

8-20-2010

## Personality and Adjustment to Assisted Living

Whitney L. Mills  
*University of South Florida*

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Personality and Adjustment to Assisted Living

by

Whitney L. Mills

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
School of Aging Studies  
College of Behavioral and Community Sciences  
University of South Florida

Co-Major Professor: Victor Molinari, Ph.D.  
Co-Major Professor: Cathy McEvoy, Ph.D.  
Lisa M. Brown, Ph.D.  
Jerri Edwards, Ph.D.  
Denise Gammonley, Ph.D.  
Lee Hyer, Ph.D.

Date of Approval:  
August 20, 2010

Keywords: transition, long-term care, older adults, relocation, life satisfaction

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## **Dedication**

This dissertation is dedicated to my grandmother (“Gran”), Doris Guyear and the memory of my grandfather (“Poppy”), Leroy “Bud” Guyear. Gran, you have shown me what it means to be strong, courageous, hopeful, and resilient in the face of the most daunting of circumstances and I can only hope to be more like you. You truly are a miracle. Poppy, I never dreamed that you would not be here for the end of this. You showed me what it meant to work hard, be compassionate, and to always have a smile on your face. Words cannot express how much I miss you and your joyous spirit. Thank you both for your love and support. I hope that I can make you proud.

Mom and Larry, you have held my world together at times when it seemed to be falling apart. Mom, I would not have been able to do this without your sacrifices, support, strength, and love through everything. Thank you for everything you have done and the support you have given to get me to where I am today.

Nahush, you have been an unexpected surprise on this journey. I want to thank you for attempting to keep me calm throughout this process and dealing with my neurotic tendencies. You have made my life much happier and I look forward to what is to come.

Cate, thank you for being my partner in crime and a source of endless support. I admire you for your persistence and strength, there is absolutely no way I could have made it to this point without your friendship.

To my friends - Chivon, Karon, Kerri, Allison, Mandy, and Janet, I want to thank you girls for keeping me sane through the years. You have each been there for me in your own unique ways – I will be forever grateful for the memories and fun we have shared.

Stewie, thank you for being my constant companion from the very first moment of this adventure. You continue to provide me with endless joy, amusement, and comfort. I don't know what I would have done without you.

## **Acknowledgments**

**Victor Molinari, Ph.D.:** Thank you for your mentorship, support, and patience throughout my time in the Ph.D. program. I will be forever grateful to you for helping me to grow as a researcher and a professional. Thank you.

**Cathy McEvoy, Ph.D.:** You have always had confidence in me, even when I have doubted myself. Thank you for your support and guidance on all sorts of issues over the years and unfailing sense of humor. Thank you for helping me find my way.

**Lisa Brown, Ph.D.:** I would like to thank you for being my biggest cheerleader and for your valuable advice over the years. You helped me get through some very difficult times and I am truly grateful.

**Jerri Edwards, Ph.D.:** My fellow Hoosier, I would like to thank you for your guidance, both in life and statistics. I appreciate the time you spent with me and know that this truly could not have happened without you.

**Lee Hyer, Ph.D. and Denise Gammonley, Ph.D.:** Thank you both for your support, encouragement, and guidance through this process. I am honored that you would dedicate your valuable time to my committee.

**Staff in the School of Aging Studies and Department of Aging and Mental Health**

**Disparities:** Thank you all for your patience and assistance over the years. Without each of you, I am sure that I would have missed some crucial step at some point that would have led to certain failure. Thank you for keeping me on track.

**Caron Peterson:** Caron, I appreciate your enthusiasm, optimism, and support. Without you, this dissertation would have been tremendously more difficult. Thank you for all you have done for me.

**Research Participants:** You are the reason I do this work. I am honored to have met each and every one of you and will always be grateful for your help. Without each of you, this would not have been possible.

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## **Personality and Adjustment to Assisted Living**

**Whitney L. Mills**

### ABSTRACT

Adjustment to assisted living does not always proceed smoothly, making it imperative to identify predictors of transition difficulties, such as personality factors. The sample for this cross sectional study included 64 older adults from ten assisted living communities in the southeast. The primarily white, well-educated, and female sample had an average age of 86 years. Correlation was used to examine relationships between individual personality factors (neuroticism, extraversion, openness, agreeableness, and conscientiousness) and adjustment. Factor analysis determined both the predictor variables and outcome variables for inclusion in regression analyses. The regression analyses examined the predictive capacity of personality relative to other associated indicators on adjustment. Hermeneutic phenomenological analysis of responses to an open-ended question regarding subjective adjustment was also conducted.

Regression analysis found that participation in community activities, satisfaction with food quality, and ability to set one's daily schedule were important predictors of adjustment. Above and beyond these predictors, neuroticism was found to predict adjustment, indicating that personality does play a role in determining adjustment to assisted living. The responses to the open ended question echoed these results and revealed additional salient issues and barriers related to resident perceptions of adjustment. Implications for practice and future research are discussed.



## **Chapter One: Background**

### **General Introduction**

The population in the United States is growing older rapidly. Currently, 12.4% of the population is comprised of adults over the age of 65, which is triple the percentage of persons of that age group in 1900 (Administration on Aging, 2006). At any point in time, it has been estimated that 4-5% of persons over the age of 65 are residing in a nursing home (NH; Strahan, 1997). It is expected that as the population continues to age, the demand for less restrictive long-term care options will increase and the number of persons adjusting to long-term care settings will increase as well, particularly with the genesis of the retirement of the leading edge Baby Boomers in 2007 (Social Security Administration, 2007).

As will be further discussed, adjustment to long-term care does not always proceed smoothly (Bridges, 1980; Brooke, 1989; Iwasiw, Goldenberg, MacMaster, McCutcheon, & Bol, 1996; Krichbaum et al., 1999; Lee, Woo, & Mackenzie, 2002; Mikhail, 1992; Reinardy, 1992; Wilson, 1997). This renders it imperative to identify predictors of transition difficulties in order to later develop and implement potential interventions to ease the transition process, particularly for residents of assisted living (AL), which have received comparatively little attention in the literature.

### **Long-Term Care**

The loosely-defined term "long-term care" encompasses a wide range of supportive services provided both in community and institutional settings intended to enable frail individuals to retain independence and functional abilities in the face of

chronic illness or disability. These services are intended to address the long-term health and personal care needs of individuals, most often through the provision of non-skilled personal care, including assistance with activities of daily living (ADLs). ADLs include the activities of bathing, dressing, toileting, transferring, incontinence care, and eating. Despite the association of long-term care with institutional settings, particularly NHs, this type of care is most often delivered through home health agencies in the home of the care recipient or of a family member.

The need for long-term care typically develops gradually with advancing age or with increased impairment from chronic illness or disease. The progression of the disease or illness may lead to the need for increasingly more extensive care, culminating in relocation to an institutional long-term care setting once care needs can no longer be addressed in the community. The average long-term care resident is female, approximately 85 years of age, and is experiencing impairment with two or more ADLs, but is still mobile (AAHSA et al., 2007). In addition to these characteristics of an average long-term care resident, an additional set of characteristics are associated with those who experience institutional long-term care.

New residents often transition into institutional long-term care settings as a result of changes in developmental, health, and situational conditions, frequently during a time of crisis (Meleis, 1991). Low socioeconomic status, limited functional status, living alone, and presence of dementia or other declines in cognitive functioning also consistently predict NH placement (Banaszack-Holl et al., 2004; Wolinsky, Callahan, Fitzgerald, & Johnson, 1992). Other characteristics of new NH residents include insufficient social support to allow the elder to remain in the community and recent hospitalization for serious illness requiring high levels of care post-discharge (Jones, 2002; Kart & Dunkle, 1995; McAuley & Travis, 1997; Travis & McAuley, 1998). Although there is a relative plethora of studies investigating predictors of NH placement, research on AL has almost exclusively focused on well-

being rather than predictors of relocation (Krout & Wethington, 2003). Health problems or the death of a spouse have been identified as precipitants to the decision to enter AL (Hawes, Rose, & Phillips, 1999).

### **Assisted living**

Assisted living is a residential alternative to NH care. Despite the initial intent for AL to house individuals who did not need extensive care, AL residents have become increasingly similar to NH residents in terms of age, functional impairment, and needed level of care (Ball, et al., 2004; Morgan, Gruber-Baldini, & Magaziner, 2001). Although no agreed-upon definition of AL exists (Zimmerman & Sloane, 2007), these communities are generally identified as congregate residential settings that provide 24-hour staffing, scheduled personal care, and monitoring (Mollica, 1998). Assisted living is regulated by the state in which it is located. These regulations typically involve the services which AL must provide to residents. The nonmedical, social model of AL provides frail elders as well as younger persons with physical and mental disabilities with housing, meals, watchful oversight, and one or more personal services (Hawes et al., 1993; Kane & Wilson, 1993).

Although the intent was to emphasize providing a home-like environment, independence, autonomy, and privacy to residents, these attributes are not realized in all settings labeled as AL, and are present in many that are not labeled as such (Hawes et al., 1999). Specific features of AL may vary widely: whether the resident lives in an apartment or a room; which services will be provided from the continuum of assistance with activities of daily living through skilled nursing; whether residents have shared or private rooms; and the degree of autonomy allowed to the residents (Wilson, 1996).

The intended accent on a homelike environment allows AL settings to differentiate from the more institutional care provided by NHs (Chapin & Dobbs-Keeper, 2001; Hawes, Phillips, Rose, Holan, & Sherman, 2003). In the medical

model of care that typifies most NH settings, residents are treated as patients who are prescribed treatments, and who require high levels of services offered according to an institutional schedule rather than centering service provision around the resident (Mollica, 1998). Compared with AL, NHs tend to provide care for residents with greater levels of impairment, offer higher levels and numbers of services to their residents, and provide less privacy (Zimmerman et al., 2003). One study examined how AL compared with the schemas of "home" and NH, as assessed by the visual and verbal attributes of these residences. In terms of perception, NH and "home" are placed on opposite ends of the spectrum, with AL falling somewhere in between, but considered to have more homelike attributes (Imamoglu, 2007).

Nursing homes and AL also have similarities that may be evidence of philosophical improvements in the provision of NH care, perhaps in response to consumer demand, the threat of the ever-increasing AL market, or regulation. In several key areas, including the provision of recreational and social services, clarity of policy, and resident control, no difference was found between NHs and ALs (Zimmerman et al., 2003). More recently the intention to provide a home-like environment has become a central focus in the evolution of nursing care, including the Eden Alternative (Thomas, 1994) and Greenhouse (Rabig, Thomas, Kane, Cutler, & McAlilly, 2006) models of care, which may serve to further blur the distinctions between the perceptions of and care provided by NHs and AL.

### **Generalizability of Nursing Home Literature to Assisted Living**

**Similarities in outcomes between nursing home and assisted living residents.** Despite the differences one might expect based on their traditionally divergent philosophies and models of care, the few studies comparing transitions into NH and AL have revealed similarities between the two long-term care options. Nursing home and AL residents are similar in terms of age, gender, and marital

status (Frytak et al., 2001; Kane & Wilson, 1993; Pruchno & Rose, 2000). Assisted living and NH residents also experience similar changes over time in physical functioning, psychological well-being, and pain and discomfort after admission into the facility (Frytak et al., 2001).

Although AL residents tend to be less impaired at baseline (Frytak et al., 2001), these residents end up with the same trajectory of physical decline as NH residents, indicating that the type of setting does not protect residents from experiencing similar levels of decline. When focusing particularly on residents' difficulties performing two to three activities of daily living (e.g., bathing, dressing, eating, etc.), NHs and AL have been shown to have the same percentage of residents with this level of impairment (Chapin, Dobbs, Moore, & Waltner, 1999). One study found that decline in functional status was related to the length of time since admission, with greater declines occurring closer to time of admission rather than after prolonged residence, (Pruchno & Rose, 2000), which lends further support to the importance of the initial adjustment phase for new residents. This study also discovered that mortality and relocation rates were not significantly different between NH and AL residents (Pruchno & Rose, 2000).

**Differences in outcomes between nursing home and assisted living residents.** A handful of studies have compared transitions into both NHs and AL, highlighting the differences in residents' experiences. Overall, studies have shown that residents of AL report significantly higher scores on several key constructs typically associated with successful adjustment. When compared with NH residents, AL residents consistently report higher levels of satisfaction with both the setting and their life (Gonzalez-Salvador et al., 2000; Mitchell & Kemp, 2000; Sikorska, 1999).

Although AL residents have been found to have lower levels of depression, studies have found that 20% of new AL residents were determined to be possibly depressed and 6% were probably depressed (Gonzalez-Salvador et al., 2000;

Mitchell & Kemp, 2000). Despite similar percentages of residents with ADL impairments, AL residents tend to be less physically frail, particularly at the time of relocation (Kane, Huck, Frytak, Kane, & Finch, 1999 as cited in Frytak et al., 2001). In terms of psychopathology, a trend has been identified with AL admitting persons with non-cognitive psychiatric disorders more frequently than NHs. These findings reflect the increasing diversity within the AL population and a move toward NHs as rehabilitative short-stay facilities (Rosenblatt et al., 2004).

Approximately 80% of AL residents move into this setting from the community, while only approximately 33% of NH residents experience this type of transition (Gabrel & Jones, 2000; Hawes, Phillips, & Rose, 2000). One study found that AL residents tended to make more proactive choices about relocation, while NH residents are more likely to experience a disabling condition that precipitated the move and are not typically involved in the decision-making process (Reinardy, 1992; Walker, Curry, & Hogstel, 2007).

Residents with higher monthly incomes and those who have attained higher levels of education are more likely to reside in AL rather than NHs (Pruchno & Rose, 2000). Affordability to the resident, rather than physical and cognitive impairment, may play a larger role in determining relocation to AL or NH (Pruchno & Rose, 2000). With AL consisting mostly of private pay residents, and Medicaid a primary funding stream for NHs, one would expect AL residents to have higher incomes and educational levels. As affordable AL options, such as utilizing Housing and Urban Development (HUD) Section 8 and/or Medicaid Waivers designed to divert older adults from NHs, become more common, it is possible that these characteristics will become less divergent and NH and AL populations may become more similar.

## **Adjustment**

“Transitions are passages from one state, condition, or place to another” (Wilson, 1997, p. 865). Transitions occur throughout the lifespan, marking significant life stages, such as graduating high school, beginning a career, getting married, and retiring. For older adults, the transition into a long term care setting can be one of the most significant events of their life (Iwasiw et al., 1996; Lee et al., 2002; Wilson, 1997). The new living environment may be very different from those previously experienced, thus placing new social and physical demands upon the new resident. It is estimated that 20-50% of the population of older adults in the United States can expect to live in a long-term care setting at some point during their lives (Rehfeldt, Steele, & Dixon, 2000). This period of time may be marked by psychological distress, stress, insecurity, exacerbated health problems, and a disconnect from the support of the social network (Bridges, 1980; Brooke, 1989; Mikhail, 1992; Wilson, 1997).

**Frameworks for understanding adjustment.** Several studies (Brandburg, 2007; Brooke, 1989; Chenitz, 1983; Heliker & Scholler-Jaquish, 2006; Iwasiw et al., 1996; Lee et al., 2002; Oleson & Shaddick, 1993; Patterson, 1995; Wilson, 1997) have been conducted to determine a general framework for understanding the process of transitioning into long-term care settings. However, these studies have focused solely on transitions to NHs. Throughout the decades of research on transitions, striking similarities in the frameworks have emerged despite varying methodologies and time periods.

One of the earlier studies on adjustment to NHs involved qualitative analysis of interviews with 30 new NH residents (Chenitz, 1983). The participants were interviewed at the time of admission and then followed for six to nine months. During the follow-up period, residents were interviewed several times a week in order to understand their experiences during the adjustment process. The findings

were categorized under two themes: preadmission process and postadmission issues, with Chenitz emphasizing that the success of adjustment to NHs was related to the preadmission process, including things such as desire to move and control regarding the decision to relocate to the NH. Adjustment, dependent upon the needs met during the preadmission process, was characterized as either postadmission acceptance or resistance. Those demonstrating acceptance either exhibited strategic submitting or submitting by default. Strategic submitting was characterized by attempting to make a life in their new home congruent to their previous life in the community, while for those experiencing submitting by default, the importance of the transition into the NH was overshadowed by previous events or preoccupations (Chenitz, 1983).

Brooke (1989) identified four phases of adjustment to NHs after interviewing 41 (mean age = 79) new NH residents over a 10 month period. The four phases were: disorganization, reorganization, relationship-building, and stabilization. During the disorganization phase, which occurred in the first two months post admission, new residents tended to experience feelings of abandonment, vulnerability, and displacement. Emotional upset stemmed from the series of losses the resident experienced and behavior is focused inward during this phase. The reorganization phase (generally by three months post-admission) was characterized by a search for meaning, learning the routine, problem-solving, and learning to express needs. Between the third and fourth months, residents moved into the relationship-building phase and began to form meaningful relationships with other residents and staff members (associates). The final stage, stabilization, occurred between the fourth and sixth month. In this fourth stage, residents began to feel that they belonged in the NH and felt comfortable reaching out to new residents and were more accepting of new experience (Brooke, 1989).



Patterson (1995) utilized Brooke's (1989) description of the adjustment process to frame an investigation into the role of social support on the transition into a NH setting. Qualitative interviews and resident observations were conducted over a 12-month period in order to gather information regarding the sources of supportive and non-supportive behaviors. Overall, the findings indicated little change in residents' perceptions of the type or source of support over time. Patterson's study provided support for Brooke's adjustment phases, with one possible addition or improvement. The author felt that phase 4 was not an end-stage for residents. Residents of more than one year had advanced beyond this stage and had become active in providing support and advice to the other residents in the NH while those who had lived in the facility for nearly or exactly one year had only begun to provide some initial support to others (Patterson, 1995).

An examination of experiences during the first two weeks in a NH was conducted from the resident perspective, with special attention on needs, priorities, and expectations of their new home (Iwasiw et al., 1996). Qualitative analysis of open-ended interviews revealed four themes: emotional reactions, transition activities, reflecting on the situation, and connecting with a personal philosophy. Transition activities included such activities as being involved in the decision to move into long-term care; activities related to preparing to move out of their home and into a new environment; making the new environment feel like a home; learning how to fit into the new environment and with the other residents; and maintaining relationships important before the transition while beginning to engage in new ones. Reflecting on their situation was characterized as gaining perspective on the relationship between the new residents' expectations and their actual experiences in the NH. Residents were not able to describe their expectations, but their experience of the NH ranged from complete disapproval to guarded disapproval to enthusiastic approval (Iwasiw et al., 1996). It is important to note that residents did not

progress through the steps of the adjustment process in a linear fashion and exhibiting the characteristics of a particular phase did not necessarily indicate that the resident had moved into that phase (Iwasiw et al., 1996).

Wilson (1997) investigated the experiences of 15 elders with planned and unplanned admissions into a NH. The participants were interviewed every other day for two weeks and then at one month postadmission. This study revealed a transition framework in three phases: overwhelmed, adjustment, and initial acceptance. Those in the overwhelmed phase experienced feelings of loneliness, crying, feeling emotional, and focusing on the self. Once new residents began to involve themselves in a new social network and see a future in their new home, they were considered in the adjustment phase. Initial acceptance was characterized by moving the focus to others, feeling in control, and a sense of well-being. Those who experienced a planned admission as well as those over the age of 90 were more likely to progress to the final stage and had a less emotionally-turbulent and shorter adjustment period (Wilson, 1997).

A meta-analysis (Lee et al., 2002) synthesized the existing literature regarding transition to a long-term care environment. Despite the existence of a body of literature related to this topic, little effort had been put into categorizing the findings into generalities or over-arching themes. Four processes related to NH placement and adjustment were identified: anticipation (the extent of planning for the placement), participation (active involvement in the decision-making process), exploration (degree of consideration of all the options and alternatives), and information (degree of researched information on each possible choice). This conclusion of the analysis was that the transition to long-term care began before the actual move took place and lasted until well after (Lee et al., 2002).

Heliker and Scholler-Jaquish (2006) utilized hermeneutical phenomenology to examine interviews with ten new NH residents one week after admission and then

occasionally throughout the next three months. Three transition patterns emerged from the interview analyses: feeling homeless, settling into the new environment and “learning the ropes” (p. 37), and creating a home. The feelings of homelessness usually occurred during the first month after the transition. During this time, the study found that residents really were not given opportunities to spend time alone in order to reflect on their new situation and role changes. One to two months following admission, residents began to share stories with others and learned the rules and routines of the community. Approximately two to three months after the transition, residents began to see the environment as being their home and began to see more opportunities in relationships with others as well as creating a neighborhood-like setting within the facility (Heliker & Scholler-Jaquish, 2006).

Most recently, Brandburg (2007) developed an integrated process model of transitions into NHs based upon an extensive literature review of articles pertaining to older adults’ perspectives on adjustment to NHs. The model is constructed of four components: initial reaction, transitional influences, adjustment, and acceptance. During the initial reaction phase, older adults often feel overwhelmed, emotional, disorganized, and without a home. The transition influences and adjustment components of the model do not interact in a linear manner, but rather in a back-and-forth pattern. As new residents cope with transitional influences, including characteristics such as life history and circumstances of admission, they experience adjustment and re-adjustment to their environment.

Once the new resident is able to come to terms with their new home, they move into the acceptance phase. Acceptance may either be maladaptive or adaptive depending on how successfully the previous components were navigated. Maladaptation is characterized by resigned resistance or forceful resistance, both of which may lead to negative outcomes for residents and associates, including depression, learned helplessness, and aggressive behavior. Characteristics of

adaptation include stabilization, feeling that the NH is a “home”, finding meaning in life, and learning to focus on others rather than the self (Brandburg, 2007). This framework has not yet been empirically examined, but as a synthesis of the previously tested models, the Brandburg (2007) framework has been an important step toward developing an overarching model in the field of transitions to long-term care for future research to build upon.

**Generalizability of adjustment frameworks to assisted living.** The similarities identified among NH and AL residents suggests that findings related to NH adjustment may be applicable to those relocating to AL. Individual characteristics, such as personality and coping styles may play a role in the adjustment process, regardless of type of setting. However, the differences between NH residents and AL residents may be an important factor in preventing the complete generalizability of transition models to AL residents.

Assisted living residents tend to move from the community into a home-like apartment-style living arrangement. Typically these residents are involved in the decision to move, do not relocate as a result of a medical crisis, and tend to have higher monthly incomes and levels of education. These characteristics suggest that the relocation from the community to AL may not be as severe as for those who move into the more medical and restrictive environment of NHs. Also, AL residents have lower levels of functional impairment and are less physically frail at the time of relocation when compared with their counterparts in NHs. These factors indicate that AL residents are in a better position initially to successfully navigate the transition process, particularly because they are not dealing with the simultaneous loss of function and independence, at least not at a similar level as NH residents.

**Outcomes of adjustment to assisted living.** The resulting impact of relocation is largely determined by the individual’s capacity to manage the transition process, and may potentially result in positive and/or negative consequences. The

negative physiological and/or psychological effects associated with relocation from one environment to another have been accepted as the basis for "Relocation Stress Syndrome" (Manion & Rantz, 1995; North American Nursing Diagnosis Association, 1992; Walker et al., 2007). Most commonly, those suffering from Relocation Stress Syndrome experience symptoms of depression, anxiety, and impaired social functioning. Other potential characteristics include confusion, fear, helplessness, hopelessness, indecisiveness, suicidal thoughts, suspicion, gastrointestinal problems, sleep difficulties, and weight loss (Brugler, Titus, & Nypaver, 1993; Castle, 2001; Kao, Travis, & Acton, 2004; Mallick & Whipple, 2000; Manion & Rantz, 1995; North American Nursing Diagnosis Association, 1992; Walker et al., 2007). For others, the transition into long-term care may result in more positive outcomes, including improved psychological functioning (Smider, Essex, & Ryff, 1996), increased quality of life (Rossen & Knafel, 2003), and decreases in social isolation and loneliness (Heisler, Evans, & Moen, 2004; Rossen & Knafel, 2003).

Research has shown that the period immediately following relocation is when the most significant psychological effects will occur. New residents who do not wish to relocate to a long-term care setting, particularly those who do not feel involved in the decision to move, experience the most severe consequences (Mikhail, 1992). According to one study, approximately 70% of AL residents reported participating in the decision to relocate, which is a significant finding considering the importance of control and feeling involved in the decision-making process (Hawes et al., 2000). However, only 52% of these residents felt they were in complete control or nearly complete control, while 25% felt they had little to no control in the decision (Hawes et al., 2000).

In a study of 156 residents in 13 AL settings, residents were asked to complete a measure of satisfaction with the AL (Sikorska, 1999). The correlates investigated were psychological well-being, functional status, participation in

decision-making and educational level. Satisfaction with AL was found to be significantly correlated with lower education, higher functional abilities, and taking part in the decision to relocate. Participants who resided in smaller facilities with larger amounts of personal space were also found to have higher levels of satisfaction with their facility (Sikorska, 1999). Additional studies have shown that AL residents focus on maintenance of their ability to perform activities of daily living in order to retain their sense of independence and satisfaction (Ball et al., 2000; Ball et al., 2004).

Another study investigated resident perceptions of AL, in which residents completed a battery of measurement instruments: Life Satisfaction Index – A, Older Adult Health and Mood Questionnaire, Facility Satisfaction Questionnaire, demographics, functional ability, health status, contact with family, participation in social activities, and Sheltered Care Environment Scale (Mitchell & Kemp, 2000). Overall, life satisfaction was high and satisfaction with the facility was moderate to high. The results also indicated that health status was significantly related to higher quality of life, higher life and facility satisfaction, and lower levels of depression. Multiple regression analyses revealed that family contact and involvement in social activities were the most predictive factors for life satisfaction (Mitchell & Kemp, 2000).

A recent study followed 42 residents as they transitioned from a NH into an AL (Brandi, Kelley-Gillespie, Liese, & Farley, 2004). The participants were followed for a minimum of 90 days after the relocation. Satisfaction with quality of life was significantly higher after residing in AL for 90 days or more. Significant increases were detected in average scores for satisfaction with the environment, the facility, and with associates. Also, depression and anxiety rates declined while satisfaction with ability to make choices increased (Brandi et al., 2004). This study examined adjustment between NH and AL, but did not focus specifically on those transitioning

into long-term care for the first time and did not look at the differences in outcomes for the two types of settings.

Most recently, well-being in AL was examined utilizing data from the Florida Study of Assisted Living (Street, Burge, Quadagno, & Barrett, 2007). This study investigated well-being (characterized by life satisfaction, quality of life, and resident perception of AL as home) as influenced by organizational characteristics, transition experiences, and social relationships. Results indicated that larger facility size, acceptance of subsidies for low-income residents, adequate privacy, high food quality, and high scores on internal social relationship measures were all related to higher scores on the measures of well-being.

Research on the move into AL or outcomes following the transition is sparse and typically does not directly address adjustment. The few studies that have been conducted based solely on AL residents have primarily focused on life satisfaction (Gonzalez-Salvador et al., 2000; Mitchell & Kemp, 2000; Sikorska, 1999), which is a component of adjustment, but does not explain the larger picture. As a result of this narrow focus on life satisfaction along with inclusion of a variety of other variables with little or no theoretical basis, a gold standard addressing all potential aspects of adjustment has not been developed.

For the purposes of this study, adjustment will be defined as the ability of an older adult to overcome psychological, physical, and social challenges and stabilize within the AL community (Brooke, 1989; Joiner & Freudiger, 1993; Lee et al., 2002). Drawing upon studies that examined some aspect of personality and adjustment to relocation among older adults, adjustment is conceptualized as an overarching concept encompassing a broad set of domains: life satisfaction (Bardi & Ryff, 2007; Brandt & Smith, 1974; Cummings, 2002; O'Connor & Vallerand, 1994); depression (Bardi, 2007; Cummings, 2002; Kling, Ryff, Love, & Essex, 2003; O'Connor & Vallerand, 1994); social support (Brandt & Smith, 1974; Cummings, 2002; Kling et

al., 2003); functional and physical health (Brandt & Smith, 1974; Cummings, 2002; O'Connor & Vallerand, 1994); autonomy (Bardi, 2007; Kling et al., 2003); and satisfaction with the new living situation or setting (Kling et al., 2003; O'Connor & Vallerand, 1994).

### **Adjustment and Personality**

Personality is defined as "individual differences in the tendency to behave, think, and feel in certain consistent ways" (Caspi, Roberts, & Shiner, 2005, p. 312). The Five Factor Model of personality is likely the most prevalent and widely-accepted theory utilized in research related to adult development (McCrae & Costa, 2003; Srivastava & John, 1999). The theory was devised in an attempt to combine components of personality discovered in previous theoretical models. The Five Factor Model consists of five traits (generally labeled as neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness), each with six underlying facets (Digman, 1990; Engler, 1999; Goldberg, 1990; McCrae & Costa, 1994). Research on the Five Factor Model has demonstrated substantial heritability (Jang, McCrae, Angleitner, Riemann, & Livesley, 1998), general (although debated) stability of the traits across the lifespan (Caspi et al., 2005; McCrae, 1993, 2002; McCrae & Costa, 1994; Roberts & DelVecchio, 2000; Terracciano, McCrae, Brant, & Costa, 2005), and demonstrated usefulness with a wide variety of subject populations, including older adults in particular (Costa & McCrae, 1989).

The large body of literature on personality and positive functioning has revealed relationships between personality and several mental health indices, including positive affect, self-esteem, and psychological well-being (Costa & McCrae, 1980; Robins, Tracy, Trzesniewski, Potter, & Gosling, 2001; Schmutte, 1997; Tellegen, 1985; Watson & Clark, 1992). In terms of relocation, personality may be particularly salient in determining outcomes based on the individual's perception of



the experience and reaction to the stress of the move. Studies have consistently shown that low neuroticism and high extraversion, in particular, are related to adjustment and well-being (DeNeve & Cooper, 1998; Diener & Lucas, 1999; Headey & Wearing, 1989; Magnus, Diener, Fujita, & Pavot, 1993), although the research on adjustment to life transitions and personality has been relatively sparse (Bardi, 2007).

More frequently, neuroticism has been significantly associated with distress and lower levels of well-being, particularly in response to stressful life events (Bardi, 2007; Bolger & Eckenrode, 1991; DeNeve & Cooper, 1998; Diener & Lucas, 1999; McCrae & Costa, 1991; Mroczek & Almeida, 2004; Schmutte, 1997). Studies examining personality and adjustment following relocation both to a new country and within the community have indicated poor adjustment (Swagler & Jome, 2005; Ward, Leong, & Low, 2004) and increased levels of depression (Kling, Ryff, Love, & Essex, 2003) among those with high neuroticism. Extraversion has been positively related to well-being (DeNeve & Cooper, 1998; Diener & Lucas, 1999; Fleeson, Malanos, & Achille, 2002; McCrae & Costa, 1991; Schmutte, 1997), with researchers determining that extraverts are “simply more cheerful and high-spirited than introverts” (McCrae & Costa, 1991, p. 228). Extraverts adjusted more successfully to living in a new country (Swagler & Jome, 2005; Ward et al., 2004) and experienced higher levels of self-esteem following relocation within the community (Kling et al., 2003).

The remaining three factors, openness to experience, agreeableness, and conscientiousness have not been studied as extensively and have not shown as strong relationships with measures of well-being (DeNeve & Cooper, 1998; Diener & Lucas, 1999). Conscientiousness has typically been positively associated with well-being (DeNeve & Cooper, 1998; Schmutte, 1997). High conscientiousness has been found to contribute to better adjustment to relocating to a new country (Swagler &

Jome, 2005; Ward et al., 2004) and indirectly related to higher levels of self-esteem following community relocation (Kling et al., 2003). Agreeableness has been shown to have weak positive relationships with well-being, including adjustment to life in a new country (Swagler & Jome, 2005; Ward et al., 2004). Finally, openness to new experience is positively correlated with both positive and negative affect, perhaps because openness allows individuals to experience both positive and negative emotions more intensely (McCrae & Costa, 1991). Following relocation, a high level of openness has been related to both increased self-esteem and increased depression (Kling et al., 2003).

### **Personality and Adjustment to Assisted Living**

Although a relatively small literature has focused on personality and adjustment to relocation among older adults, there is a dearth of literature addressing personality and adjustment to long-term care, specifically AL. Thus, it is important to determine influences upon adjustment to AL, as has been addressed by a relatively voluminous literature on relocation to NH settings. Based upon findings of previous studies of personality and adjustment to significant life transitions, it can be reasonably expected that personality factors, particularly neuroticism and extraversion, may play a role in predicting which individuals will adjust successfully and unsuccessfully following relocation to AL. Identification of specific factors related to adjustment may allow for ameliorative interventions to be put in place early on in the process for residents who have potential to experience difficulty adjusting to their new home.

### **Research Questions**

The purpose of this study is to investigate the predictive capacity of personality factors on the adjustment of AL residents. First, we hypothesized that

length of residence and personality factors will be predictive of adjustment. Second, it is hypothesized that high extraversion will be associated with better adjustment and low neuroticism will also be associated with better adjustment. It is also expected that conscientiousness and agreeableness will be positively related to adjustment, but to a lesser degree. Finally, openness to experience is expected to intensify both the positive or negative adjustment experienced by the new resident, with an interaction between openness and neuroticism and an interaction between openness and extraversion.

## Chapter Two: Research Methodology

### Sample

**Communities.** The ten AL communities that participated in the study were all part of a single national corporation providing long-term care for older adults. The director of the non-profit responsible for conducting research with this corporation agreed to assist in recruiting seven communities within 50 miles of the Tampa Bay area for participation. At a later time, three communities within 50 miles of the Nashville area were added to the convenience sample. The non-profit director initially contacted the executive director at each community, who was asked to designate a contact (typically the activities director) for the study. The researcher worked with this contact to determine the best time and method for recruiting their residents for participation in the study.

**Participants.** The participants were a convenience sample of 64 older adults who resided in one of the ten AL communities who chose to participate in the study. Participants were required to meet a minimum score of 80 on the Modified Mini-Mental State Examination and speak English in order to take part in the study. Descriptive information about the participants is presented in Table 1. The age of study participants ranged from 68 years to 97 years with mean of 86 years. The participants were mostly female ( $n=53$ ) and white ( $n=59$ ). On average, participants had resided in their current AL community for 24 months with a range of three weeks to 82 months.

Table 1

*Participant Characteristics*


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Age (years), <i>M (SD)</i>	85.89	(5.62)
Women, <i>n (%)</i>	53	(88.30)
Marital status, <i>n (%)</i>		
Married	4	(6.70)
Widowed	50	(83.30)
Divorced	3	(5.00)
Never Married	3	(5.00)
Race, <i>n (%)</i>		
White	59	(98.30)
Spanish/Hispanic	1	(1.56)
Education, <i>M (SD)</i>		
Did not graduate high school	4	(6.70)
High school diploma	21	(35.00)
Junior college/technical degree	16	(26.70)
Four-year degree	9	(15.00)
Master's degree	5	(8.30)
Doctorate/professional degree	3	(5.00)
Annual income (\$), <i>n (%)</i>		
< 10,000	4	(6.70)
10,000-30,000	21	(35.00)
30,000-50,000	6	(10.00)
50,000-100,000	4	(6.70)
>100,000	2	(3.30)

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## **Procedure**

The study was a retrospective assessment of the transition experience and adjustment following relocation to AL as indicated by life satisfaction, depression, relative quality of life, feeling of home, and mood. Institutional Review Board (IRB) approval for research with human subjects was obtained on December 9, 2008. Data were collected during face to face interviews in the participant's AL community. Participants were identified and initially contacted by designated associates at each community to explore participation in the study. Once participants were identified and agreed to participate, the researcher met with them to further explain the study and leave the resident with a copy of the questionnaire and an informed consent document. At this time, residents chose a time for their in-person appointment with the researcher, which was noted on the front cover of their questionnaire. Residents were given one week to review the informed consent document and complete the questionnaire on their own. Upon meeting with the researcher, informed consent was obtained, the cognitive screen was administered, and the questionnaire was collected. If the participant had any questions or needed assistance filling out the questionnaire, the researcher addressed these issues during the designated meeting time. Information regarding community characteristics was collected from associates at each AL community.

## **Measures**

Participants were administered a cognitive screen and were asked to respond to a questionnaire which took approximately one hour to complete. The questionnaire included measures of personality, social support, resident characteristics, AL community characteristics, transition experience, depression, life satisfaction, relative quality of life, feeling of home, and mood. The designated

associate at each community also completed a questionnaire with information regarding the resident and their AL community.

**Screening Measure.** Prior to taking part in the study, participants were required to complete the Modified Mini-Mental State Examination (3MS; Teng & Chui, 1987) in order to exclude possible dementia. The 3MS was developed in order to address the shortcomings of the Mini-Mental State Exam (MMSE; Folstein, Folstein, & McHugh, 1975). Although the 3MS takes approximately twice as long to administer as the MMSE, its reliability (test-retest, split-half, and internal consistency) and sensitivity have been shown to be consistently higher than that of the MMSE for both normal community-dwelling elders (Bravo & Hebert, 1997; McDowell, Kristjansson, Hill, & Hebert, 1997; Tombaugh, McDowell, Kristjansson, & Hubley, 1996) and for NH residents (Nadler et al., 1995). Previous research has not consistently identified a single cutoff point for this instrument, but recent studies have indicated that a score lower than 80 is indicative of cognitive impairment too severe to complete more complex questionnaires (Fitzpatrick et al., 2007; Lopez et al., 2003). As a result, this score was used as the cut-off for participation in this study. Four AL residents were not asked to complete a questionnaire due to scores below the cut point or inability to complete the cognitive screen.

**Participant Questionnaire.** The first portion of the questionnaire consisted of forced-choice responses and open-ended questions (see Appendix A). Included in this section were items related to resident characteristics, including birth date, sex, marital status, race, education, and annual income. Participants were asked about how many times they had previously made long-distance moves in their lifetime. Questions regarding where the participant was living prior to relocating to AL and what prompted the decision were also included in this section. In addition, participants were asked about frequency of and the types of activities they participated in prior to and after relocating to their AL community. Questions

regarding the frequency of phone and in-person contact with relatives and friends who did not live in their community were included next. Finally, participants were asked to indicate whether they were independent in the six activities of daily living (bathing, dressing, toileting, transferring, continence, and feeding).

The second section of the questionnaire included 23 questions related to satisfaction with various aspects of their transition experience, relationships, and life in AL. Responses to these questions were indicated on a 5-point Likert type scale with 1=disagree strongly and 5=agree strongly. Participants were asked if they were involved in the decision to move to the community and whether they wanted to move. Ten questions covered various aspects of social support, including sense of belonging, shared interests with other residents, and satisfaction with relationships with their families, other residents, and associates. The participant's satisfaction with privacy was assessed with regards to other residents and the associates. Items related to autonomy within the community that were included in this section involved setting one's own daily schedule and choosing who to sit with at meals. Satisfaction with the food in the AL community, subjective health, and satisfaction with the current living situation were also assessed. Finally, this section included three items included in the outcome variables: relative quality of life, feeling of home, and relative mood.

The third section of the questionnaire assessed personality through the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991). The BFI is a 44-item assessment of the traits associated with the Big Five dimensions of personality (openness, conscientiousness, extraversion, agreeableness, and neuroticism). Respondents rate each item on a five-point scale (1=strongly disagree, 5=strongly agree) and then scores are determined through mean item response. The BFI has been normed across many populations. Typically, Chronbach's alphas for the five scales of the BFI range from .75 to .90 with the average alpha score above .80.



Test-retest reliabilities over a three month period were found to range from .80 to .90 ( $M = .85$ ). Among the five scales of the BFI, low intercorrelation has been found, with  $r$  typically below .20 and rarely above .30. When compared with the Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992), the BFI was found to have a high level of convergent validity ( $r = .75$ ). It has been estimated that a normal adult can complete the BFI in approximately 5 minutes, which is considerably quicker and less taxing than even the short form of the NEO-PI-R (Benet-Martinez & John, 1998; John et al., 1991).

The fourth section was comprised of measures of the remaining two dependent variables, depression and life satisfaction. The Geriatric Depression Scale (Residential) (GDS-12R; Sutcliffe et al., 2000) was developed specifically for use with individuals living in NHs and residential care settings. The 12-item scale is a shortened version of the Geriatric Depression Scale (GDS-15; Sheikh & Yesavage, 1986). Respondents received one point for responding yes to positive items (e.g., "Do you feel happy most of the time?") and no to negative items (e.g., "Do you often get bored?"). Items that were found to be ambiguous or irrelevant for individuals residing in NHs and residential care settings were removed, leaving the GDS-12R with a Chronbach's alpha of .81 versus .76 for the GDS-15. Longitudinal analysis of internal reliability revealed Chronbach's alpha levels of .81 at admission, .85 at five months post-admission, and .81 at 9 months post-admission, providing further evidence of robustness of the scale. The authors suggest a cutpoint of 3/4 for research studies utilizing the GDS-12R, yielding sensitivity of 78.6% and specificity of 69.1% (Sutcliffe et al., 2000).

Life satisfaction was assessed through the 18-item Life Satisfaction Index Z (LSI-Z; Wood et al., 1969). The LSI-Z is a shortened version of Life Satisfaction Index A (Neugarten, Havighurst, & Tobin, 1961), which measures subjective well-being and satisfaction with life among older adults. Participants are asked to state

whether they agree, disagree, or have no opinion regarding a series of statements (e.g., “This is the dreariest time of my life”, “I have made plans for things I will be doing a month or a year from now”) about their life at present. Respondents received two points for agreeing with a positive statement or disagreeing with a negative statement, no opinion received one point, and disagreeing with positive statements or agreeing with negative statements received no points. The points are totaled with a higher score indicating higher levels of life satisfaction. The instrument has been widely utilized in research with older adults and is reported to have a reliability coefficient of .79 (Wood et al., 1969). The LSI-Z was normed on a sample of 100 older adults with a mean life satisfaction score of 11.6 and a standard deviation of 4.4 (Sauer & Warland, 1982).

On the last page of the questionnaire, participants were asked an open-ended question to garner a subjective appraisal of the relocation experience and subsequent adjustment to the new environment. Often, with permission, the researcher added additional comments and notes from discussions with the participant during the in-person meeting.

**Associate Questionnaire.** The designated associate at each community completed a one page set of questions for each resident who participated in the study (see Appendix B). The associate was asked to provide the move in date and to indicate independence in the six ADLs mentioned above. In addition, the associate was asked questions regarding community characteristics, which included the number of residents residing in the community, room-sharing, and acceptance of subsidies for low-income residents.

### **Chapter Three: Results**

Participants missing more than 5% of items ( $n=4$ ) were not included in subsequent analyses. Among those 60 participants with at least 95% complete data, the mode was substituted for missing categorically scaled items and the mean was substituted for missing continuously scaled items. Less than 3% of the data points were substituted. Factor analyses were performed on the questionnaire items to reduce the number of independent and dependent variables and to form composites. Correlations identified potentially significant indicators of adjustment, which were included in the regression analyses to test the study hypotheses.

#### **Factor Analysis and Correlation**

Prior to conducting the factor analysis, it was determined that a component must have a factor loading greater than .5 (Tabachnick & Fidell, 1996) to be included in the composite variable. After using the principal components extraction method, an examination of the Eigen values suggested the existence of eight factors from the independent variables included in the first and second sections of the questionnaire. A Varimax rotation with Kaiser normalization was performed, resulting in eight factors that together accounted for 70.06% of the total variance. Interpretation of these relevant factors are presented below and the factor loadings of the independent variables are reported in Table 2. Orthogonal rotation was chosen rather than oblique rotation in order to produce factors that were as distinct as possible (Tabachnick & Fidell, 1996). Composite variables were created through calculating and combining z-scores of the components to include in each composite.

Table 2

*Presentation of Factor Loadings of Independent Variables in Rotated Component Matrix after Varimax Rotation*

Variable	Factors							
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
	Sense of Belonging	Privacy	Choices	Participation in Decision	Relationships with Associates	Relationships with Family	Community Characteristics	Previous Activities
Friends among residents	.871 *	.127	.059	.055	-.030	-.080	.150	-.047
Residents with similar interests	.796 *	-.105	.116	.078	.155	-.137	.038	-.105
Feel like member of the family	.854 *	.133	-.007	.084	.174	.140	.075	.016
Friends among associates	.660 *	.156	-.077	.071	.179	.214	.042	.067
Relationships with other residents	.815 *	.074	-.052	-.059	-.005	-.246	.134	.018
Other residents respect privacy	.115	.928 *	.009	.043	.029	-.015	.002	-.043
Associates respect privacy	.182	.877 *	.167	-.040	.173	.030	.110	.032
Phone calls with friends per month	.025	.022	.634 *	.357	-.041	.036	-.159	.348
Choose who to eat with	-.132	.296	.560 *	-.250	.016	-.357	.286	.121
Can sleep late if wanted	-.144	-.105	.623 *	.236	.160	-.072	.181	-.251
Regular contact with friends outside AL	.385	.123	.575 *	-.116	-.170	.228	-.156	.147

Involvement in decision to move	-.076	.023	.127	.826 *	.140	.083	-.008	-.109
Wanted to move to this AL	.267	.009	-.034	.808 *	-.093	-.117	-.007	-.018
Relationships with associates	.383	.428	.089	.245	.581 *	-.016	-.086	-.289
Associates show affection and caring	.236	.181	-.226	.038	.590 *	.388	.054	.142
Visits from family per month	-.125	-.126	-.083	-.194	-.013	.757 *	-.052	-.014
Phone calls with family per month	.020	.158	.257	.222	-.120	.724 *	.123	-.110
Number of current activities per week	.194	-.096	-.039	.304	.033	.153	.665 *	.213
Quality of food	.157	.121	.021	-.109	.085	-.029	.741 *	-.100
Can set own daily schedule	-.102	.185	.290	-.211	.475	-.028	.567 *	.122
Number of previous activities per week	-.036	-.095	.017	-.241	.063	-.115	.070	.747 *

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A factor analysis of the dependent measures of adjustment included depression ( $M = 2.85$ ,  $SD = 2.32$ ), life satisfaction ( $M = 20.35$ ,  $SD = 3.32$ ), feeling of home ( $M = 3.72$ ,  $SD = 1.37$ ), relative quality of life ( $M = 3.68$ ,  $SD = 1.26$ ), and relative mood ( $M = 3.95$ ,  $SD = 1.13$ ). After using the principal components extraction method, an examination of the Eigen values suggested the existence of two factors from the dependent variables. A Varimax rotation with Kaiser normalization was performed, resulting in two factors that together accounted for 57.17% of the total variance. Table 3 shows the factor loadings for the dependent variables. The first dependent factor accounted for 33.30% of the variance. The items that loaded most strongly on this factor (0.5 or better; Tabachnick & Fidell, 1996) were depression, relative quality of life, and feeling of home. This factor was interpreted to represent adjustment for this study. The second dependent factor accounted for 23.86% of the variance. The items included in this factor were life satisfaction and relative mood and it is later identified as life satisfaction.

Correlations between the covariates (sex, marital status, race, education, income, age, ADLs, and perceived health), the eight independent factors, number of previous moves, previous living arrangement (in own home, in another person's home, in another AL, in a senior apartment or independent living, in a NH), precipitating factors (loss of spouse, medical event, planned ahead of time, family made decision), and the two dependent composite variables (adjustment and life satisfaction) were examined and are presented in Table 4. Correlations between the five personality variables (neuroticism, extraversion, openness, agreeableness, and conscientiousness) and the two dependent composite variables are shown in Table 5. Four of the eight independent factors were significantly correlated with the outcome of adjustment: sense of belonging, choices, relationships with family, and community characteristics. The first factor accounted for 16.91% of the variance among all of the variables. Items that loaded most strongly on the first

Table 3

*Presentation of Factor Loadings of Dependent Variables in Rotated Component Matrix after Varimax Rotation*

Variable	Factors	
	Factor 1	Factor 2
	Adjustment	Life Satisfaction
Depression	-.846 *	.114
Relative Quality of Life	.599 *	.070
Feeling of Home	.762 *	.411
Life Satisfaction	-.101	-.591 *
Relative Mood	-.004	.811 *

*Note:* \* = factor loadings of .5 or greater.

Table 4

*Correlations of Independent Composite Variables and Potential Covariates with the Dependent Composite Variables to Determine Inclusion in Regression.*

Variable	Adjustment	Life Satisfaction
Sense of Belonging	.387 **	.231
Privacy	.146	.084
Choices	.383 **	-.096
Participation in Decision	.170	-.190
Relationship with Associates	.228	.144
Relationships with Family	.385 **	.209
Community Characteristics	.437 ****	.162
Previous Activities	.114	-.078
Number of residents in community	.311 *	-.118
Subjective health	.256 *	.290 *
Age	.174	.159
Number of ADLs	-.243	.006
Sex	.048	.198
Marital status	-.023	-.102
Race	-.301 *	.013
Education	-.097	-.132
Income	.115	-.283
Number of previous moves	-.063	-.142
Residing in own home prior to relocation	-.041	-.078
Residing in another person's home prior to relocation	-.238	.057
Residing in an apartment or IL prior to relocation	.219	.233
Residing in another AL prior to relocation	-.009	-.309 *
Residing in a NH prior to relocation	.003	-.121
Other living arrangement prior to relocation	.067	.134
Relocation precipitated by loss of spouse	.139	-.021
Relocation precipitated by medical event	.055	.069
Relocation planned ahead of time	.031	-.093
Family made decision to relocate	.070	.175

Note: \*  $p < .05$ , \*\*  $p < .01$ ., \*\*\*  $p < .001$ , \*\*\*\*  $p < .0001$ .



Table 5

*Correlations of Time Since Move and Personality with Adjustment.*

Variable	Adjustment	Life Satisfaction
Time since move	.011	-.073
Extraversion	.316 *	.087
Agreeableness	.172	-.009
Conscientiousness	.147	-.022
Neuroticism	-.442 ***	-.035
Openness	-.061	.041

*Note: \*  $p < .05$ , \*\*  $p < .01$ ., \*\*\*  $p < .001$ .*

factor (0.5 or better; Tabachnick & Fidell, 1996) included questions regarding shared interests and friendships with residents and associates within the AL community and feeling like a member of the family. This factor was interpreted as indicating a sense of belonging. The second significant factor accounted for 8.69% of the variance. Items that loaded strongly on this factor included the number of phone and in-person contacts with friends residing outside the AL community, choice to sleep late, and choice in where to sit at meal times. This factor was interpreted as representing choices. The third significant factor, which accounted for 6.82% of the variance, included high loadings for items representing contacts with family members on the phone and in-person. Thus, this factor is judged to represent relationships with family. The fourth significant factor, accounting for 6.73% of the variance, was determined to represent community characteristics. The items loaded most strongly onto this factor included satisfaction with food, number of activities participated in per week, and ability to set one's own daily schedule. Neuroticism, extraversion, number of residents in the community, race, and subjective health were also found to be significantly correlated with adjustment (see Tables 4 and 5).

Although life satisfaction was significantly correlated with the covariates subjective health and previously residing in AL, it was not significantly correlated with any of the independent factors or personality variables. Thus, the second dependent factor was not included in the analyses for the first two hypotheses, leaving the first dependent factor as the sole measure of adjustment.

Of the eight independent factors, four were found to be significantly correlated with the remaining measure of adjustment and were included in the regression analyses.

### **Hypothesis 1**

We hypothesized that length of residence and personality factors would be predictive of adjustment. In order to test this hypothesis, correlations between the

length of time since the resident had relocated to the AL community, the five personality measures, and adjustment were examined and results are presented in Table 5. Extraversion was found to be positively correlated and neuroticism was found to be negatively correlated with adjustment. Time since move, agreeableness, conscientiousness, and openness were not significantly related to adjustment. As previously mentioned, no significant correlations were identified between the independent variables and life satisfaction. Correlations between life satisfaction and the personality variables are presented in Table 5.

## **Hypothesis 2**

We hypothesized that high extraversion and low neuroticism would be associated with better adjustment. We expected that conscientiousness and agreeableness would be positively related to adjustment, but to a lesser degree. To test the second hypothesis, two regressions were conducted. In the first regression, extraversion and neuroticism were entered as indicators of adjustment, with extraversion entered as the first variable. As shown in Table 6, extraversion initially accounted for a significant proportion of variance in adjustment ( $R^2 = .100$ ,  $p = .014$ ). However, when considered along with neuroticism, the explanatory power of extraversion disappears while neuroticism remains a significant predictor of adjustment ( $\Delta R^2 = .137$ ,  $p = .002$ ).

In the second regression, the relative contribution of neuroticism beyond the contributions of the correlated covariates on adjustment (number of residents in community, subjective health, sense of belonging, choices, relationships with family, and community characteristics) was examined. For this regression, the independent variables were included in the following order. Step one included number of residents and subjective health. The next step added sense of belonging, choices, relationships with family, and community characteristics. The third step included the addition of personality (neuroticism). Adjustment served as the dependent variable

Table 6

*Multiple Regression Analysis of Correlated Personality Variables with Adjustment*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Extraversion	.898	.353	.316 *
Step 2			
Extraversion	.602	.341	.212
Neuroticism	-1.143	.357	-.385 **

*Notes:*  $R^2 = .100$  for Step 1 ( $p = .014$ );  $\Delta R^2 = .137$  for Step 2 ( $p = .002$ ). \*  $p < .05$ ,

\*\*  $p < .01$ .

for the analysis and results are presented in Table 7. In the first step of the regression, both the number of residents in the community and subjective health explained significant proportions of variance ( $R^2 = .288, p = .008$ ). In the second step, these variables lost their predictive capacity as sense of belonging, choices, and community characteristics accounted for significant variance ( $\Delta R^2 = .288, p < .000$ ). With the addition of neuroticism in the final step, only community characteristics and neuroticism remain as significant predictors ( $\Delta R^2 = .047, p = .035$ ), with higher values on community characteristics and lower neuroticism associated with better adjustment.

### **Hypothesis 3**

In the third hypothesis, we expected openness to intensify resident adjustment, with an interaction between openness and neuroticism and an interaction between openness and extraversion. To test this hypothesis, regression analyses were conducted to examine the interactions between the personality variables and to determine the predictive capacity of any significant interactions. The dependent variables in these regressions included both adjustment and life satisfaction. Although life satisfaction was not significantly related to the personality variables in previous analyses, we decided to test for potential relationships with interactions between personality variables. Tables 8 and 9 show the results of regressions on the adjustment variable. These two regressions did not find an interaction between neuroticism and openness or extraversion and openness for adjustment. The next two regressions, shown in Tables 10 and 11 examined the interactions of neuroticism and openness and extraversion and openness with life satisfaction. No interaction was found between neuroticism and openness, but a significant interaction was discovered between extraversion and openness for life

Table 7

*Multiple Regression Analysis of Covariates and Neuroticism with Adjustment*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Number of Residents in Community	.035	.014	.303 *
Subjective Health	.633	.313	.246 *
Step 2			
Number of Residents in Community	.020	.014	.168
Subjective Health	.213	.300	.083
Sense of Belonging	.213	.082	.394 *
Choices	.311	.119	.365 *
Relationships with Family	-.335	.305	-.203
Community Characteristics	.280	.126	.267 *
Step 3			
Number of Residents in Community	.016	.014	.133
Subjective Health	.126	.293	.049
Sense of Belonging	.159	.083	.295
Choices	.195	.128	.229
Relationships with Family	-.129	.310	-.078
Community Characteristics	.277	.122	.264 *
Neuroticism	-.749	.350	-.252 *

*Notes:*  $R^2 = .157$  for Step 1 ( $p = .008$ );  $\Delta R^2 = .288$  for Step 2 ( $p < .000$ );

$\Delta R^2 = .047$  for Step 3 ( $p = .035$ ). \*  $p < .05$ .

Table 8

*Multiple Regression Analysis of Interaction of Neuroticism and Openness with Adjustment*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Neuroticism	-1.314	.350	-.442 ***
Step 2			
Neuroticism	-1.331	.352	-.448 ***
Openness	-.337	.450	-.089
Step 3			
Neuroticism	-.534	2.076	-.180
Openness	.218	1.496	.057
Neuroticism x Openness	-.225	.577	-.301

*Notes:*  $R^2 = .195$  for Step 1 ( $p = .000$ );  $\Delta R^2 = .008$  for Step 2 ( $p = .457$ );

$\Delta R^2 = .002$  for Step 3 ( $p = .699$ ). \*\*\*  $p < .001$ .

Table 9

*Multiple Regression Analysis of Interaction of Extraversion and Openness with Adjustment*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Extraversion	.898	.353	.316 *
Step 2			
Extraversion	.929	.357	.328 *
Openness	-.372	.477	-.098
Step 3			
Extraversion	-.189	2.230	-.066
Openness	-1.479	2.228	-.389
Extraversion x Openness	.311	.612	.520

*Notes:*  $R^2 = .100$  for Step 1 ( $p = .014$ );  $\Delta R^2 = .009$  for Step 2 ( $p = .439$ );

$\Delta R^2 = .004$  for Step 3 ( $p = .613$ ). \*  $p < .05$ .



Table 10

*Multiple Regression Analysis of Interaction of Neuroticism and Openness with Life Satisfaction*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Neuroticism	-.068	.254	-.035
Step 2			
Neuroticism	-.063	.257	-.032
Openness	.097	.328	.039
Step 3			
Neuroticism	-1.510	1.502	-.780
Openness	-.911	1.083	-.369
Neuroticism x Openness	.408	.418	.839

*Notes:*  $R^2 = .001$  for Step 1 ( $p = .791$ );  $\Delta R^2 = .002$  for Step 2 ( $p = .767$ );

$\Delta R^2 = .017$  for Step 3 ( $p = .332$ ).

Table 11

*Multiple Regression Analysis of Interaction of Extraversion and Openness with Life Satisfaction*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Extraversion	.161	.242	.087
Step 2			
Extraversion	.15	.245	.084
Openness	.079	.328	.032
Step 3			
Extraversion	3.207	1.479	1.735 *
Openness	3.097	1.479	1.253 *
Extraversion x Openness	-.850	.406	-2.179 *

Notes:  $R^2 = .008$  for Step 1 ( $p = .507$ );  $\Delta R^2 = .001$  for Step 2 ( $p = .811$ );

$\Delta R^2 = .072$  for Step 3 ( $p = .041$ ). \*  $p < .05$ .

satisfaction ( $R^2 = .080$ ,  $p = .041$ ). The predictive capacity of this interaction was examined in a final regression, presented in Table 12. In earlier correlations, the covariates of residing in another AL prior to relocation and subjective health had been significantly associated with life satisfaction. These variables were included in the regression to test whether the interaction of extraversion and openness was predictive beyond the other variables. In the first step of the regression, both residing in an AL and subjective health were explanatory. In the second step, these variables remained significant predictors, while the interaction of extraversion and openness did not account for a significant proportion of the variance ( $\Delta R^2 = .002$   $p = .727$ ).

Table 12

*Multiple Regression Analysis of Independent Variables and Interaction of Extraversion and Openness with Life Satisfaction*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Prior Residence in AL	-2.146	.797	-.322 **
Subjective Health	.510	.200	.304 *
Step 2			
Prior Residence in AL	-2.107	.811	-.316 *
Subjective Health	.517	.203	.308 *
Extraversion x Openness	.017	.048	.351

*Notes:*  $R^2 = .187$  for Step 1 ( $p = .003$ );  $\Delta R^2 = .002$  for Step 2 ( $p = .727$ ).

\*  $p < .05$ ., \*\*  $p < .01$ .

## **Response to Open Ended Question**

Participants were asked an open-ended question regarding how they adjusted to life in AL when they were a new resident. Responses to the open-ended question were investigated based on a hermeneutical phenomenological approach (Miles & Huberman, 1994) and the ATLAS.ti software package. Phenomenological approaches seek to understand the lived experience of a certain phenomenon, such as relocating to AL (Miles & Huberman, 1994). The responses to the open-ended question were entered into the ATLAS.ti program where the text was annotated with codes. The initial set of codes was created by reading the text multiple times in order to identify words or ideas that appeared frequently and making notations with the software program. Once the data were coded with the initial coding scheme, the codes were examined and revised to include only those that were most directly related to the study. The number of codes was again reduced through grouping related codes, which allowed for the identification of larger overarching themes as described below.

The most relevant theme to the current study was that of adjusting to AL. Nearly all of the respondents suggested that they had adjusted “well” or “easily” to life in AL. Few respondents expressed any difficulties with adjustment; however, those that did mention problems adjusting initially later indicated that things did become better. Many participants stated that they decided to enter the situation with the intention of “making it work”, which made the adjustment process easier. This involved having a positive attitude, making the effort to get involved in the community’s activities, and finding friends. Respondents identified making friends as an important part of their adjustment, but also expressed fear that they would not be able to cultivate these relationships. Some respondents felt that they knew what to expect through the experiences of friends and family in AL. As a result, the expectations were not set too high and they “didn’t expect to be happy”. Relationships with family and associates were also credited with easing the

adjustment experience. Having family nearby and interacting with them both inside and outside of the community was especially important for the participants.

Related to the adjustment theme, the second overarching theme was the environment. Respondents felt that one of the most difficult things about their adjustment process was getting used to living in a much smaller space or “being confined to life in one room”. Although, as one participant said, there is “no place like your own home”, residents often described bringing things (furniture, pictures, knick-knacks) from their previous residence to make the AL apartment feel as much like home as possible. Another aspect of adjusting to the environment was the loss of independence, autonomy, and privacy. Not being able to drive or go out when the resident wanted were particularly salient themes. In addition, many respondents mentioned no longer having to or being able to do household chores and yardwork as negatives of their adjustment experience, while others expressed relief that they were no longer responsible for taking care of a household.

The third theme identified in this analysis was a fear of what it means to live in AL. For some residents there was a denial that they will remain in AL, which was identified both in individual responses and through observations of other residents. One respondent observed that still having a residence outside of AL gave some residents a sense that they would be able to return to their home at some point, which impeded the adjustment process. Several of the research participants discussed death very casually in their responses, indicating that AL was a place to “mark time” until the end and hoping to live long enough to see important moments in the lives of their family members. One respondent mentioned that “no money should be spent on older adults because they have no value. At least I am providing a little something through tutoring. People are being kept alive too long.” This particular respondent was teaching adults to read from her AL apartment in order to feel that she had value. Another participant voluntarily did the dishes in the AL

kitchen in order to feel worthwhile. Many respondents expressed a sense of finality about their situation. "I feel set adrift with no way out", wrote one participant.

The decision to relocate to AL was the fourth theme identified. Most of the respondents indicated that they felt they were involved in the decision to move. The few that did not feel involved in the decision did not appear to be upset by their lack of participation and one respondent was glad that she did not have to do it herself. For many, the decision to move to AL was tied to their health and inability to care for themselves. In addition to adjusting to life in AL, several of the participants indicated that they were also adjusting to a new or exacerbated medical condition, such as hearing loss or changes in mobility. Another important reason for the decision to move to AL was the health or loss of a loved one. Some respondents were faced with placing their spouse in NH care or the threat of having to do so without both relocating to AL. As the respondents faced difficult situations, declines in health, and loss of loved ones, the perception that there was "no other choice" was salient among the responses.

The final theme identified among the responses was satisfaction with the current AL. Although not directly asked about this, the participants overwhelmingly indicated that they were satisfied with their current home, the associates that worked there, and their relationships with other residents. The one key factor that garnered negative responses from participants was the food. Many expressed how they missed cooking their own food in their preferred manner and their dislike for the food at their AL community. Summing up the sentiments, one resident wrote "the food is pretty awful, but perhaps it will improve".

## **Chapter Four: Discussion**

### **Discussion of Major Findings**

The results of this study provide us with descriptive information regarding adjustment among older adults who have relocated to AL. The analyses also provide valuable information regarding the relative contribution of personality in comparison to number of residents in community, subjective health, sense of belonging, choices, relationships with family, and community characteristics in explaining adjustment to AL.

Partial support was found for the first hypothesis, which stated that the length of residence and personality factors would be predictive of adjustment. Neuroticism was found to be negatively correlated with adjustment, and extraversion was found to be positively correlated with adjustment. However, time since relocation and the other personality variables (openness, agreeableness, and conscientiousness) were not found to be significantly associated as we had expected.

The second hypothesis stated that high extraversion and low neuroticism would be associated with better adjustment. We expected that conscientiousness and agreeableness would be positively related to adjustment, but to a lesser degree. This hypothesis was partially supported. Neuroticism was found to be a significant predictor of adjustment and the predictive capacity was maintained after the inclusion of other covariates. Extraversion was not determined to be a significant predictor of adjustment. Additionally, the remaining personality variables were not significantly correlated with adjustment.

We also found partial support for the third hypothesis, in which we expected openness to intensify resident adjustment, with an interaction between openness and



neuroticism and an interaction between openness and extraversion. Initially a significant interaction was identified between extraversion and openness on life satisfaction. The relationship between the interaction of extraversion and openness with life satisfaction was negative, which was unexpected and not supported by previous research. When the strength of this predictive relationship was tested through the inclusion of other covariates, the explanatory power of the interaction was not maintained.

In summary, the quantitative analysis found that participation in community activities, satisfaction with food quality, and ability to set one's daily schedule were important predictors of adjustment. Above and beyond these predictors, neuroticism was found to predict how individuals adjust to AL.

The responses to the open ended question echoed these findings through the identification of related themes. Regression analysis found that the composite variable community characteristics (satisfaction with food, number of activities participated in per week, and ability to set one's own daily schedule) was positively related to adjustment. The responses to the open ended question also indicated that involvement in community activities and making friends (related to number of activities participated in per week), as well as satisfaction with food were important parts of the adjustment process. In addition, responses to the open ended question discussed the importance of entering the situation with a positive attitude in order to adjust well, which may support the quantitative finding that neuroticism is negatively related to adjustment. Neuroticism is associated with negative affect, which would not lend itself toward a positive attitude upon entering AL. Several other important issues related to adjustment were revealed, including relationships with family and making the space feel more like "home" by bringing items from their previous home. The challenges participants identified in their responses to the open ended question mostly revolved around loss – the loss of space, health status, independence,

privacy, autonomy, and loved ones. By identifying factors associated with adjustment, it is possible for AL communities to adjust their policies and procedures in order to ease the experience of those at risk of a difficult adjustment.

### **Support for Previous Research**

The results of this study supported previous research regarding personality, predictors of adjustment, and adjustment frameworks. Previous studies have indicated that neuroticism is associated with poor mental health outcomes. When specifically related to adjustment to relocation or following a stressful life event, neuroticism has been associated with increased depression (Kling, Ryff, Love, & Essex, 2003), lower levels of adjustment (Swagler & Jome, 2005; Ward, Leong, & Low, 2004), and decreased well-being (Bardie, 2007; Bolger & Eckenrode, 1991; Mroczek & Almeida, 2004; Schmutte, 2007). In this study, neuroticism was found to be a predictor of lower levels of adjustment, as measured by depression, relative quality of life, and feeling of home. Studies of adjustment and well-being in AL have primarily focused on life satisfaction as an outcome variable (Gonzalez-Salvador et al., 2000; Mitchell & Kemp, 2000; Sikorska, 1999; Street et al., 2007). It is interesting to note that this variable along with relative mood was separated from the other outcome variables during the factor analysis and they were not found to be associated with any of the expected predictors. This finding was unexpected, but may have been influenced by overall high scores on this item. Average life satisfaction scores were nearly double ( $M = 20.35$ ) those of the sample on which the measure was normed ( $M = 11.6$ ).

In the literature related to adjustment in long-term care settings, several predictors have been identified: desire to move (Chenitz, 1983; Mikhail, 1992; Wilson 1997), participation in the decision to move (Chenitz, 1983; Mikhail, 1993; Sikorska, 1999), facility size (Sikorska, 1999; Street et al., 2007), acceptance of low-income subsidies (Street et al., 2007), social support (Mitchell & Kemp, 2000;

Street et al., 2007), privacy (Street et al., 2007), functional health (Mitchell & Kemp, 2000; Sikorska, 1999), food quality (Street et al., 2007), and participation in activities (Mitchell & Kemp, 2000). Although we included a measure of each of these concepts, this study only found support for food quality and participation in activities as predictors of adjustment. In addition, we found that the ability to make choices, such as setting one's own daily schedule, was a significant predictor of adjustment. This finding regarding choice is particularly interesting because choice is a concept that is unique to the intended philosophy of AL settings. It is not surprising that this predictor has not been discussed in the adjustment literature previously because most of this work has focused on NH settings. It is important that future research regarding adjustment to AL should include measures relating to residents' abilities to make choices not only about relocating, but also about their life within their new home.

This study did not specifically aim to investigate how the participants progressed through the phases associated with frameworks of adjustment, and it is thereby difficult to provide evidence of clear support for these frameworks. However, the responses to the open ended question did highlight some interesting points that can be related to specific phases of adjustment. Anecdotally, there appeared to be a difference in the residents who had resided in AL for less than two months versus the other respondents. The interviews with these two individuals were more emotional with open weeping, expressions of loneliness, and sadness. These residents appeared to fit within the initial adjustment phase (Brandburg, 2007; Wilson, 1997) while most of the other respondents appeared to have progressed further in the adjustment process. The responses to the open ended question revealed acceptance of the situation, a focus on others, interest in becoming involved in AL life, with many describing how they were searching for or had found meaning for their life in AL. In addition, the quantitative analysis showed

that, overall, participants felt that their AL community was “home”. These findings align well with the adjustment frameworks created for NH settings, indicating that these frameworks may be generalized to residents adjusting to AL and warrant further investigation.

### **Implications for Practice**

Personality is easily determined through a variety of assessments of varying lengths. Associates could identify residents high in neuroticism during move-in and make adjustments to how that person is dealt with, perhaps paying extra attention to ensure that such individuals feel supported by staff, are becoming involved in community activities, and are allowed to set their own daily schedule. As evidenced in the responses to the open ended question, becoming involved in activities can make it easier to develop friendships, thus helping the individual adjust more successfully. Associates may foster this process by providing activities that encourage residents to get to know one another and foster the development of friendships. Although extraversion was not significantly related to the outcomes of this study, extraverted individuals may have an easier time socializing within the AL and finding new friends. It is also important for associates to identify individuals who may be more introverted and to provide opportunities that would allow them to make friends comfortably as well, such as planning more intimate gatherings of residents.

Although satisfaction with the quality of food is a salient issue in long-term care research (Street et al., 2007), it is not easily addressed on a practical level. Individuals come from different traditions and preferences for food preparation and it would be impossible to please every resident. Perhaps it would benefit communities to gather more information about resident preferences and adjust the menu offerings accordingly to please as many individuals as possible.

The findings of this study appear to be immediately generalizable to AL

communities providing private-pay high-end care. Given the similarities of some of the findings, particularly the responses to the open ended question, to the literature on adjustment to NH settings, the findings may also generalize across long-term care settings.

### **Limitations**

There are several factors that may have played a role in influencing the results of this study. First, since the study relied on a single time point for data collection, it was not possible to examine adjustment to AL across time. Also, the sample used for this study was a convenience sample from 10 AL communities in Florida and Tennessee which were all part of the same national company. These communities provide high-end private-pay AL with no subsidies for low-income seniors. The residents living in these communities likely have resources that would allow them to have more options and choice in AL residence. The financial resources of the participants of this study were not accurately reflected in the data because 38% (n = 23) chose not to answer the question, making it difficult to compare this sample to the typical AL resident population. The results from this study may not be generalizable to older adults living in AL provided by other companies or AL settings with subsidies for low-income residents.

Next, despite assistance from the non-profit director associated with the owning company in recruiting AL communities for participation, there were still challenges. The non-profit director and the researcher each made repeated attempts to contact the selected communities, but several communities simply did not respond. A regional manager denied access to one community citing that they were experiencing "some issues" that took precedence over helping with research. Once the executive director of a community agreed to participate, the entire process was typically delegated to the activities coordinator. This individual was not always as invested in the project, and thus, resulted in varying levels of enthusiasm and

assistance for recruiting participants from each community. These variations influenced the number of participants who chose to take part in the study and who successfully completed all the necessary steps of participation.

Another issue that may have influenced the results was cherry-picking. Associates often appeared hesitant to identify anyone for recruitment who they felt was "too stressed out". Despite the researcher explaining the importance of including residents who were experiencing difficulty adjusting to life in AL, it may be true that many associates remained protective of these residents and did not recommend them for participation.

Upon examination of the length of residence for the participants, only 33.9% (n=20) of the sample had resided in the AL community for less than one year. In addition, 8.5% (n=5) had lived in the community for less than six months and only 3.4% (n=2) had resided in the AL for less than three months. As discussed in previous studies (Brooke, 1989; Heliker & Scholler-Jaquish, 2006; Iwasiw et al., 1996; Patterson, 1995), the first three months are the most difficult period of the adjustment process for new long-term care residents. With such a small proportion of the sample representing this initial phase, it is likely that a large majority of the participants in this study had already adjusted to their AL community. It is also possible that residents who did not adjust well initially may have relocated to another residence, leaving relatively happy and well-adjusted residents. The average scores on the items comprising the composite measure of adjustment indicate that overall, the residents were expressing high quality of life and feelings of being at home and were not experiencing clinical levels of depression. The retrospective nature of the open-ended question allowed residents to express the difficulties of their initial adjustment (as some did indicate), but this experience could not be quantified by the outcome measures for the quantitative analyses.

Mean scores on the individual personality factors indicate that the range of

scores may have been limited for certain factors. Scores on each factor can range from 0 to 5. Neuroticism had a mean of 2.57 (SD = .77) while extraversion had a mean score of 3.42 (SD = .80). Only 15% (n = 9) of participants had scores below the midpoint on extraversion, which indicates that the sample was largely comprised of individuals with higher levels of extraversion. Similarly high means for openness (M = 3.62, SD = .65), agreeableness (M = 4.28, SD = .54), and conscientiousness (M = 4.05, SD = .77) were also found with at least 95% of respondent scores above the midpoint for each.

The small sample size limited the power of the analyses reported here. For the regressions for the second hypothesis, post hoc power analysis revealed adequate power. The analysis identified power of .98 for the first regression and .99 for the second. For hypothesis three, post hoc power analyses were also conducted for those four regressions, revealing limitations of some of these analyses. The first regression was found to have a power of .91, while the second (power = .61), third (power = .12), and fourth (power = .44) regression analyses were found to not meet the minimum power criteria (power > .80) as set forth by Cohen (1988).

Finally, another limitation of the study was the fact that there is no consensus measurement of adjustment for long-term care settings. The outcome variables for this study were chosen based on the literature for NH research. Since no single measure exists, several measures were included to try to capture the essence of adjustment. It is unknown if the included variables indeed accurately and completely measured adjustment or if key elements were left out.

### **Future Directions**

In terms of the challenges and limitations specific to the current study, alterations to future research are necessary to address these issues. The first important modification to future research would include a more heterogeneous sample of AL communities, particularly in terms of geographic location,

corporate/non-profit ownership, size, philosophy, resident characteristics, and acceptance of low-income subsidies. Another challenge that could be addressed in future research would be to provide incentives for both the participants and associates involved in the study. Incentives may be monetary, but could also include volunteering at the community or providing topical presentations to the residents and/or associates. Through incentivizing participation, the recruitment process would likely be much easier and more successful.

Although neuroticism was the only personality variable related to adjustment as measured by this study, there may be modifications that would allow for the relationship between personality and adjustment to be more fully explored. The identification and acceptance of a single measure of adjustment to long-term care, specifically AL, would increase confidence in the findings of future research on this topic. Applying some of the additional information learned from the hermeneutic phenomenological analysis about how residents view the factors associated with and barriers to adjustment to the development of future questionnaires could better explain quantitative assessments of adjustment. In addition, a larger sample and longitudinal study design with frequent assessments (e.g., upon entry; 1 month; 3 months; 6 months; 12 months; 24 months) would also allow researchers to gain a more accurate and detailed picture of the adjustment process for new AL residents.



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## **Appendices**

## Appendix A: Resident Assessment Instrument

### ADJUSTMENT TO ASSISTED LIVING – RESIDENT QUESTIONNAIRE –

*Please answer all of the following questions. For each question, write in your answer or put a check mark for the best answer from the list provided.*

1. What is your birth date?	_____ / _____ / _____
2. What is your sex?	<input type="checkbox"/> Female <input type="checkbox"/> Male
3. What is your current marital status?	<input type="checkbox"/> Married <input type="checkbox"/> Widowed <input type="checkbox"/> Divorced <input type="checkbox"/> Never married
4. What is your race?	<input type="checkbox"/> White <input type="checkbox"/> Black or African American <input type="checkbox"/> Other: _____
5. Are you of Spanish or Hispanic descent?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. What is your highest level of education?	<input type="checkbox"/> Did not graduate high school <input type="checkbox"/> GED <input type="checkbox"/> High school diploma <input type="checkbox"/> Junior college/technical degree (e.g., LPN) <input type="checkbox"/> Four-year college degree <input type="checkbox"/> Master's degree <input type="checkbox"/> Doctorate/Professional degree

### Appendix A (Continued)

7. What is your current annual income?	<input type="checkbox"/> Less than \$10,000 <input type="checkbox"/> \$10,000-\$30,000 <input type="checkbox"/> \$30,000-\$50,000 <input type="checkbox"/> \$50,000-\$100,000 <input type="checkbox"/> Greater than \$100,000
8. Before you moved into your current residence, about how many times in your life have you moved more than 50 miles?	
9. Where were you living before you moved to your current residence?	<input type="checkbox"/> In your own home in the community <input type="checkbox"/> In another person's home in the community <input type="checkbox"/> In a senior apartment or independent living <input type="checkbox"/> In another assisted living community <input type="checkbox"/> In a nursing home <input type="checkbox"/> Other: _____
10. How was the decision made to move to your new residence?	<input type="checkbox"/> A medical event made the decision necessary <input type="checkbox"/> Loss of spouse <input type="checkbox"/> Family members unable to provide care <input type="checkbox"/> The decision was planned ahead of time <input type="checkbox"/> Other: _____
11. On average, how many times per week do you participate in your community's activities?	
12. What types of activities do you usually participate in?	
13. On average, how many times per week did you participate in activities before moving to this community?	
14. What types of activities did you participate in before moving to this community?	

### Appendix A (Continued)

15. How many times per month does a family member visit you?	
16. How many times per month do you speak to a family member on the phone?	
17. How many times per month does a friend visit you?	
18. How many times per month do you speak to a friend on the phone?	

#### activities of daily living

*For each statement, please place an X in the box to indicate whether or not you perform the activity independently.*

	Independent	
	Yes	No
1. <b>Bathing</b> (sponge bath, tub bath, or shower) - Receives either no assistance or assistance in bathing only one part of the body		
2. <b>Dressing</b> – Gets clothes and dresses without any assistance except for tying shoes		
3. <b>Toileting</b> – Goes to toilet room, uses toilet, arranges clothes, and returns without any assistance (may use cane or walker for support and may use bedpan/urinal at night)		
4. <b>Transferring</b> – Moves in and out of bed and chair without assistance (may use cane or walker)		
5. <b>Continence</b> – Controls bowel and bladder completely by self (without occasional “accidents”)		
6. <b>Feeding</b> – Feeds self without assistance (except for help with cutting meat or buttering bread)		



## Appendix A (Continued)

### satisfaction

*For each statement, make an X in the box to indicate the extent to which you agree or disagree.*

	Disagree strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree strongly
1. I was involved in the decision to move to this community					
2. I wanted to move to this community					
3. Compared with my previous living situation, I am satisfied with my current residence					
4. Compared with others my own age, my health is better than average					
5. I am satisfied with the relationships I have with others outside this community					
6. I am satisfied with the relationships I have with other residents in this community					
7. I am satisfied with the relationships I have with associates in this community					
8. I am satisfied with the food offered in this community					
9. My quality of life is better now than before I moved here					
10. This place feels like home to me					
11. I feel that other residents respect my privacy					

**Appendix A (Continued)**

12. I feel that the associates respect my privacy					
13. I can set my own daily schedule					
14. At meals, I choose who to sit and eat with					
15. I can sleep late if I want to					
16. I regard people here as my friends					
17. I have met residents here with similar interests to mine					
18. I feel like a member of the family here					
19. I feel that I have friends among the associates					
20. I feel that the associates show affection and caring for me					
21. I would like to have more privacy					
22. I have regular contact with friends that do not live here					
23. Compared with my mood when I first moved here, my current mood has improved					

## Appendix A (Continued)

### personality

*There are a number of characteristics that may or may not apply to you to some degree. For each statement, make an "X" to indicate the extent to which you agree or disagree.*

I see myself as someone who...	Strongly disagree	Disagree a little	Neither agree or disagree	Agree a little	Strongly agree
1. Is talkative					
2. Tends to find fault with others					
3. Does a thorough job					
4. Is depressed, blue					
5. Is original, comes up with new ideas					
6. Is reserved					
7. Is helpful and unselfish with others					
8. Can be somewhat careless					
9. Is relaxed, handles stress well					
10. Is curious about many different things					
11. Is full of energy					
12. Starts quarrels with others					
13. Is a reliable worker					
14. Can be tense					

### Appendix A (Continued)

15. Is ingenious, a deep thinker					
16. Generates a lot of enthusiasm					
17. Has a forgiving nature					
18. Tends to be disorganized					
19. Worries a lot					
20. Has an active imagination					
21. Tends to be quiet					
22. Is generally trusting					
23. Tends to be lazy					
24. Is emotionally stable, not easily upset					
25. Is inventive					
26. Has an assertive personality					
27. Can be cold and aloof					
28. Perseveres until the task is finished					
29. Can be moody					
30. Values artistic, aesthetic experiences					
31. Is sometimes shy, inhibited					

### Appendix A (Continued)

32. Is considerate and kind to almost everyone					
33. Does things efficiently					
34. Remains calm in tense situations					
35. Prefers work that is routine					
36. Is outgoing, sociable					
37. Is sometimes rude to others					
38. Makes plans and follows through with them					
39. Gets nervous easily					
40. Likes to reflect, play with ideas					
41. Has few artistic interests					
42. Likes to cooperate with others					
43. Is easily distracted					
44. Is sophisticated in art, music, or literature					

#### adjustment

*Please answer No or Yes to the following questions by circling your answer.*

1. Are you basically satisfied with your life?	No	Yes
2. Have you dropped many of your activities and interests?	No	Yes
3. Do you feel that your life is empty?	No	Yes

### Appendix A (Continued)

4.	Do you often get bored?	No	Yes
5.	Are you in good spirits most of the time?	No	Yes
6.	Are you afraid that something bad is going to happen to you?	No	Yes
7.	Do you feel happy most of the time?	No	Yes
8.	Do you often feel helpless?	No	Yes
9.	Do you think it is wonderful to be alive now?	No	Yes
10.	Do you feel pretty worthless the way you are now?	No	Yes
11.	Do you feel full of energy?	No	Yes
12.	Do you feel that your situation is hopeless?	No	Yes

*Here are a number of characteristics that may or may not apply to you to some degree. For each statement, make an "X" in the box to indicate the extent to which you agree or disagree.*

	Agree	Disagree	No Opinion
1. As I grow older, things seem better than I thought they would be			
2. I have gotten more of the breaks in life than most of the people I know			
3. This is the dreariest time of my life			
4. I am just as happy as when I was younger			
5. My life could be happier than it is now			
6. These are the best years of my life			

### Appendix A (Continued)

7.	Most of the things I do are boring or monotonous			
8.	I expect some interesting and pleasant things to happen to me in the future			
9.	The things I do are as interesting to me as they ever were			
10.	I feel old and somewhat tired			
11.	As I look back on my life, I am fairly well satisfied			
12.	I would not change my past life even if I could			
13.	Compared to other people my age, I make a good appearance			
14.	I have made plans for things I'll be doing in a month or a year from now			
15.	When I think back over my life, I didn't get most of the important things I wanted			
16.	Compared to other people, I get down in the dumps too often			
17.	I've gotten pretty much what I expected out of life			
18.	In spite of what some people say, the lot of the average person is getting worse not better			

open ended question

In your own words, describe how you adjusted to life in your assisted living community when you were a new resident. *(Extra lines are provided on the back)*

## Appendix B: Associate Assessment Instrument

### - ASSOCIATE QUESTIONNAIRE -

What date did the resident move into this community? \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

<i>For each statement, please place an X in the box to indicate whether or not the resident <u>currently</u> performs the activity independently.</i>	<b>Independent</b>	
	<b>Yes</b>	<b>No</b>
<b>1. Bathing</b> (sponge bath, tub bath, or shower) - Receives either no assistance or assistance in bathing only one part of the body		
<b>2. Dressing</b> – Gets clothes and dresses without any assistance except for tying shoes		
<b>3. Toileting</b> – Goes to toilet room, uses toilet, arranges clothes, and returns without any assistance (may use cane or walker for support and may use bedpan/urinal at night)		
<b>4. Transferring</b> – Moves in and out of bed and chair without assistance (may use cane or walker)		
<b>5. Continence</b> – Controls bowel and bladder completely by self (without occasional “accidents”)		
<b>6. Feeding</b> – Feeds self without assistance (except for help with cutting meat or buttering bread)		

### community information

*Please respond to the following questions about your community. Place your answer in the box next to the question.*

1. How many units are located in this community?	
2. How many residents live in this community?	
3. How many residents share rooms with another person other than by choice (e.g., spouse or family member)?	
4. Does this community accept subsidies (e.g., Medicaid waivers) for low-income residents?	



### **About the Author**

Whitney L. Mills was born in Tell City, Indiana and earned a B.A. Degree in Psychology from Indiana University in Bloomington, Indiana. After being selected as a McNair Scholar at Indiana University, she became passionate about research related to aging and long-term care. She has co-authored several peer-reviewed journal articles and one book chapter. She has given numerous presentations at national conferences and served on committees both at the university and national levels. She is currently a Senior Research Coordinator in the Department of Medicine – Health Services at Baylor College of Medicine and in Health Services Research and Development at the Michael E. DeBakey VA Medical Center.