not anticipate changing jobs. In contrast, black workers, especially those with higher education and more training may expect more, thus, be more dissatisfied with the lack of opportunity than non-whites. Another explanation is that most managers are white, and therefore, non-whites may face racial discrimination in the workplace. However, additional research is needed to verify this explanation. The finding the race predicts supervisor satisfaction but not coworker

Conversely, race does not significantly affect coworker and promotion satisfaction. In terms of coworker satisfaction, a lack of variance contributes to the lack of significant effect because most staff members (whether they are whites or non-whites)

view their coworkers positively. Furthermore, race is not a predictor of coworker relationships since coworkers tend to be among the same race, thus, may be unlikely to experience race discrimination from them. In contrast, race is a significant predictor of supervisor satisfaction. Therefore, from a policy standpoint, attention needs to be focused on how to reduce race discrimination, especially discrimination from management in assisted living facilities. For promotion satisfaction, a lack of significant effect may be due to limited promotion opportunities in the long-term care workforce.

Nativity does not have a significant effect on job satisfaction. Additional analyses (not shown) suggest that race accounts for the insignificant effect of nativity on job satisfaction. Once race is removed from the model, nativity significantly predicts job satisfaction. Note that most foreign-born staff members (93%) are non-whites.

Urban/rural residence predicts overall job satisfaction, and satisfaction with supervisor relationships, coworker relationships, promotion opportunities, and pay. Urban workers are simply less satisfied than their rural counterparts with most aspects of their jobs. I suspect the higher level of job satisfaction among rural workers may be due to limited employment alternatives. Another explanation is that all rural facilities are small and workers and supervisors have greater contact and some have known workers or their families personally in the community.

Education is significantly associated with coworker satisfaction. Persons with higher education are less satisfied with their relationships with their coworkers than those with lower education. However, no evidence has been found to support the relationship between education and overall job satisfaction and its other dimensions such as pay satisfaction. The evidence is limited due to two reasons. First, since there is a lack of

variance in educational attainment among care workers, it is difficult to find variations in educational effects on job satisfaction. Second, in a caregiving setting that lacks promotion opportunities, education may not increase care workers' chances of getting more benefits. It is important to employ new ways to provide more promotion opportunities to make workers, in particular, workers with higher education, more satisfied.

It is unclear why marital status is not a significant predictor of overall job satisfaction or its several dimensions. Given that only 40 percent of the study sample is married, further investigation should explore the validity of this finding.

Having children affects supervision and pay satisfaction. Staff members with children are significantly less satisfied than those without children, which supports my hypothesis. Understandably, since staff members with children have more family responsibilities, they are likely to need and expect higher pay and more benefits in terms of receiving understanding and support from their supervisors than those without children. However, it is unclear why having children does not significantly affect other aspects of their job satisfaction. Future research is needed to further understand how having children affects all aspects of their jobs.

The results show that staff members on night and combined shifts are slightly less satisfied with the work itself than those on morning shifts, though not significantly. One reason may be that workers on morning shifts are more likely to interact with management and get promotion opportunities than those on night and combined shifts, resulting in a higher level of job satisfaction. On the other hand, workers on night shifts may find it difficult to maintain their relationships when their work schedules do not

match those of their family and friends. Also, the work may simply be less interesting, due to a lack of social and rehabilitation activities in the evenings. This implies that administrators and supervisors should find creative ways to improve the work conditions of staff members on night and combined shifts to enhance their level of job satisfaction.

Job tenure has no impact on job satisfaction and its several dimensions, so the results do not support hypothesis 7. I suspect the correlation between age and job tenure may account for its insignificant effects.

Not surprisingly, hourly pay rate is positively related to pay satisfaction, yet, it is not a predictor of overall satisfaction or its other dimensions. This finding suggests a need to raise staff members' hourly rate to improve their pay satisfaction. However, the results show that staff members with low hourly rates do not necessarily have lower levels of overall, work, promotion, supervision, and coworker satisfaction. This may be due to a lack of other employment opportunities, or it may indicate the greater value workers place on intrinsic factors related to their job satisfaction such as autonomy, workload, and the nature of the care work itself.

Attitudinal characteristics are strong predictors of job satisfaction. Perceived workload is negatively associated with overall job satisfaction and each of its dimensions. Staff members with greater perceived workload are less likely to be satisfied than those with less perceived workload, which supports hypothesis 9. This finding has an important policy implication: reducing workload could be one of the solutions to improved job satisfaction among staff in assisted living facilities. Therefore, administrators, supervisors, and policy-makers should consider the need for new

strategies such as recruiting new workers and designing new work schedules in order to reduce workload while maintaining high quality of service.

Perceived autonomy also predicts overall and promotion satisfaction. Staff members with a greater level of perceived autonomy are more satisfied with their jobs in general and promotion opportunities than those with a lower level of perceived autonomy. As known, persons who consider job autonomy important are more likely to expect more rewards from their jobs (such as being promoted) than those who do not.

The dependent variables account for 23% of the total explained variance in pay satisfaction. In comparison, the dependent variables explained relatively lower variance for other types of satisfactions, such as satisfaction with coworkers (6% of the total variance) and with promotion (10%). It may be due to our small sample size and a lack of heterogeneity.

In summary, I find older staff members are more satisfied with the work itself but less satisfied with promotion opportunities than their younger counterparts. Race is an important predictor of overall, work, supervision, and pay satisfaction, and whites are more likely to be satisfied than non-whites. Nativity does not have a significant effect on job satisfaction. Urban workers are less satisfied with overall job, supervisor relationships, coworker relationships, promotion opportunities, and pay than their rural counterparts. Persons with higher education are less satisfied with their relationships with their coworkers than those with lower education. Staff members with children are less satisfied with supervisor relationships, pay, and promotion opportunities than those without children, which supports my hypothesis. As expected, workers with higher pay are more satisfied with pay than those with lower pay. Perceived workload is negatively

associated with overall job satisfaction and each of its dimensions. Workers with a greater level of perceived autonomy are more satisfied with their jobs in general and promotion opportunities than those with a lower level of perceived autonomy.

This study makes several significant contributions to our understanding of job satisfaction of direct care workers in assisted living. First, to my knowledge, this study is the first to examine the predictors of overall job satisfaction and its various dimensions separately. The results show that the predictors of overall, work, supervision, coworker, promotion, and pay satisfaction are different. Accordingly, policy-makers, administrators, and supervisors should employ different strategies to improve staff members' job satisfaction. For example, since hourly rate only predicts pay satisfaction, it may be more important to initiate more interaction and communication among workers (e.g., staff lunches) to increase their levels of coworker satisfaction rather than simply to increase their pay.

Second, by examining the predictors of overall job satisfaction in ALFs and its various dimensions, this study has deepened our understanding of the most salient predictors of job satisfaction among staff in assisted living. Ideally, we could employ policies and improve interactions between management and care workers to increase retention and decrease turnover. Third, examining the difference of the impact of race on job satisfaction and that of nativity contributes to the literature of racism in the workforce and strengthens our awareness of racial stratification in society. The finding that whites are more satisfied than non-whites suggests that employers may consider improving the working conditions of non-whites and preventing racial discrimination in the workplace. Fourth, the data also allow me to establish the reliability of the JDI and JIG scales and

thereby make contributions to the field of psychology, organizational sociology, and gerontology. The JIG and JDI scales are reliable and can be used to advance or generate more research in these fields. Finally, since all of the respondents are women, examining their job satisfaction contributes to our understanding of women's working conditions, sense of empowerment, overall life satisfaction, and social status. Their low levels of pay and promotion satisfaction need more attention in order to improve their social status in the society.

I acknowledge the limitations of this study. First, the secondary data used for analyses do not include certain measures that warrant additional investigation as independent variables. For example, marital status is the only variable to measure family support. In addition, I can not take into account the effects of other forms of social support such as religious activities. Second, because this study is limited to Georgia, caution should be taken when generalizing the findings. Third, because the study is based on cross-sectional survey data, I can not differentiate the cohort effect and age effect. Longitudinal data are needed for future research to better understand the dynamics of job values and attitudes among staff members in LTC. Fourth, this analysis only uses quantitative data and does not include qualitative data. Yet, additional qualitative data in the larger study may provide insights on how to explain some of the findings and verify some claims. For instance, qualitative data may shed light on why whites are more satisfied than non-whites.

Finally, this research only includes individual-level variables and does not include facility-level and community-level variables. Therefore, I can not conduct multivariate analyses. Several facility-level variables such as facility size, not-for-profit status, and



chain status have been identified as being associated with turnover in ALFs (Banaszak-Holl & Hines, 1996; Konetzka et al., 2005). For example, some care workers take pride in working in a large or chain facility. They consider the opportunity of working in a prestigious facility as an indicator of capability and social status. Thus, even if they are not satisfied with supervision and promotion opportunities, they may still report that they are satisfied with their jobs.

Future research is needed to address all these issues in order to deepen our understanding of how to improve job satisfaction and job retention on a facility, community, and even societal level.

## References:

- Agho, A. O., Mueller, C. W. & Price, J. L. (1993). Determinants of employee job satisfaction: An empirical test of a causal model. *Human Relations*, 46 (8), 1007-1025.
- Anderson M. A., Aird T. R. & Haslam W. B. (1991). How satisfied are nursing home staff? *Geriatric Nursing*, 12 (2), 85–87.
- Arnold H. J. & Feldman D. C. (1982) A multivariate analysis of the determinants of job turnover, *Journal of Applied Psychology*, 67, 350–360.
- Aronson, K. R. (2005). Job satisfaction of nurses who work in private psychiatric hospitals. *Psychiatric Service*, 56, 102-104.
- Assisted Living Quality Coalition. (1998). Assisted living quality initiative: Building a structure that promotes quality. Washington, DC: Author.
- Ball, M., Perkins, M., Whittington, F., Connell, B., Hollingsworth, C., King, S., Elrod, C., & Combs, B. (2004). Managing decline in assisted living: The key to aging in place. *Journal of Gerontology: Social Sciences*, 59B (4), 202-212.
- Ball, M. Project proposal for satisfaction and retention of direct care staff in assisted living.
- Balzer, W. K., Kihm, J. A., Smith, P. C., Irwin, J. L., Bachiochi, P. D., Robie, C., Sinar, E. F., and Parra, L. F. (2000). *Users' Manual for the Job Descriptive Index (JDI; 1997 Revision) and the Job In General Scales*. In J. M. Stanton and C. D. Crossley (Eds.), *Electronic Resources for the JDI and JIG*. Bowling Green, OH: Bowling Green State University.
- Banaszak-Holl, J., & Hines, M. A. (1996). Factors associated with nursing home staff turnover. *The Gerontologist*, 36 (4), 512-517.

- Barak, M., Nissly, M., & Levin, A. (2001). Antecedents to retention and turnover among child welfare, social work, and other human service employees: What can we learn from past research? A review and meta-analysis. *Social Service Review*, 75 (4), 625–661.
- Brush, D. H., Moch, M.K., & Podyan, A. (1986). Individual demographic differences and job satisfaction. *Journal of Organizational Behaviour*, 8, 139-155.
- Burgio, L. D., Fisher, S. E., Fairchild, J. K., Scilley, K., & Hardin, J. M. (2004). Quality of care in the nursing home: Effects of staff assignment and work shift. *The Gerontologist*, 44 (3), 368-377.
- Burris, V. (1983). The social and political consequences of overeducation. *American Sociological Review*, 48, 454-467.
- Carsten, J.M., & Specter, P.E. (1987). Unemployment, job satisfaction, and employee turnover: A Meta-analytic test of the Muchinsky model. *Journal of Applied Psychology*, 72, 374-381.
- Caudill, M. & Patrick, M. (1991). Turnover among nursing assistants: Why they leave and why they stay. *Journal of Long-term Care Administration*, 19, 29-32.
- Chatterjee, S., Hadi, A., & Price, B. (2000). *Regression Analysis by Example*. New York: A Wiley-Interscience Publication.
- Chou, S., Boldy, D., & Lee, A. (2003). Staff satisfaction and its components in residential aged care. *International Journal of Quality in Health Care*. 14 (3), 207-217.
- Christianson, J., & Moscovice, I. (1993). *Health care reform: Issues for rural areas*. Rural Health Care Research Center, Institute for Health Services Research: School of Public Health, University of Minnesota.

- Cohen-Manfield, J., & Noelker, L. (2000). Nursing staff satisfaction in long-term care: an overview. In Cohen-Mansfield, J., Ejaz, F. K., & Werner, P. *Satisfaction Surveys in Long-Term care*. New York: Springer.
- DeMeuse, K.P. (1985). A compendium of frequently used measures in industrial/organizational psychology. *The Industrial-Organizational Psychologist*, 23, 53-59.
- Feldman, P., Sapienza, A., and Kane, N. (1990). *Who Cares for Them? Workers in the U.S. Home Care Industry*. Westport, Connecticut: Greenwood-Praeger Press.
- Fitzsimons, P., & Peters. M. (1994). Human capital theory and the Government's Industry Training Strategy. *Journal of Education Policy*, 9, (3): 245-266.
- Gellis, Z. D. (2001). Job stress among academic health center and community hospital social workers. *Administration in Social Work*, 25 (3), 17-23.
- Gleason-Wynn, P. (1994). The effects of organizational, client, and personal variables on job satisfaction and intention for job turnover among nursing home social workers. (Doctoral dissertation, University of Texas at Arlington, 1994). *Dissertation Abstracts International*, 56 (3), 1125A.
- Gleason-Wynn, P., & Mindel, C. H. (1999). A proposed model for predicting job satisfaction among nursing home social workers. *Journal of Gerontological Social Work*, 32 (3), 65-79.
- Glenn, N. D., & Weaver, C. N. (1982). Further evidence on education and job satisfaction. *Social Forces*, 61 (1), 46-55.

- Gold, R. S., Webb, L. J., & Smith, J. K. (1982). Racial differences in job satisfaction among white and black mental health employees. *The Journal of Psychology*, 111, 255-261.
- Hall, R. H. (1986). *Dimensions of Work*. Beverly Hills: Sage.
- Hawes, C. & Phillips, C. (2000). *High service or high privacy assisted living facilities, their residents and staff: Results from a national survey*. Texas A&M University System Health Science Center. Myers Research Institute, TX.
- Hawes, C., Phillips, C. D., Rose, M., Holan, S., & Sherman, M.(2003). A National Survey of Assisted Living Facilities. *Gerontologist*, 43: 875-882.
- Hellman, C. M. (1997). Job satisfaction and intent to leave. *The Journal of Social Psychology*, 137 (6), 677-689.
- Herzberg, F. (1966). *Work and the Nature of Man*. Cleveland, OH: The World Publishing Company.
- Himle, D.P., & Jayaratne, S. (1990). Burnout and job satisfaction: Their relationship to perceived competence and work stress among undergraduate and graduate social workers. *Journal of Sociology & Social Welfare*, 17 (4), 93-108.
- Ingersoll, G. L., Olsan, T., Drew-Cates, J., DeVinney, B. C., & Davies, J. (2002). Nurses' job satisfaction, organizational commitment, and career intent. *Journal of Nursing Administration*, 32(5):250-263.
- Ironson, G., Smith, P., Brannick, M., Gibson, W. & Paul, K. (1989). Construction of a job in general scale: A comparison of global composite and specific measure. *Journal of Applied Psychology*, 74, 193-200.

- Kalleberg, A. L., & Loscocco, K. A. (1983). Aging, values, and rewards: Explaining age differences in job satisfaction. *American Sociological Review*, 48, 78-90.
- Kalliath & Morris. (2002). Job satisfaction among nurses: A predictor of burnout levels. *Journal of Nursing Administration*, 32 (12), 648-654.
- Kiyak, H. A., Namazi, K. H., & Kahana, E. F. (1997). Job commitment and turnover among women working in facilities serving older persons. *Research on Aging*, 2, 223-246.
- Konetzka, R. T., Stearns, S. C., Konrad, T. R., Magaziner, J., & Zemmerman, S. (2005). Personal care aide turnover in residential care settings: An assessment of ownership, economic and environmental factors. *Journal of Applied Gerontology*, 24, 87-107.
- Kraditor, K. (2001). *Facts and Trends: The Assisted Living sourcebook 2001*. Washington, DC: National Center for Assisted Living.
- Landy, F. J., Shankster, L. J., & Kohler, S. S. (1994). Personnel selection and placement. *Annual Review of Psychology*, 45, 261-296.
- LaSala, K.B. (1995). Rural health nursing: Recruitment and retention strategies and barriers in rural health care settings in the Commonwealth of Virginia. *Dissertation Abstracts International*, 56-05B (2560).
- Lee, R., & Wilbur, E. R. (1985). Age, education, job tenure, salary, job characteristics, and job satisfaction: A multivariate analysis. *Human Relations*, 38 (8), 781-791.
- Locke, E.A. (1983). Nature and Causes of Job Satisfaction. In Dunnette, M.D. (ed.) *Handbook of Industrial and Organizational Psychology*, (2nd ed). New York: Wiley.

- Martin, J. K., & Shehan, C. L. (1989). Education and job satisfaction. *Work and Occupations*, 16, 184-199.
- Mathieu, J., & Zajac, D., (1990). A review of meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108, 171-194.
- Mitchell, T. R. & Larson, J. R. (1987). *People in Organizations: An Introduction to Organizational Behavior* (3rd ed.). New York: McGraw-Hill.
- Mollica, R. L. (2000). *State assisted living policy*. Portland, ME: National Academy for State Health Policy.
- Mollica, R.L. (2001). *State policy and regulations*. In Zimmerman, Sloane, and Eckert, Assisted living. Baltimore and London: The Johns Hopkins University Press..
- Noelker, L., and Ejaz, F. (2001). *Final Report: Improving Work Settings and Job Outcomes for Nursing Assistants in Skilled Care Facilities*. Cleveland, Ohio: The Margaret Blenkner Research Center, The Benjamin Rose Institute.
- Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.
- Ostroff, C. (1992). The relationship between satisfaction, attitudes, and performance: An organization level analysis. *Journal of Applied Psychology*, 77 (6), 963-964.
- Paraprofessional Healthcare Institute (PHI) and North Carolina Department of Health and Human Services (NCDHHS). (2004). *Results of the 2003 National Survey of State Initiatives on the Long-Term Care Direct-Care Workforce*. Raleigh, NC: North Carolina Department of Health and Human Services' Office of Long-Term Care.

- Poulin, J. E., & Walter, C. A. (1992). Retention plans and job satisfaction of gerontological social workers. *Journal of Gerontological Social Work*, 19 (1), 99-114.
- Priester, R., & Reinardy, J. (2003). Recruiting immigrants for long-term care nursing positions. *Journal of Aging and Social Policy*, 15 (4), 1-19.
- Rice, R. W., Gentile, D. B. & McFarlin, D. A. (1991). Facet importance and job satisfaction. *Journal of Applied Psychology*, 70 (1), 31-39.
- Ross, C.E., & Reskin, B.F. (1992). Education, control at work, and job satisfaction. *Social Science Research*, 21 (2), 134-148.
- Seavey, D. (2004). The cost of frontline turnover in long-term care. <http://www.bjbc.org/content/docs/TOCostReport.pdf>.
- Sikorska-Simmons, E. (2005). Predictors of organizational commitment among staff in assisted living. *The Gerontologist*, 45, 196-205.
- Siefert, K., Jayaratne, S., & Chess, W. A. (1991). Job satisfaction, burnout, and turnover in health care social workers. *Health & Social Work*, 16 (3), 193-202.
- Siegel, L. & Lane, I. M. (1987). *Personnel and Organizational Psychology*. Homewood, Illinois: Irwin.
- Stone, R. (2001). Research on frontline workers in long-term care. *Generations*, 25 (1), 49-57.
- Stone, R., & Wiener, J. (2001). *Who Will Care for us? Addressing the Long-Term Care Workforce Crisis*. Washington, DC: The Urban Institute and the American Association of Homes and Services for the Aging.



- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-293.
- U.S. Department of Health and Human Services (HHS) and U.S. Department of Labor (DOL). (2003). *The Future Supply of Long-Term Care Workers in Relation to the Aging Baby Boom Generation: Report to Congress*. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation.
- U.S. General Accounting Office (2001). Testimony by William Scanlon, Director, Health Care Issues: *Nursing Workforce: Recruitment and Retention of Nurses and Nurse Aides is A Growing Concern*. GAO-01-944. Washington, DC: U.S. General Accounting Office.
- Vinokur-Kaplan, D., Jayaratne, S., & Chess, W. A. (1994). Job satisfaction and retention social workers in public agencies, non-profit agencies, and private practice: The impact of workplace conditions and motivators. *Administration in Social Work*, 18, 93-121.
- Vroom, V. (1964). *Work and Motivation*. New York: John Wiley & Sons.
- Williams, L. J., & Hazer, J. T., (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A re-analysis using latent variable structural equation methods. *Journal of Applied Psychology*, 71, 219-231.
- Williamson, D.A. (1996). *Job Satisfaction in Social Services*. New York & London: Garland Publishing.
- Wright, J. D., and Hamilton, R. F. (1978). Work satisfaction and age: Some evidence for the job change hypothesis. *Social Forces*, 56 (4), 1140-58.