What is Going on in Adult Day Services (ADS) in Taiwan?
An Examination of Social and Physical Environments in Two Centers

Chih-ling Liou

Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
In
Human Development

Shannon E. Jarrott, Chair
Katherine R. Allen
Rosemary Blieszner
Toni M. Calasanti
Karen A. Roberto

November 1, 2011
Blacksburg, VA

Keywords: Adult Day Services, Physical Environment, Social Environment, Taiwan, Ethnographic study, Infantilization
What is Going on in Adult Day Services (ADS) in Taiwan?

An Examination of Social and Physical Environments in Two Centers

Chih-ling Liou

ABSTRACT

Some studies have demonstrated that Adult day services (ADS) benefit elders’ and caregivers’ well-being; however, others indicated that infantilization exists in some ADS centers where staff ignore the lifetime of elders’ experiences. Many ADS environments in the United States are socially constructed as places for incompetent elders, and ADS clients may be labeled as child-like dependents. Most ADS research has been performed in Western society; little is known about ADS centers in Asian countries. Because ADS programs are promoted by the Taiwanese government to meet the needs of a growing aging population, it becomes essential to examine ADS centers and their practices in Taiwan in order to provide suggestions for future research and professional practice that supports respectful care of elders.

This dissertation examined how elders experienced their daily life within the physical and social environment of two different types of ADS centers in Taiwan. I utilized theories of environmental press, place rules, and the total institution to shape my research framework. Using ethnographic data from two ADS centers with 270 hours of observations and 23 interviews with staff and clients, I analyzed staff-client interactions and clients’ reactions toward staff behavior. The results are based on the analysis of clients’ competencies, each center’s approach to care, and their physical and social environments. Staff-client interactions within the two centers occurred not only in the form of infantilization but also with age-appropriate treatment in which staff paid respect to clients.
I found two formats of staff-client interactions that reflected a culture of care uniquely Taiwanese yet also reminiscent of western programs: teacher-student format and nurse-patient interactions predominated. In one center, staff-client interactions were oriented toward a teacher-student relationship in which staff played the role of a teacher during activities by giving directions that controlled clients’ behavior. In the other center, staff-clients relationships were focused on physical care and therapeutic practices. Staff treated the clients as patients and had the power to rule over clients’ behavior by directing them how to eat and when to use the restroom. These patterns were neither inherently ageist nor absent of ageism. These differences stemmed from different models but each was supported within the context of Taiwanese culture derived from Confucianism and Japanese colonization, which emphasize hierarchical relationships.

The findings also reveal that clients’ individual differences influenced how they reacted toward both infantilizing and age-appropriate interactions. The differences were not only related to their competencies but also their different life experiences. These findings may inform a new approach to professional practice that incorporates a home-like environment that fosters autonomy and inhibits ageist treatment of differently-abled adults, thereby achieving a positive person-environment fit in the long-term care setting.
Acknowledgements

I am very grateful for the financial support of the Department of Human Development for providing funding for this project ($450). I also would like to acknowledge those who have provided funding that has helped further my professional development through my graduate career: Harold A. Schlenker Scholarship (2009/2010, $600), James D. Moran Memorial Scholarship (2009, $800), the Graduate Student Assembly Travel Fund Award (2009, $250), Peggy Lavery Gerontology Research and Professional Development Scholarship Award (2010, $500), S. J. Ritchey Gerontology Scholarship (2011, $3000).

I would like to acknowledge the enormous support and guidance I received from my chair, Dr. Shannon Jarrott, who read countless transcripts, coding sheets, and drafts of my dissertation and scheduled a regular meeting with me at least once a week. Even though I was in Taiwan collecting data, Dr. Jarrott was on Skype at 5:00 a.m. to talk to me. I appreciate a lot of her mentoring, guidance, support, patience, and encouragement, so I could successfully defend my dissertation proposal, go home to collect data, and complete my dissertation within one year. I am also grateful for her financial support, so I can concentrate on my writing without desperately seeking money to survive. Both the support and challenges from Dr. Jarrott helps me grow and develop independently.

I want to also acknowledge the wonderful support that I received from each of the members of my committees. My studies with Dr. Toni Calasanti in the aging in social context, particularly the perspective of intersectionality on aging issues, helped me to gain a critical lens that allowed me to see the malleability that often seems monolithic at first glance. Moreover, she offered support for my ideas and encouraged me to follow my heart to do the research. Dr. Katherine Allen’s suggestion sustained me going through my tough time, and her encouragement
cheered me up when walking on the road of developing my graduate career. I also thank Dr. Karen Roberto and Dr. Rosemary Blieszner for their support, as they both provided valuable feedback and offered constructive criticism on my dissertation proposal.

Other HD faculty and staff also offered their support on my journey of graduate life. Dr. Jyoti Salva gave me an opportunity to work on a project with caregivers of people with mild cognitive impairment. Dr. Alison Galway, as the director of ADS at Virginia Tech, shared her insight with me on LTC issues. Dr. Matthew Komelski helped me with writing support. Ms. Kathy Surface is always patient to assist me on problem solving.

I would also like to thank Dr. Dina Shenk who was my prior advisor in the University of North Carolina at Charlotte. Her continuing concerns about my graduate career helped me overcome each difficulty. I would also like to acknowledge the encouragement I received from Dr. Chin-yu Chen and Dr. Wen-tang Yu who bolstered me while I was pursuing higher education.

In addition to professional support, I would like to acknowledge the friendship of so many important people in recent years. First, my housemate and colleague, Jing Zhang, whom I know will always be there for me whenever I feel happy, sad, frustrated, or helpless. Jing, like my family member, cooked great food to feed me and encouraged me to not give up so easily. I also thank Cathee Dennison about her kindness of being my writing tutor to meet with me intensively at least three hours per week to help me on my dissertation proposal. Cathee is more than a tutor but is like my mom to cheer me up when I felt frustrated. There are other colleagues and friends to whom I am especially grateful for their support and encouragement: Dr. Brandy McCann, Dr. Crystal Duncan Lane, Dr. Kristin Walker, Dr. Yi-Chen Chuang, Dr. Huei-jin Wang, Dr. Bradley Hertel, Dr. Bob Lowell, Dr. Jessica Lu, Dr. I-ping Fu, Dr. Hung-chieh Lo, Dr. Donald McKeon, Ms. Kelly Munly, Ms. Jada Brooks, Ms. Manjushree Palit, Ms. Jou-chen
Chen, Ms. Ana Lucía Jaramillo, Ms. Hyunjoo Kwon, Ms. Laura Eubanks Gambrel, Ms. KareL Joyce Kalaw, Ms. Aileen Virrey Lapitan, Ms. Chang, Heng-Ching, Ms. Yoshiko Anzai, Ms. Yilin Miao, Ms. Lori Kadlec Balbuena, Ms. Andrea Mendes, Ms. Monica Kimbrell, Ms. Lynn Rallos, Ms. Yanjun Ma, Ms. Chungwen Hsu, Ms. Kitty Harmon, Mr. Jay Lester, Ms. Caitlin Faas, Ms. Kimberly Day, Mr. Chun-yi Su, and Mr. Han-pin Lin.

My family has also provided so much support over the course of my life. I would especially like to thank my parents who provide emotional and financial support to help me go through the toughness and loneliness. Although they do not think that getting a Ph.D. degree is important for me, they still respect my choice and encourage me and love me anyway. I also want to thank my eldest aunt and her eldest daughter in my dad’s family. When I was back in Taiwan, my aunt always gave me allowances to demonstrate her support for me. My cousin who lives in San Jose calls me regularly to check on me and encourage me. Their implicit love and support warm my heart and encourage me to pursue my dream.

I am also indebted to the staff members of the two ADS centers in Taiwan I studied. The two directors in both centers were generous with their time in speaking with me about their work. I am deeply grateful to the staff members on the front-line for trusting me and allowing me to become part of the scenery. I also thank the clients for being open to me.

Lastly and importantly, I want to thank God who gives me strength to sustain. Without acknowledging Him, I would no doubt be a very different person today and may not be able to complete my degree. I feel truly blessed to have his support and be taken care of by his unseen hand.

All the pictures in this dissertation were taken by the author.
# Table of Contents

Chapter One: Introduction, page 1  
  Problem Statement, page 1  
  Rationale, page 4  
  Theoretical Framework, page 5  
  Overview of the Study, page 8

Chapter Two: Literature Review, page 11  
  ADS Programs in the United States, page 11  
  ADS Programs in Taiwan, page 18  
  Current studies related to ADS Centers, page 24  
  Theoretical Perspective, page 30

Chapter Three: Methodology, page 44  
  Philosophical Assumption, page 44  
  Ethnology, page 45  
  Setting, page 48  
  Participants, page 49  
  Data Collection, page 50  
  Reflexivity of the Researcher, page 55  
  Data Analysis, page 60  
  Verification, page 62

Chapter Four: Results, page 64  
  Description of the two Centers, page 64  
  The People, Environment, and Behavior in Center A, page 79  
  The People, Environment, and Behavior in Center B, page 111

Chapter Five: Discussion, page 139  
  Findings from Research Questions, page 139  
  Limitations, page 150  
  Contributions, page 152  
  Implications of the Study for Theory, page 155  
  Implications of the Study for Professional Practice, page 157  
  Conclusion, pp. 161-163

References, page 164

Appendices, page 184  
  Appendix A: Occurrence of Themes at the Two Centers, page 184  
  Appendix B: Observation Timelines in the Two ADS Centers, page 186  
  Appendix C: Interview Questions Guide, page 187  
  Appendix D: Informed Consent Forms, page 195  
  Appendix E: IRB Approval Letter, page 199
List of Figures

Figure 1: The floor plan of Center A (Chapter 4, page 65)
Figure 2: The nurse’s station of Center A (Chapter 4, page 66)
Figure 3: The living room of Center A (Chapter 4, page 66)
Figure 4: The dining room and kitchen of Center A (Chapter 4, page 66)
Figure 5: The tea shop of Center A (Chapter 4, page 66)
Figure 6: The temple of Center A (Chapter 4, page 68)
Figure 7: The restroom of Center A (Chapter 4, page 68)
Figure 8: The meeting room of Center A (Chapter 4, page 68)
Figure 9: The sensory room of Center A (Chapter 4, page 68)
Figure 10: The floor plan of Center B (Chapter 4, page 73)
Figure 11: The nurse’s station of Center B (Chapter 4, page 75)
Figure 12: The lobby of Center B (Chapter 4, page 75)
Figure 13: The dining room of Center B (Chapter 4, page 75)
Figure 14: The restroom of Center B (Chapter 4, page 75)
Figure 15: The living room of Center B (Chapter 4, page 76)
Figure 16: The rest area of Center B (Chapter 4, page 76)
List of Tables

Table 1: Characteristics of Selected Clients in Center A (Chapter 4, page 84)

Table 2: Characteristics of Selected Clients in Center B (Chapter 4, page 114)

Appendix

Table 1: Compared themes in the two centers (on page 184)
CHAPTER ONE: INTRODUCTION

Problem Statement

Throughout much of the developed world people are living longer, and there are fewer early deaths (Wilson, 2000). However, this does not guarantee that anyone will attain a longer, healthier life than their ancestors with shorter lifespans. Wilson (2001) indicated that a widely held popular view in the United States is that if old age equals disability, the longer people live, the longer they will be disabled (Wilson, 2000). Baltes and Smith (2003) disputed this stereotype by illustrating that in developed countries more old people living longer with fewer physical and cognitive disabilities. Baltes and Smith (2003) also emphasized how well older people adjust to changing environments (Baltes & Smith, 2003; Findlay & McLaughlin, 2005). However, they also determined that no matter how hard a person tries to be proactive within her or his environment, when people live past the age of 85, limits of their functional capacity might impact their ability to adjust to environmental changes, and they may need assistance to function in their daily lives (Baltes & Smith, 2003).

Increasing years of longevity not only trigger debates concerning the health experience of future elders but also raise issues about the support and care provided for old people (Izuhara, 2010; Victor, 2006). The term “aging” refers not only to individuals’ expanded life courses, but also changes in family structures and relations, all of which contribute to a transformation of the age structures of nations (Bengtson, Lowenstein, Putney, & Gans, 2003). The change of family structures from extended families to smaller nuclear families results in fewer familial sources of care of and support for elders (Bengtson et al., 2003; Chao & Roth, 2005). The transformation of the age structure from one with many children and few elders to one characterized by more elders and fewer children creates a smaller labor population relative to the dependent population.
and leads some governments to reduce welfare expenditures to reflect lower income tax revenue (Bengtson et al., 2003; Phillipson, 2010). As a government changes its responsibilities for its citizens’ welfare and well-being, families also struggle to fulfill their perceived and legal obligations of care for their elders (Izuhara, 2010). When elders can no longer fully care for themselves, support may come from family, friends, or formal services (Wilson, 2000).

At present, families are the most commonly preferred caregivers for old people around the world (Wilson, 2000). In the United States, family caregivers are the backbone of the long-term care system; most caregivers are adult children (39%-50%) providing care with limited help from others (Giovannetti, 2009). As the nuclear family, composed of two adults and dependent children, became dominant in society, families were challenged to meet every need for elders (Litwak, Silverstein, Bengtson, & Hirst, 2003). As it became clear that families were taking on greater responsibility for an increasing number of elders, concern began to grow about the stress family caregivers experienced from their role. Without help, family caregivers may experience tension, which can lead to institutionalization of the elderly relative (O’Keeffe & Siebenaler, 2006).

Researchers have found that institutionalized elders in the United States have a poorer quality of life, lower self-esteem, and more negative self-concepts compared with non-institutionalized elders (Antonelli, Rubini, & Fassone, 2000; Kane, 2001). A study of critically ill elders found that a substantial majority would rather die than enter a nursing home (Wiener, 2004). Not only do elders resist living in institutional care facilities, but the U.S. government has tried to reduce the number of people in the institution to cut the expenses of institutional care. Most developed countries now promote in-home and community-based services for elders so that they can continue living in their communities (Wiener, 2004). These services may include home
help aides, homemaker, foster care, assisted living, and adult day services (ADS) (O’Keeffe & Siebenaler, 2006). Studies indicated that ADS programs benefit both elders’ and caregivers’ physical and psychological well-being (Bilotta, Bergamaszhini, Sprearico, & Vergani, 2010; Gaugler & Zarit, 2001; Silverstein, Wong, & Brueck, 2010).

Despite documentation of the benefits of attending ADS centers, Salari and Rich (2001) observed two ADS centers in the United States and found that elders in the two centers were infantilized by being treated like children with little or no recognition of the lifetime of experience that differentiates them from children. In a later study, Salari (2006) observed five ADS centers in western America for 220 hours and discovered that the child-oriented settings, activities, and speech patterns in some of the ADS centers were negative influences on behavior, well-being, self-identity, relationship formation, and social interactions among clients. Salari’s research (Salari, 2002; 2006; Salari & Rich, 2001) hinted at the infantilization that is likely quite common in ADS centers in the United States but has not figured prominently in institutional care studies.

According to Lyman (1989), infantilization may occur because ADS programs are based on a child-care model, which leads to the concept that it is easier to treat ADS clients as children. Lyman focused on the role of staff and found that elders’ child-like behavior was expected and reinforced by ADS staff who labeled them as incompetent because of physical, mental, or both physical and mental impairment (Lyman, 1988). ADS clients, therefore, are not only socially labeled as “old” or “dependent” but are also medically labeled as “impaired” or “incompetent” because they attend ADS centers. According to the labeling theory, the staff members of ADS centers, therefore, obtain the power to create and enforce rules that control clients’ behaviors and create an atmosphere of infantilization (Becker, 1973; Triplet & Jarjoura, 1994).
Moore (2004) not only focused on ADS staff but also examined the influence of the physical settings and social environments on social interactions within one ADS center. He found that within an ADS environment, which is socially constructed as one used by incompetent and impaired elders, ADS clients were labeled as dependents or children. They were not allowed to make choices for themselves, as staff created place rules to stress their control, emphasize routine, and limit clients’ independence to maintain efficiency (Moore, 2004). Within that infantilized environment emphasizing efficiency, routine, and staff controls, clients are often limited to individual choices and interacting with staff through “challenging behaviors” or “social withdrawal” (Moore, 2004). Others may adapt to the environments by acting according to the staff’s expectations of dependence (Salari, 2002). Lawton (1980) indicated that people’s reactions to their physical and social environments are based on their abilities to adapt to the environments’ press or demands. Some ADS clients may find a way to adapt to the infantilized environments, and others may not be able to cope. No matter how ADS clients react to infantilization, their experiences of being treated like children results in diminished quality of life in ADS centers.

**Rationale**

Because studies of ADS programs have been conducted primarily in Western society, little is known about whether other patterns of care exist in countries with different cultural backgrounds. In East Asian cultures like Taiwan, for example, elders, traditionally, are treated with respect for their life-long experiences and are often viewed as leaders of their families. I, therefore, assumed that Taiwan’s ADS clients, may be less likely to be treated as children and would experience other care patterns. However, because Eastern ADS programs are largely
informed by Western models, I was open to the possibility that the ADS programs could exhibit infantilization, though it might manifest differently in the Taiwanese culture.

ADS programs are now the popular community-based services promoted by the Taiwanese government, which plans to develop more ADS centers modeled on existing programs. Few evaluations of Taiwanese centers have been conducted; thus, little is known about the quality of care provided in any of the ADS models. In this research project, I intended to replicate Salari’s studies (Salari, 2002; 2006; Salari & Rich, 2001) to investigate ADS clients’ life in the context of the physical and social environments of two prestigious ADS centers. Ryvicker’s (2009; 2010) study of two different types of nursing home facilities (home-like vs. hospital-like) demonstrated differences in staff-resident interactions that reflected different physical and social environments. Therefore, I selected two centers that paralleled the American social and medical models and resembled Ryvicker’s home-like versus hospital-like settings. Though I expected to see care patterns that reflected the Eastern tradition of respecting community elders, I still expected to see differences in the environments and interactions at the two centers. Based on my review of Salari’s studies, I went into the sites also anticipating instances of finding infantilization and other care patterns to understand the life of the clients there.

**Theoretical Framework**

Although Salari (2002; 2006; Salari & Rich, 2001) did not explicate her theoretical framework, her work reflected Lawton’s (2001) idea of person-environment fit and emphasized the influence of ADS physical and social environments on infantilization. In conceptualizing my replication of Salari’s studies of infantilization, I relied primarily on Lawton’s (1980; Lawton & Nahemow, 1979) environmental press theory and ecological model to help me examine how
infantilization derived from the ADS physical and social environments and influenced clients with different competence.

Before addressing person-environment relations, Lawton (1980) identified five kinds of environment: the physical environment, the personal environment, the group environment, the suprapersonal environment, and the social environment (More detail of these are addressed in the Literature Review). For the human component of the environment, Lawton focused on elders (or less competent persons) and conceptualized them as having a set of five given behavioral competence: biological health, functional health, cognition, time use, and social behavior. Lawton and Nahemow (1979) proposed a person-environment goodness-of-fit model between elders and their environment that is reflected by their adaptive behavior and mood and influenced by their competencies. Then Lawton specified a reciprocal relationship between elders and their environments; the hypothesis of the environmental press theory explicates that the less competent the individual, the greater the impact of environmental factors on that individual.

Lawton extended his work on person-environment fit by incorporating Lewin’s (1951) ecological equation, \( B = f(P, E) \), which suggests that behavior \( (B) \) is a function of the person \( (P) \) and the environment \( (E) \). For Lawton, the behavior is not only a function of a person and the environment but also of the transaction between them (Moore et al., 2003). He modified Lewin’s ecological equation by adding the transaction \( (P \times E) \) to recognize not only the influence of environments on individuals but a bi-directional influence whereby individuals influence their environments. The equation then became \( B = f(P, E, P \times E) \); in the current study \( P \) represents clients’ competence; \( E \) refers to the ADS physical and social environments; \( P \times E \) reflects the place rules, such as regulations or activities of the two centers; and \( B \) represents clients’ responses to infantilization. Using Lawton’s environmental press theory and ecological equation
helped me to explore the linkages of infantilization, ADS environments, clients, as they influence and are influenced by the systems in which they are nested.

Though Lawton incorporated \((P \times E)\) into Lewin’s equation to \(B = f(P, E, P \times E)\), I included the concept of *place rules* to more fully investigate how the shared understandings in an ADS center form the infantilizing environments. According to Imamoglu (2009), each person carries a vital role in shared social constructions of reality. People in a restaurant, for example, want to eat and socialize, so they select a restaurant and enter. Once there, they know their role, what is expected and appropriate, and try to achieve their purposes, while meeting expectations set by place rules (Imamoglu, 2009). Place rules, for Moore (2005), are consistent relationships between activities and settings that reflect the negotiated purpose of the place. Some place rules are explicit, such as no smoking inside of ADS centers. Others are implicit and imbued by socially constructed norms or stereotypes, such as the place rule that clients of ADS centers are frail and need supervision all the time. According to Moore (2005), place rules provide a useful means by which to assess environments as these rules serve the purpose of achieving group goals, which may be met at the expense of security and individual well-being. Thus, places rules are a source of power that interacts with individual competence to influence the person-environmental fit.

In addition to embracing place rules to investigate the \((P \times E)\) interaction, I also need other concepts or theories to examine clients’ reaction to the environment, the \(B\), which is just referred to as *adaptive or maladaptive* behavior by Lawton. I adopted Goffman’s (1961) theoretical framework of the total institution to examine the partial institution of ADS centers. That is, while ADS centers regulate all aspects of clients’ behaviors while they are there, these are not equivalent to total institutions as clients go home at the end of the day. In Goffman’s
conceptualization of total institutions, residents may be required to give up personal passions, privacy, status, decision-making abilities, and self-authority, and individuals may need to change to adapt to an environment. Goffman refers to the process of requiring individuals to adapt their behavior to fit in the environment as *self-mortification*, which can take four forms: challenge, withdrawal, colonization, and conversion (These are addressed further in the Literature Review). These can help me in my present study by pointing to how clients react to the infantilizing environments in the partial institution of ADS settings. Therefore, I employed Goffman’s notions of the four forms of self-mortification to analyze clients’ behavior toward the social and physical environment of two ADS centers in Taiwan.

**Overview of the Study**

In this research project, I integrated the theories described above while replicating Salari’s study, which led my research question to “How do elders experience their daily life within the physical and social environment of two different types of ADS centers in Taiwan?” The following are my specific study questions:

1. In what ways is infantilization expressed in the two ADS centers? How does Taiwanese culture influence infantilization or other patterns of care?
2. How do the two different types of centers influence staff’s infantilizing behavior toward their clients?
3. How do clients’ different abilities influence their reaction to infantilization in the two centers?

In order to understand how people in ADS interact with their physical and social environments, I adapted the ethnographic method to collect data from both field observations and interviews in the two different types of ADS centers (social and medical models) in Taiwan. On
the topic of aging and places, ethnographers have examined how elders experience their time in places such as private homes (e.g., Rubinstein, 1990), supportive housing buildings (Kontos, 1998), retirement communities (Katz, 2005), and nursing homes (e.g., Diamond, 1992; Gubrium, 1975). However, relatively few ethnographic studies have been done comparing different types of ADS centers. This research project, therefore, may enhance the understanding of how elders experience their days within a given ADS environment and has the potential to shape the development of future ADS programs in Taiwan and elsewhere.

The following chapters include the literature review, methodology, results, and discussion. In Chapter Two (Literature Review), the long-term care (LTC) system and ADS programs in the United States are addressed first, followed by a brief introduction to the LTC system and ADS centers in Taiwan. Then I refer to current, relevant ADS research, including quantitative and qualitative studies that address the benefits and challenges of ADS caregivers and clients. I address my theoretical perspective, the theory of environmental press, incorporating Moore’s idea of place rules of ADS centers, and Goffman’s idea regarding how people’s individual behaviors interact with the total institutional environment.

In Chapter Three (Methods), I first mention my own worldview and how it influenced my choice of the method of inquiry. Then I describe the reasons for adopting ethnographic design to collect data in two ADS centers in Taiwan and the process of data collection and analysis. My position as a researcher and the credibility of this research are stated at the end of this section. As detailed in Chapter Four (Results), I first provide a description of the two research sites with their floor plans and centers’ pictures to demonstrate the visual evidence of the physical environment. Lawton’s ecological equation then was employed to help organize the rich data from field notes and interviews. Two centers are described separately relative to the equation of
B = f (P, E, P x E) where P equals the clients’ competence; E refers to the physical and social environments, such as decoration that appeals to adults or staff’s infantilizing behavior; P x E reflects the place rules, such as regulations or activities of the two centers; and B represents clients’ and staff’s responses to the environments and place rules.

The final chapter provides a synthesis that connects findings back to theory and research on environment and people in long-term care settings by first answering the three research questions. Contributions of this research projects are addressed, followed by the limitations. Research and practical implications are then described to enhance future ADS research on person-environmental fit and inform efforts to improve clients’ quality of life in ADS centers. Other supplemental materials used in this study, i.e., the detailed coding themes, observation timelines in the two ADS centers, interview questions guide, and IRB approval letter are provided in the Appendices.
CHAPTER TWO: LITERATURE REVIEW

In this section, I will first introduce Adult Day Services (ADS) programs in the United States and Taiwan as the research context. Because most of my research ideas are inspired by American journals and books, the information will help readers to understand how I construct my research ideas within the American environment. The Taiwanese information given next will be essential for my study because this type of community services for elders is relatively new for the United States but even newer for Taiwan. Finally, I will discuss my theoretical perspective using previous studies to support my plan to measure environment of and the interaction within two types of ADS centers in Taiwan.

**ADS programs in the United States**

Before introducing the U.S. ADS programs, I will first provide some census information regarding the aging population in the United States. The structure of the aging population and associated family structure reflects both a population that is living longer and one that is also experiencing low fertility. Therefore, I will discuss the changing family structure along with the aging population issue. When elders experience increased longevity, poorer health, and decreased family support they will make more demands for formal long-term care services. Thus, after I address family structure, I will turn to the increasing needs for long-term care. Then, ADS programs will be the subject of focus and I will look at the programs developed in the U.S., including models of programs, types of services, and funding resources.

**Aging Population in the United States**

The population of people age 65 and over in the United States is becoming larger. In 2000, 12.4% of the total population was 65 and over. By 2008 older adults accounted for 13% of the population (Federal Interagency Forum on Aging-Related Statistics, 2010). By 2030, this
population is projected to be twice as large as it was in 2000 and will be nearly 20% of the total U.S. population (Federal Interagency Forum on Aging-Related Statistics, 2010; Mui, 2002). Among elder Americans, the oldest old, those aged 85 years and older, is a rapidly growing group. In 1900, only 0.1% of people were aged 85 or older; however, by 2000, this group had reached 4.2% (U.S. Census, 2005). Compared with the group aged 65-75, the oldest-old people become frailer and have different needs for health care, housing, and assistance with activities in daily life. According to the Federal Interagency Forum on Aging-Related Statistics (2010), the number of people who age 65 and over and are able to perform any one of five physical functions including stooping, kneeling, reaching over the head, writing or grasping small objects, walking 2–3 blocks, and lifting 10 pounds decreases with age. That is, 34.8% of people who age 65 to 74 are unable to perform any one of five physical functions associated with self-care, whereas the percentage for people who age 85 and over is 96.3 %. As people live longer, they need more assistance with daily activities.

**Changing Family Structure in the United States**

As mentioned above, an aging society is the result of a combination of increased longevity and declining fertility. Low fertility places more pressure on a smaller pool of people to provide support for their dependents (Izuhara, 2010). This demographic change leads to a shift in family structure with more generations live at one time but with fewer individuals in any one generation and results in what is called the “beanpole family” (Bengtson, Rosenthal, & Burton, 1990; Kinsella, 1995). This means that there are more living generations in a family and fewer members in each generation. The changing family structure alters both persons’ expectations of their roles and the time spent within the family. Moreover, the increasing rates of divorce, childlessness, and persons who never marry create more single-person households, which
contribute to diminished availability of family support in later life. The beanpole family and single-person households raise important questions about the likelihood of adequate social support and the availability of family members involved in providing care for the aging population.

**Increasing Need for Long-Term Care (LTC) Services in the United States**

People may need long-term care services based on their abilities to perform activities of daily living (ADLs, e.g., bathing, grooming, shaving, dressing, eating, toileting, and transferring) and how many chronic illness they have (Lawton & Brody, 1969). Census estimates indicate that about 80% of elders in the United States live with at least one chronic, and potentially disabling, health condition; about 50% of them live with at least two chronic illnesses (He et al., 2005). Based on the Long Term Care Financing Model, the number of elders with at least one ADL limitation is projected to increase from five million in 2001 to over 11 million by 2050, and those with two or more limitations will rise from two to five million (Alexihih, 2001). The number of elders aged 85 and over needing long-term care will reach 16 million by 2020 and 24 million by 2060 (Mui, 2002), compared to the 15 million in 2000 (Federal Interagency Forum on Aging-Related Statistics, 2010). Long-term care services in the United States is provided in nursing home facilities, ADS centers, assisted living facilities, or at home with personal caregivers (Booth & Mor, 2007). According to Mui (2002), of 7.3 million elders with functional limitations, only 1.6 million live in nursing homes (just 4% of the older adult population), and 5.7 million receive long-term care services in their homes or other community residential settings.

**LTC Services in the Community**

Most American elders are taken care of by their families or friends in the community (Federal Interagency Forum on Aging-Related Statistics, 2010). Taking care of elders at home,
however, increases the stress for the family care providers (Aneshensel, Pearlin, & Schuler, 1993). Therefore, in the near future there will be more demand for community-based or in-home services to meet elders’ preferences to age in place as well as to reduce burdens on family members. Among the community-based services, ADS centers have proven to be attractive programs that benefit elders and caregivers as well as being a cost-effective alternative to nursing homes (Bilotta et al., 2010; Gaugler & Zarit, 2001; Jarrott, Zarit, Parris-Stephens, Townsend, & Green, 1999; O’Keeffe & Siebenaler, 2006; Silverstein et al., 2010).

Development of ADS Programs in the United States

The origin of ADS programs can be traced back to the early 1930s with the development of the first psychiatric day hospital in Moscow, Russia as an option for early patient discharge for an acute shortage of inpatient hospital beds (Moore, Geboy, & Weisman, 2006). That is, patients could receive necessary follow-up care during the day and return home at night. Following the Russian psychiatric day care hospital model, the British established a geriatric day hospital in the 1960s (Alkema, Wilber, & Enguidanos, 2007; Tester, 2001). Acute care patients could be discharged earlier but receive follow-up outpatient treatment. The day hospital concept was imported to the United States in the late 1960s by a British physician, Dr. Lionel Cosin, who had his psychiatric day care program in Cherry Hospital in Greensboro, North Carolina. His patients attended the day program in order to develop skills that would enable them to live independently following discharge (Moore et al., 2006; O’Keeffe & Siebenaler, 2006). The need for a more social and less medically intensive model of day care became apparent by the early 1970s. Therefore, a more social model of care for elders was offered in placed called “day centers,” facilities that provided companionship, meals, and sometimes baths, but few of the medical services that characterized the geriatric day hospitals (Moore et al., 2006). This type of
ADS center as a community service meets care partners’ needs and started to increase in the 1980s (Gaugler & Zarit, 2001).

Currently, ADS programs are designed to provide social and some health services to adults who need supervised care in a safe place outside the home during the day as well as offering caregivers respite from the demanding responsibilities of caregiving (NADSA, 2010). With the purposes of helping elders with functional limitations of living in the community as well as reducing family caregivers’ burdens, ADS programs provide a community based LTC option in the United States that has grown rapidly in the past two decades (Schmitt, Sands, Weiss, Dowling, & Covinsky, 2010). By 2010, more than 4,600 ADS centers served more than 260,000 clients (The Metlife National Study of Adult Day Services, 2010).

**Types of ADS Centers in the United States**

Generally, three models of ADS centers can be found in the United States: a social model, a medical and health model, and a specialized model (NADSA, 2010). The social model provides meals, recreation, some health-related services, and activities for cognitively and physically impaired adults. Activities include games, arts and crafts, and discussion groups (NADSA, 2010; Silverstein et al., 2010). The medical or health model provides social activities as well as more intensive health and therapeutic services such as physical therapy. Many programs combine both social and medical models (O’Keeffe & Siebenaler, 2006). The specialized model is targeted to specific groups, such as individuals with HIV/AIDS, multiple sclerosis, acquired brain injuries, or mental illness (O’Keeffe & Siebenaler, 2006). This model will not be reviewed in my study because it typically does not include many elders. According to the Metlife Market Survey of LTC costs (2010), 30% of ADS centers offer a social model of care (no nursing services furnished), 25% provide a health model (nursing services and in some
instances rehabilitation therapies furnished), and 35% combine both the social and the health models.

**Services Provided in ADS Centers in the United States**

ADS centers in the United States typically provided assistance with ADLs, therapeutic and recreational programs, and services for family (Jarrott, Zarit, Berg, & Johansson, 1998). According to O’Keeffe and Siebenaler (2006), in addition to ADL assistance and medication administration, considered key services, ADS providers view activity programs as the primary service that distinguishes ADS centers from other long-term care settings. Activity programs are designed to encourage clients to function at their highest possible levels, and most providers tailor programs for the physical and cognitive functional levels of the clients (O’Keeffe & Siebenaler, 2006). Activity programs may include physical exercise, reminiscence, intergenerational activities, cognitive stimulation, music therapy, cooking, and/or art activities (Jarrott, et al., 1998). Such activities not only help clients to maintain their physical and cognitive functioning, but also help them sleep better at night (O’Keeffe & Siebenaler, 2006). This, in turn, allows caregivers to sleep better and decreases their stress.

**Funding Support for ADS Programs in the United States**

Most ADS centers providers in the United States receive a significant percentage of their operating revenue from Medicaid home- and community-waiver programs and other public funding sources such as Veterans Affairs (VA) programs, the Social Services Block Grant, and the Older Americans Act (O’Keeffe & Siebenaler, 2006). Private long-term care insurance accounts for very little revenue in a few programs (O’Keeffe & Siebenaler, 2006). The proportion of funds from private payments varies among programs; the range is between 18% and 50% of private pay clients. The average fee for a person in an ADS program is $67 a day.
(Metlife Market Survey of LTC Costs, 2010) with programs using a medical or health model or a combination of medical and social models charging higher fees than those using a social model alone (Metlife Market Survey of LTC Costs, 2010). Most clients receiving assistance to attend ADS programs rely on one source of payment, typically Medicaid. However, Medicaid funding may not be enough to cover all costs. For example, in 2006, the statewide median cost for a combined model was $51 a day, but Medicaid paid only $36.51 a day (O’Keeffe & Siebenaler, 2006). In order to cover the gap, programs often rely on substantial fundraising, in-kind contributions, and volunteer services to survive.

**Features of ADS Centers in the United States**

O’Keeffe and Siebenaler (2006) visited ADS centers in five states and gathered information on characteristics of ADS centers, including physical settings, organizational affiliations, populations served, and clients’ functional limitations. Sites the authors visited generally provided clients with pleasant physical settings to avoid seeming like institutions. Affordability was the key in determining the quality of the structure and amenities; thus, not all programs exhibit all the features that care staff might wish to implement. In terms of organizational affiliations, ADS facilities were either freestanding entities or associated with another organization such as a hospital, an organization providing LTC services in multiple settings, a nonprofit social service agency, a regional and national advocacy organization, or a health care organization. The age of ADS clients ranged from 21 through 90; the average age was 72 (O’Keeffe & Siebenaler, 2006). Over half of the clients had dementia or extensive physical functional limitations and needed help with ADLs, such as eating, toileting, or walking. ADS features in the United States both resemble and differ from those in Taiwan in regard to
characteristics of the physical setting, the clients, and funding. The following section will describe ADS centers in Taiwan.

**ADS Programs in Taiwan**

**Aging Population in Taiwan**

Taiwan, like other developed countries, faces the demographic transition of an aging population. In 1993, people in Taiwan aged 65 and over surpassed the 7% mark set by the World Health Organization (WHO) to denote an “aged population” (Chiu, 2002). This figure increased to 8% in 2000 and 10% in 2007 as a consequence of the decreasing fertility rate and increasing longevity of elders (Hsieh, Kuo, & Hsu, 2009). The government estimated that its elder population will reach 20% by 2025, 30% by 2040, and 35.5% by 2050 (Chen, 2006; Chiu, 2002). This population, therefore, will increase from 8% to 35% in only 50 years. With a higher proportion of the population reaching advanced ages, the number of older people needing assistance with personal care and daily activities will increase. As a consequence, the burden of caring for the rapidly increasing number of elders will become a challenge to both families and the government (Chiu, 2002).

**Changing Family Structure and Cultural Norms**

Taiwan’s culture is strongly influenced by Confucianism, which stresses that everyone has to respect his or her parents and support them in their old age (Ishii-Kuntz, 1997). This cultural idea, called “filial piety,” is about repayment, family harmony, respect, obligation, and sacrifice. It is the root of all morals and a social value that has greatly influenced the care situation between parents and children (Chao & Roth, 2000). Adult children, sons in particular, are expected to provide assistance to their aging parents and to give priority to their parents’ needs over their own. Also, sons are expected to live with their parents and to provide their
financial support, whereas daughters-in-law are expected to take care of their parents-in-law and to complete the household tasks (Hsu, Lew-Ting, & Wu, 2001). Izuhara (2010) stated that co-residency among adult generations within the family is one of the significant characteristics of East Asian family support.

Taiwan, like other developed Asian countries, has experienced many social changes in the last several decades. Longer life spans, low birth rates, urbanization, and industrialization have contributed to the change of cultural norms about caring for, and relationships with, aging parents (Lin, Wang, Chen, Wu, & Portwood, 2005). Young adults love and respect their parents, but they do not consider living with their parents to be the only way to fulfill filial piety (Tsai, Chen, & Tsai, 2008). According to a survey on living arrangements conducted by the Ministry of the Interior in Taiwan, 70% of elders lived with their children in 1986, whereas only 57% did so in 2006 (Chen, 2006). Even though intergenerational living arrangements are declining in Taiwan, most elders still hope that children and parents will live together (Hsu et al., 2001). Chiu (2002) pointed out that 73% of the elders in Taiwan considered living with children as the ideal arrangement, 16% preferred to live with their spouses only, and under 3% preferred to live in residential long-term care facilities. Although elders still prefer to live with and be cared for by their children, the nuclear family structure is changing the traditional way to care for older parents. That is, adult children will not provide direct long-term or nursing care but fulfill their caring duty by emotional and financial commitment (Izuhara, 2010). Therefore, more and more elders will be sent to long-term care settings or be cared for by hired aides (Lin et al., 2005).

**LTC Services in Taiwan**

It has been a relatively short time since the long-term care services began in Taiwan. As proposed recently by the Department of Health (DOH), LTC services in Taiwan are to: (a) care
for chronically ill patients in the community after their discharge from hospitals, (b) shorten the length of hospital stays, (c) help patients adjust to daily life, and (d) use limited medical care resources more effectively for the care of patients with acute needs (Yang, 2002). LTC services are delivered through governmental agencies, charitable organizations, and other individual agencies and are mostly regulated by two systems: the health care system under the Department of Health (DOH) and the social welfare system under the Department of Social Affairs (DSA) (Chiu, 2002). The DOH is one of three Directorates General funded by the Executive Yuan, head of the DOH, responsible for all health related issues in Taiwan, such as universal health insurance, medication control, food safety issues, diseases prevention and health promotion, and supervision for all hospital facilities and other health related projects. The DSA is funded by the Ministry of the Interior, one of eight ministries under the Executive Yuan and the head of the DSA, and provides services targeting vulnerable groups, e.g., disabled people, children, women, and elders.

LTC services supervised by the DOH include institutional settings: hospital care and nursing home care and within the community: visiting nursing care and ADS centers (Chiu, 2002). The Nurses’ Law was enacted in 1991 to be the regulation for LTC services under the DOH (Chiu, 2002). LTC services under the DSA are also comprised of institutional settings and community services: institutional care like Homes for the Aged and Social Nursing Facilities; and community services like Home Care for the Chronically Disabled Aged, Home Services for the Aged, and ADS centers. The Senior Citizens Welfare Act serves as the regulations for LTC services under the DSA. With the Nurses’ Law as the foundation of regulation, DOH supervision for LTC services focuses more on the medical treatment and physical health related issues.
Compared to DOH, DSA evaluates its LTC services more on social justice issues such as elders being abused or mistreated.

Clearly, the DOH and DSA belong to different systems with different regulations that have different frameworks for evaluating services. The two systems cause confusion about providing similar services in different departments with different regulations. In order to solve the problem of the fragmentation of the LTC systems in Taiwan, since 2007 the Taiwanese government has devoted 81.736 billion New Taiwanese Dollars (equal to US$ 2.7 billion) to the project of the Ten Year Long-term Care Plan. The goal of this project is to create human-centered, diverse long-term care services to help elders age in place. The Ten Year Project mainly focuses on in-home and community-based services, and it is expected to create diverse, community-based, quality LTC systems (Ten Year Long-Term Care Project, 2007). Moreover, in January 2012, the DOH and DSA will be combined into one Department of Health and Welfare by which there will be only one version of regulations for LTC services in Taiwan to focus on both medical treatments and social services.

Increasing Need for LTC Services in Taiwan

According to The Ten Year Long-term Care Project (2007), formal long-term care services supervised by the government are available to people who are age 65 and above, live with others, and have at least one ADL limitation (native Taiwanese can start to access the services at age of 55), or who are also age 65 but live alone and have dysfunctions in all the Instrumental Activities of Daily Living (IADLs, e.g., preparing meals, taking medications, shopping for groceries, using the telephone, managing money, and doing light housework). To be eligible for subsidized money for LTC, elders must have at least one limitation from ADLs, which includes more basic self-care tasks than IADLs. Surveys measuring ADLs indicate that
5.5% of the elders in Taiwan meet this requirement (Chiu, 2002). The government estimates that in 2046, elders who have three limitations with some degree of cognitive impairment will account for 5.6% of the total population (Chou et al., 2005). The number of elders needing LTC will increase due to the increasing population of elders and associated ADL impairments. Based on the government’s Ten Year Long-term Care Project (2007), there should be 270,325 people eligible for subsidized LTC services in 2010; 327,185 in 2015; and 398,130 in 2020. Since elders prefer to live in the community with their families, and the Taiwanese government promotes community services focusing on daily activities, ADS programs will one of the ideal services to meet the needs of elders, families, and the government.

Use of ADS centers in Taiwan

ADS programs are community-based services widely promoted by the government in Taiwan; services are provided at hospital sites or in the community (Wang, Wu, & Chen, 2010). The first ADS center was established in Taiwan in 1989 (Wang et al., 2010). By 2005, there were 455 ADS centers. According to the regulations, ADS centers can either be supervised by the DSA (Department of Social Affairs) or by the DOH (Department of Health). Depending on their clients’ characteristics, ADS centers in Taiwan can be placed in one of three categories: one for clients with moderate and severe disabilities with at least three ADL limitations, one for clients with only one ADL limitation, and one for healthy elders (Ten Year Long-term Care Project, 2007). Among the 455 ADS centers in Taiwan, 7% provide care for people with at least three ADL limitations, 8% provide care for people with only one ADL limitation, and the rest are for healthy elders and function like senior centers in the United States. The last are not supervised by any government agencies (Ten Year Long-term Care Project, 2007). In 2006, the total number of ADS users was 11,427 people, but only 2,088 of them were in ADS centers that
were overseen by the Department of Social Affairs or the Department of Health (Ten Year Long-term Care Project, 2007). In this study, I will focus on the ADS centers regulated by government agencies as these serve impaired elders exclusively.

ADS programs are most frequently used by elders living with family members who need to work full-time. The clients are generally between the ages of 65 and 74 and have at least one ADL limitation or dementia (Yang, 2002). Services in ADS centers mainly include health care, cognitive and physical activities, one nutritious meal, and social interaction (Wang, et al., 2010). The regulations for ADS programs are slightly different based on the organization that is supervising them. The regulations for freestanding ADS centers located in the community and supervised by the DSA are stricter than for those at hospitals, which are supervised by the DOH. For instance, regulations for freestanding ADS centers include extra checklists for a safe environment, a requirement to provide services for clients with cognitive impairment, and a detailed list of tasks and responsibilities for staff members (Information adapted from the website of the Federation for the Welfare of the Elderly, 08.11.2010).

As mentioned above, there is an increasing need for LTC services in Taiwan; however, elders prefer to be taken care of at home by their family members. Family members might face challenges to balancing their jobs and caregiving for their old relatives and feel stressed or ignore elders’ needs. In order to relieve family members’ burdens and meet elders’ desires to aging in place, there will be an increased demand for ADS programs. The Taiwanese government has been aware of the situation of rising demand for ADS programs but providers are lacking. Therefore, in the Ten Year Long-term Care Project (2007), the Taiwanese government has set up a fund to provide subsidized money for ADS providers as well as low-income ADS users. The first step is to have at least one ADS center in those four counties where there is no ADS
program, then to provide more support for select ADS programs so that they can expand services. A third step is to subsidize ADS programs that are not qualified now to provide care for people with dementia (Ten Year Long-term Care Project, 2007). Although the Taiwanese government is ambitious in its promotion of ADS programs, there are only a few studies done for ADS in Taiwan, and most of them are master theses. This study, therefore, was designed to contribute to ADS research in Taiwan by utilizing theories and ideas from current studies related to ADS published in English language journals.

**Current Studies Related to ADS centers**

Using “adult day care” or “adult day services” as key words to search articles published in English language journals from 1995 to 2010, I first found that most research related to the outcomes of ADS use for family caregivers, particularly the effects of ADS use on caregiver strain.

Zarit, Stephens, Townsend, and Greene (1998) used a quasi-experimental design to evaluate the psychological benefits for family caregivers who were assisting relatives with dementia attending ADS programs. After three months of ADS use, caregivers had lower levels of stress and better feelings of psychological well-being when compared with caregivers not using ADS. Related analyses of data from the same study determined that ADS use could help caregivers alleviate strain, depressive symptoms, and feelings of role overload when the client attended ADS centers at least two days per week (Gaugler, Jarrott, Zarit, Stephens, Townsend, & Greene, 2003; Jarrott et al., 1999; Zarit, Parris-Stephens, Townsend, Green, & Leitsch, 1999; Zarit, et al., 1998).

Compared to the impact of ADS use on caregivers, investigations of its impact on clients are less numerous. Teresi and colleagues (1997) used data from field observations and interviews
with clients’ primary caregivers and key day care staff to examine clients’ behavior. They found that clients in ADS programs have a lower frequency of behavior disorders by comparing with previous studies of residents in nursing facilities. In addition to examining behavior, Femia, Zarit, Stephens, and Greene (2007) included reports on psychological well-being of ADS clients to determine whether they benefitted from attending ADS centers. Comparing ADS users matched with non-ADS users for two months revealed that ADS users had fewer nighttime sleep-related problems, depressive symptoms, and agitated behavior than non-ADS users (Femia et al., 2007). Other articles related to the positive effects of ADS use for clients generally showed that participating in ADS programs enhanced elders’ quality of life (Bilotta et al., 2010; Schmitt et al., 2010), fostered companionship (Tse & Howie, 2005), promoted well-being and health (Emami, Torres, Lipson, & Ekman, 2000), and provided an opportunity to socialize and maintain their functional abilities (Lu, 1997).

Among studies of the impact of ADS programs on clients, a number of researchers have focused on specific activities and their ability to positively affect social, physical, and psychological well-being of people with dementia in an ADS setting. For example, Dabelko-Schoeny, Anderson, and Spinks (2010) implemented a civic engagement intervention, which consisted of education, service, and recognition phases administered in two ADS programs. Clients involved in the intervention reported higher levels of purpose in life, self-esteem, and perceived physical health when compared with those in the control group.

Another study used semi-structured interviews to explore the positive effects on ADS clients’ mental wellness by interviewing impoverished, Mexican-American female clients (Valadez, Lumadue, Gutierrez, & Vries-Kell, 2006). Twenty-two clients were asked about their perception of how ADS had affected their lives. Analyses of the interviews revealed that ADS
activities (e.g., dances, crafts and sewing, field trips, games, and prayers and services) buffered stress related to growing old and played an important role in alleviating depression related to the dispersion of family members.

Brooker and Duce (2000) conducted their study in three ADS centers in the UK for 12 months and demonstrated that people with dementia attending reminiscence therapy experienced a greater level of relative well-being compared with non-attendees. Horticulture therapy, utilizing plant-based activities, is another programming option for dementia-care facilities. Gigliotti and Jarrott (2005) assessed the effectiveness of such activities in four ADS facilities and found that elders participating in them reported higher levels of engagement, and experienced positive effects and lower levels of non-engagement than people in traditional ADS activities.

Montessori-based activities also provide meaningful activities for people with dementia in ADS centers; the principles for this programming include using everyday materials, a progressive complexity of tasks, focusing on process, and a methodology of administrating activities (Jarrott, Gozali, & Gigliotti, 2008). Studies revealed that Montessori programming can elicit higher levels of self-engagement and positive affect on ADS clients during activities compared to traditional programming (Jarrott et al., 2008; Judge, Camp, & Orsulic-Jeras, 2000). Studies related to intergenerational programs, which involved joining two generations together for activities in ADS centers, have also shown that elders benefited from participating in these programs, such as expressing positive affect and demonstrating behavioral engagement, positive social interactions, higher self-esteem, and decreased levels of passive or withdrawal behaviors (Jarrott & Bruno, 2007; Jarrott & Bruno, 2003; Jarrott, Gigliotti, & Smock, 2006).

In addition to studies of ADS caregivers and clients, two studies investigated other aspects, such as ADS organization and administration, which are the components of the social
environments and influence the interactions between the staff and clients. Jarrott and colleagues (1998) evaluated 71 ADS programs in Sweden and 86 in the United States and identified differences in program organization and administration. That is, more free standing ADS centers were operated in the USA than in Sweden. Moreover, the American ADS programs had a lower ratio of clients to staff and more varied personnel than those in Sweden. Referring to services provided in ADS centers, there were more varied therapeutic and recreational programs and more family services found in the USA compared to Sweden (Jarrott et al., 1998). Those differences may affect clients’ experience in the ADS centers.

Another cross-national comparison was done by Weeks and Roberto (2002) who compared the structural characteristics, participant characteristics, program objectives, and policies of 47 ADS programs in Canada and in the United States. Many differences emerged between the two countries; Canadian ADS programs were commonly located in nursing homes, underutilized, run as public organizations, and had lower fees predominantly because of government funding and fewer hours of operation of compared with ADS in the US states. Those differences may also influence the interactions between staff and clients of the ADS centers.

Schmitt, Sands, Weiss, Dowling, and Covinsky (2010) designed a longitudinal study that compared newly enrolled community-dwelling clients from 16 ADS programs with non-ADS participating elders to assess the association between ADS participation and health-related quality of life. Their results demonstrated that benefits of participating in an ADS programs resulted when the centers’ social and physical environment were tailored to clients’ functional levels so that clients could comfortably meet the demands of the environment.

As described before, most ADS studies focused on how ADS programs benefited their clients and caregivers, particularly in the physical, cognitive, and psychological aspects of well-
being only by measuring individuals’ problematic behavior. Researchers may tend to have a biomedical approach to assume that the ADS users and their caregivers had some psychological and physical problems, and attending ADS centers help them reduce their problematic behavior. This kind of stereotype limited the research’s approach to those pathological behavior or specific therapeutic programs and resulted in using the same topic of ADS benefits and ignored the factor of social construction (Moore, 2004). That is, using a medical lens might lead to focus more on ADS benefits on psychological and physical wellbeing and miss other influential factors such as characteristics of ADS programs and environments, which were proved to influence clients’ quality of life in the center (Salari, 2006; Schmitt et al., 2010).

In order to fully understand the life of clients in ADS centers, there is a need to conduct a study with a broader scope by investigating not only ADS users and caregivers but also the physical and social environments wherein the clients are involved. Salari’s research (Salari, 2002; 2006; Salari & Rich, 2001) was unique in its investigation of person-environment interactions in ADS environments.

Gubrium (1978) has also studied how the environments influence persons’ interactions. Gubrium studied the behavior of people with “senility” (dementia) in one nursing home and found that the recognition of residents as “senile” was related to where assessed them:

Who or what behavior is spoken of or recorded as senile depends on place. . . . By place, I mean geographic locations in and around the nursing home that are taken for granted to have certain meanings on particular occasions when specific people are gathered there.

(p.28)

For instance, in busy hours in a nursing home where residents are predicted to develop dementia one day, staff members ignored one resident’s complaint, and this triggered the resident’s
repeated visits to the nurses’ station to complain. Staff members, therefore, may describe this resident as agitated, having something wrong with him or her, or confused, which are characteristics of dementia (Gubrium, 1978). This resident may or may not have been confused, but staff members in the nursing home are conditioned to recognize residents’ behavior with a medical model. Gubrium stated that place and environment not only organize the meaning of behavior, but are used by people to give meaning to behavior.

Moore (2004) built upon Gubrium’s idea regarding place and suggested that the shared understandings of a place are negotiated in and shaped by the social groups and rooted in a socially shared sense of the purpose of the place. Place rules, or what Lawton calls “group environment,” control and interact with human activities in the place (e.g., no smoking in the dining area). Moore (2004) conducted a study in one ADS center and found that place rules (e.g., clients have to sit in wheelchairs to go out no matter how capable they are of walking) ensured the use of the place was inexorably related to the goal of staff control, emphasizing routine, and limiting participant independence. That is, these place rules in the ADS center link human activities and the physical setting, embodying the social shared expectations for the relationship between the two (Moore, 2004).

Gubrium (1978) and Moore (2004) indicated that the place not only stands for the physical environment but includes other aspects, such as place rules and social norms. They specified that human activity is linked with the physical setting by place rules. To illustrate, the place rules of a LTC facility led staff to treat all clients as demented in a study by Gubrium (1978); however, the researcher failed to explain how staff behaviors affected clients’ reactions. In the following section, which focuses on the theoretical perspective informing this study, I mainly address Lawton’s (1980) environmental press theory and ecological model as a way to
help me investigate the physical and social environments as well as the interactions between staff and clients in two ADS centers.

**Theoretical Perspective**

In this study I am interested in exploring how infantilization reflects the ADS environments and its influences on staff and clients’ behavior. In order to do so, I used Lawton’s theory of environmental press to support my idea of examining the environment and the interactions between staff and clients in ADS programs. Lawton proposed a perspective of multidirectional influence of physical and social environment on adults with dementia. That is, Lawton’s theory provided a framework from which to not only examine the influence of physical environment on ADS clients but also investigate their behavior as functions of interactions with their environments.

**The Environmental Press Theory**

The importance of environment can be understood by Lawton’s (1980) ecological model that focuses on how the environment influences people’s behavioral outcomes, particularly those of less competent elders in a restrictive environment. According to Lawton and Nahemow (1973), “the aging process itself can be seen as one of continual adaptation: adaptation both to the external environment and to the changes in internal capabilities and functioning which take place during the life cycle” (pp.619-620). However, as people age, the demands of the environment increase and the capacity for adaptation diminishes (Cutler, 2000). That is, the less competent elders are, the more vulnerable they become to environmental influences (Lawton & Nahemow, 1973). In particular, the behavior of people with dementia may be easily influenced by their environment.
The environmental press theory focuses on personal variables (competencies), environmental variables (environmental press), and the interaction between the two variables (Lawton & Nahemow, 1973; Lichtenberg, MacNeil, & Mast, 2000). According to Lawton and Nahemow’s environmental press model (1973), individuals’ behavior is a function of their interaction with the environment, which includes the social as well as the physical environment. Five components of the environmental press model are used to explain the relationship between aging individuals and their environment. The first component is the degree of individual competence, which reflects how an individual’s cognitive ability, psychological adjustment, and physical health interact with an environment. Environmental press is the second component. Environment includes the person’s home environment, social environment, neighborhood environment, and social components like cultural norms and social relationships, which will be addressed in more detail below (Lichtenberg et al, 2000; Newcomer, Kang, LaPlante, & Kaye, 2005). Adaptive behavior (the degree to which it is present) and affective responses are the results of the individual-environment transaction and are indicated by behaviors and emotional statements or expressions (Lawton & Nahemow, 1973). The adaption level, the last component, is determined when the individual tries to function at a comfortable level to meet the demands of the environment, such as how individuals balance their abilities in response to the environmental press.

When the environmental demands exceed or fall below a person’s capability, the mismatches are recognized between an individual and his or her environment occur (Newcomer et al, 2005). That is, the challenging environment that exceeds or places no demand on an individual’s competence produces stress and inadequate performance (Cutler, 2000; Lawton & Nahemow, 1973). An example adapted from Kitwood (1997) shows how the behavior of elders
with dementia may be influenced if they are in a new environment. Bessy just moved into sheltered housing from her house and is showing early signs of memory problems. During her first few months in this new environment, she is confused and becomes aggressive. She has even become physically violent to people who came into contact with her. She refuses to be undressed for bed, and if provoked, she would strike out. However, when a new staff member at the home tries to understand Bessy’s previous life by learning about her life and treats her in a way that respects her past experiences, Bessy’s aggressive behavior decreases. Changing environment can makes people with dementia confused; Bessy may just need to be treated with some respect, to be in a supportive social environment while she adapted to her new physical environment.

An understimulating environment can cause problems for more competent people who may demonstrate maladaptive behavior similar to that of people who are overstimulated (Cutler, 2000; Lawton & Nahemow, 1973). In Salari’s (2002) study, for example, one elder without dementia in one ADS center felt that some activities were too childish for her; she refused to participate and yelled at the staff who invited her to join. This example illustrates how an elder with high competence involved in an understimulating environment with low environmental press demonstrated negative affect and reacted with maladaptive behavior.

Beyond the physical environments in which elders receive care, the staff members represent a social dimension of the environment that exerts press on clients and influence their function. Staff experiencing their work environment negatively will contribute to a negative environment for clients. For example, Kitwood (1997) investigated a residential home which had 50 residents, 60% of whom had dementia and 28% of whom had some form of physical disability. The total number of staff working directly with all of the residents was only five people. As the environmental demands exceeded what the staff could handle, the problematic
behavior of the staff became more frequent. This included ignoring residents’ requests, and expressing resentment toward residents or abandoning clients’ needs. Staff behavior itself became another environmental press for residents and influenced their ability to interact with the staff and other dimensions of their environment. Therefore, in ADS centers, clients’ behavior changes should not necessarily be perceived as pathological symptoms; they may also be related to physical as well as social dimensions of environmental press.

Lawton (1980) divided the social and the physical environment into more detailed categories: the personal, group, suprapersonal, social, and physical environment. The personal environment represents relationships with significant others such as parents, spouses, children, friends, or fellow employees who have a strong influence when they interact with the individual. Group pressure often regulates individuals’ behaviors, and persons act according to group norms that structure the group environment. This suprapersonal environment represents the characteristics of the individuals in physical proximity to the subject; this is usually expressed as the “average” or the “mode,” such as the average age of clients in one ADS centers. The social environment is a constellation of influences, such as social movement, social institutions, legal traditions, and cultural values. The physical environment is the natural or built environment. The environmental press, therefore, not only comes from the physical environment but can be derived from personal, group, or social demands. Although Lawton (1980) provided detailed descriptions of the environmental domains, the domains may overlap and be hard to separate from each other. For example, the personal environment may intertwine within a group and social environment as personal relationships are constructed within the group and social environment. In this study, I distinguished between the physical and social domains of an ADS environment. That is, I investigated the physical setting in ADS centers as the physical environment and examined the
interaction between staff and clients (including speech, behavior, and activities) as the social environment, which combines with the suprapersonal and personal environments.

**Literature on the Environment of LTC Programs**

Literature that examines the environment in ADS centers is limited; therefore, I first present studies of all LTC settings and specifically mention research done in ADS centers later. I divided the literature on LTC programs into the categories of physical environment and social environment and demonstrate how each specific environment affects individuals’ experiences.

**The physical environment.** In the United States, the physical environment of long-term care facilities have been stereotyped as sterile hospitals with sterile corridors, cold and hard surfaces of the building, and lacking privacy (Ryvicker, 2009). Moreover, the floor, wall, and ceiling materials were designed for durability and ease of maintenance, and spaces are tight with residents and equipment crowding the hallways (Boyd, 2003). A typical waking day in the life of a nursing home resident includes engaging in any type of activity for 32% of the time, either napping or sitting idle for 68%, and interacting with another person for 7% of the time (Boyd, 2003). Studies found that in a hospital- or institution-like care environment, the regulations and the focus on organizational efficiency forced staff to meet bureaucratic demands and as a result, residents’ social and emotional needs were not met (Diamond, 1992). Bureaucratic demands to which staff must respond may include keeping clients on strict schedules for eating, sleeping, bathing, and the like; restricting activities; and relegating materials to certain spaces. Such demands influence the physical and social environments in which clients receive their care.

Recently, changes have been made in some LTC facilities, such as organizing residential areas into small “households” and creating environments that appear more home-like and enhance residents’ dining experience (Rahman & Schnelle, 2008). Unlike traditional hospital-
like nursing homes, home-like nursing facilities not only provide an environment with a kitchen, dining room, and small neighborhood with room for residents to walk; they also allow residents to remain close to their rooms and staff to remain close to them (Brennan, Brancaccio, & Brecanier, 2003). Studies have shown that this kind of informal and “home-like” environment creates more opportunities for residents to preserve their sense of self, whereas a formal, “institutional” approach fosters depersonalizing practices that interfere with residents’ psychological well-being (Fagan, 2003; Thomas, 2003).

Ryvicker (2009) conducted a study in a hospital-like and a home-like nursing facility and challenged the favoring of a home-like environment as being unproblematic. While Ryvicker (2009) found that a home-like facility does provide more individual attention and warmth than a hospital-like one, the staff’s over-protectiveness also erodes residents’ autonomy in areas where they might otherwise have been able to exercise it. In other words, the staff in the home-like environment may think that taking good care of residents is accomplished by reducing the risk of falls and injury even if they do it by limiting residents’ mobility. According to the environmental press model, if residents are competent to do things but are encouraged not to do them (understimulating environment), they may demonstrate maladaptive behavior or be socialized into a passive role. In the hospital-like nursing home, administrators emphasized physical aspect of care that resulted in a medical approach to care with objectifying practices. The staff members viewed clients as bodies that needed maintenance and kept distance between themselves and residents. However, the emphasis on physical care had an unintended consequence whereby residents experienced more opportunities to engage in activities that they enjoyed before coming to the institution. Ryvicker’s study shows that the physical environment is not the only factor that influences people’s behavior, and that there is a need to be concerned with the social
environment, which includes personal relationships, institutional regulations, and social norms (Lawton, 1980).

**The social environment.** According to Goffman (1962)’s theory of a total institution, the relationship between elders and staff includes a boundary that causes staff members to be seen as supervisors who manage individuals. The boundary consists of a special way of communicating in which staff control the communication in order to distance the managed group from decision-making and raise the status of the staff. Researchers have described this means of communication between staff and elders as “elderspeak,” “babytalk,” or “infantilizing communication” (Herman & Williams, 2009; Whitbourne, Culgin, & Cassidy, 1995; Williams, Herman, Gajewski, & Wilson, 2009). According to Williams and colleges (2009), elderspeak is an intergenerational communication style that is common in interactions between staff and residents in LTC settings. Features of elderspeak include inappropriately intimate terms, collective pronoun substitutions, and shortened sentences (Herman & Williams, 2009; Williams, 2006). The inappropriately intimate terms, such as “honey,” “sweetie,” “dearie,” and “good girl” imply a parental relationship (Herman & Williams, 2009; Williams, 2006). Staff members may use plural instead of singular forms to imply that elders are unable to act independently (e.g., Williams, 2006; Williams et al., 2009). For instance, staff may talk to an individual using a collective pronoun (“Are we ready for our medicine?”) instead of using a singular form (“Are you ready for your medicine?”). Very short sentence length is a strategy to simplify speech, and simplified vocabulary and grammar are also common in elderspeak communication (Herman & Williams, 2009). For example, during lunch time, staff may direct elders by saying, “Look, Mr. Smith. Lunch time. Let us go and eat.” instead of communicating with the man in a more
respectful way: “Mr. Smith, it is lunch time. Please come with me to the dining hall to have lunch.”

In LTC settings, researchers observed that the very regulations meant to protect individuals and improve quality of care can contribute to their dehumanization (Diamond, 1992; Ryvicker, 2009). In order to follow the rules of regulation, staff in LTC facilities may treat residents as bodies that need to be cleaned, dressed, maintained, and treated rather than people who need to be cared for (Ryvicker, 2009). For instance, staff may feed elders but have no interaction with them. Moreover, staff members may move elders without any verbal acknowledgement of them and speak to other staff over elders’ heads. Elders in an environment that lacks interaction are recognized simply as objects that have to be fed or cleaned instead of people with social and emotional needs.

As mentioned above, in the total institutional setting, elderspeak or baby talk can be recognized as a way to set boundaries between staff and residents. However, this kind of communication is not about total institutionalization alone but also derives from social norms. In a society that favors productivity and achievement, elders may easily fall into the category of incompetent and be stereotyped as dependent (Kuypers & Bengtson, 1973). As younger adults interact with elders, they may over-accommodate their speech by using simplified sentences or vocabulary, high-pitched tones, exaggerated or drawn out phrasing, or child-oriented nicknames, which is like elderspeak (Salari, 2006; Whitbourne et al., 1995; Williams et al., 2009). This kind of communication reinforces the message that elders have declining capabilities, loss of control, and helplessness (Whitbourne et al., 1995). Elders may internalize the stereotype, as evidenced by decreased self-esteem and depression, a desire to withdraw from social interaction, and dependent behavior (Williams et al., 2009). Over time, elders’ adaptive behavior may actually
lead to activity that reinforces stereotypes and causes early cognitive and social decline (Whitbourne et al., 1995).

**Studies on the Environment of ADS Centers**

In this section, I will address how the physical and the social environments in ADS centers affect staff members’ and clients’ experiences, based primarily on Lyman’s (1988;1989) and Salari’s studies (Salari, 2001; 2006; Salari & Rich, 2002). I will end by arguing for a different perspective on the ADS environments.

**The physical environment in ADS centers.** As “partial institutions” where clients do not live together but go home with their families after hours, the environment in ADS centers has an important influence on both staff members and clients (Lyman, 1989; Salari & Rich, 2002). In her research on ADS programs Lyman (1989) discovered that physical environmental press influences staff behavior toward clients. That is, in an environment with architectural barriers (e.g., no wheelchair width, no continuous walkway, no wide entry door) and space limitations (e.g., no separate activity rooms that provide areas for nursing or rest, informal lounge areas, or project work areas) staff members face increased caregiving demands. Their interaction with the environment leads them to increase their control over clients, such as making decisions for them about what they should do and should not do.

When staff members take over activities clients can manage themselves, clients lose their freedom to move or make decisions and exhibit “excess disabilities” (Lyman, 1989). Moreover, some ADS facilities have been established within a school building and the setting is similar to a classroom. Salari (2001) found that a classroom-like environment encourages a teacher-student relationship between staff and clients in ADS centers. This kind of relationship also supports staff tendencies to control clients’ behavior by verbally correcting their behavior in unnecessary
interventions (i.e., as a client dunks her graham cracker in her juice, the staff corrects her by saying “Don’t put those in there. You don’t want to do that.”) (Salari, 2001). Beyond the challenges of the physical environments, the social environments also impact ADS clients’ experience.

The social environments in ADS centers. The primary goal of ADS centers is for clients to maintain competence and delay the process of being institutionalized. However, in Salari’s research (Salari, 2001; 2006; Salari & Rich, 2002), she found some environmental characteristics in ADS centers that are similar to those in Goffman’s (1962) total institutions. According to Goffman (1962), there are four features that indicate a total institutional environment. First, individuals’ lives are conducted in the same place and under the same single authority. Second, individuals are treated alike and required to do the same things with similar others. Moreover, daily activities are prearranged, tightly scheduled, and imposed on individuals by a system of explicit formal rulings. Finally, the activities are derived from a single rational plan designed to fulfill the official aims of the institution. The key factor relevant to ADS centers in Goffman’s (1962) total institution model is that individuals are asked to perform daily activities in the immediate company of similar others with few or no choices to do things on their own.

Salari (2006) examined five ADS centers in western America and found that some characteristics are comparable to those of the total institution, such as there being one single authority, clients being treated like children, and pre-arranged daily activities. In this environment, the relationship between clients and staff is constructed in the manner of bureaucratic management (Goffman, 1962). That is, every activity is controlled and regulated by staff, so clients are required to forgo their self-determination, autonomy, and freedom of action.
in order to obey the rules of the institution. Goffman (1962) called the process of losing self-control “self-mortification,” which likely involves psychological stress for the individuals. In the mortifying process, individuals have four ways to react: “situational withdrawal,” “intransigent,” “colonization,” and “conversion” (Goffman, 1962, pp. 61-63). During the process of situational withdraw, individuals withdraw apparent attention from everything except events immediately around their body and see things happened in a perspective not employed by others present. People reacting to the situation with intransigence will challenge the authority and refuse to co-operate. The reaction of colonization means that people will take outside world as a point of reference to determine how they will act. The fourth model of adaption, conversion, occurs when the individuals appear to take over others’ view of themselves and try to act in these roles to meet others’ expectations. Salari (2006; Salari & Rich, 2001) discovered that clients in an environment with child-oriented decoration and child-oriented speech and activities also acted as though they were within a self-mortifying process. Specifically, clients responded to the ADS environmental press or infantilization with adaption strategies including withdrawal, challenging, colonization, and conversion (Salari, 2002).

**Rethinking the study of the environments in ADS centers.** Salari (Salari, 2001; 2006; Salari & Rich, 2002) described her studies as bringing environmental theory into gerontological research and included an examination of environmental infantilization. Salari’s findings can be explained by Lawtons’ environment press model. The physical environment with child-oriented décor and no private space for elders to rest, and the social environments with child-oriented speech, age-inappropriate behavior, and child-like activities could be considered as inappropriate environmental press or infantilization for clients in ADS centers, which Salari associated with clients’ maladaptive behavioral and negative affective responses. Clients reacted to the ADS
environmental press differently by demonstrating different levels and types of adaptation based on their various level of competence.

Salari examined ADS environments and found that ADS physical environment as child-oriented settings and social environments as activities and speech patterns had negative influences on clients’ behavior, well-being, self-identity, relationship formation, and social interaction with others in ADS centers. However, this does not mean that all ADS centers in the United States have the same characteristics. Salari (2002) noted that ADS programs vary widely in age appropriateness, opportunities for autonomy, privacy regulations, choice, and adult interaction. In her study of five ADS centers, each center showed a different degree of child-like or total institutional environment, activities, and speech and behavior patterns (Salari, 2006). Salari (2006) focused more on the examination of the inappropriate environmental press in ADS centers and less on the appropriate environmental press or an optimal environment that could compensate for individuals’ decreasing competencies and support their well-being (Schmitt et al., 2010). Moreover, different people with different competencies may label the environmental press differently and demonstrate different levels and types of adaptation based on their various level of competence, which were not mentioned in Salari’s studies.

In this chapter, I have reviewed how population change leads to more demands on long-term care services both in the United States and Taiwan. The ADS programs, as a partial institution, represent one of the LTC systems that provide elders with a chance to continue living with their families and to join activities that promote socializing and retaining physical and mental function. ADS research has demonstrated that clients’ and family caregivers’ have physical and psychological well-being benefit from using this service. Other ADS studies have associated specific aspects of the physical or social environment with positive client outcomes.
However, Salari’s studies (Salari, 2001; 2006; Salari & Rich, 2002) demonstrated that not all ADS programs enhance clients’ well-being; rather, some diminished clients’ quality of life. Building on Lawton’s idea of person-environment linkage, Salari examined the setting, décor, and private space as the physical environments and activities and interactions between staff and clients as the social environments of ADS centers and illustrated how environments fostered infantilization, which influenced clients’ behavior, and may harm clients’ quality of life in the centers. By examining environments inclusive of the people within them, Salari (2006), therefore, could determine that infantilization represented mistreatment of ADS clients.

Salari’s approach to studying ADS environments and her research findings regarding infantilization inspired me to replicate her research in Taiwan’s popular, government-endorsed community ADS programs. However, I attempted to know more about how infantilization happened in ADS centers, particularly within the cultural context. Lawton, in his environmental press theory, identified culture as one element of social environments that supported me to explore my first research question of the influence of Taiwanese culture on infantilization in ADS centers. Moreover, utilizing Lawton’s ecological equation focusing on individual’s behavior as the function of interaction between individual’s competence and his or her environments helped me to answer my third research question. Unlike Salari, I analyzed individual’s differences and investigated the relationships between his or her abilities, environmental infantilization, and reaction to the environments. Goffman’s total institutional model was employed to interpret clients’ reaction to infantilization or other care patterns. Studies on LTC environments and Ryvicker’s (2009; 2010) findings of differential client outcomes in nursing homes possessing different physical and social environments (home-like vs. hospital-like) inspired my second research question involving clients’ experiences in two different types
of ADS centers reflecting a more home-like (social) and hospital-like (medical) setting. Lawton’s ecological equation informed my examination of the relationships between ADS environments and clients as well as the influence of environments on staff’s infantilizing behavior toward their clients.

In order to answer my research questions about the expression of infantilization in two different types of ADS centers in the context of Taiwanese culture and the relationships between ADS environments and clients or staff, ethnography is the best way to explore the cultural influence and investigate the interactions between the ADS environments and clients and staff. In the next chapter, I address how to implement my study in Taiwan, based primarily on Salari’s (Salari, 2001; 2006; Salari & Rich, 2002) process of collecting data.
CHAPTER THREE: METHODOLOGY

Philosophical Assumption

The way a person views the world influences her or his ideas about how the world functions. My worldview, social constructivism, has informed my plans for this study. Without this information, readers may not know why researchers choose qualitative, quantitative, or mixed methods to conduct their studies.

I view the world as a social constructivist and believe it is created through individual and collective actions (Charmaz, 2006; Gergen, 1985). Reality, knowledge, thought, facts, texts, selves, and so on are constructs generated by communities of like-minded peers (Bruffee, 1986). The process of understanding the world is not automatically driven by the forces of nature but is the result of an active, cooperative enterprise of people in relationships (Gergen, 1985). One’s intimate environment is not always the product of readily identifiable, visible, or objective conditions but is perceived, identified, and defined by developing shared meanings and interpretations of the issues that involve people (Taylor, 2000). Social constructionists or constructivists emphasize the individual’s definition of a situation and are concerned about how people develop meaning about their social worlds and actions in specific situations (Charmaz, 2006).

Using a constructivist perspective, a researcher will see both data and analysis as created from shared experiences and relationships among participants. According to Charmaz (2006), a constructivist approach means more than relying on participants’ views of the situation being studied but acknowledges that the interpretation depends on the researcher’s view. Therefore, different researchers looking at the same environment may have different ideas and articulate their ideas in different ways.
Applying the constructivists’ view to this ADS study, I assumed that in ADS clients experience their processes of meaning making through negotiating with people they interact with and the environment in which they are involved. Meanings, therefore, are not only made by individuals, but are also formed through interaction with others within their societal and cultural contexts (Creswell, 2009). In order to investigate the meaning making process of clients in the two ADS centers, I listened to and watched carefully what people said and did as well as examined the processes of interaction among people in the two ADS centers. I also realized that my own background shaped my interpretation, and I positioned myself in the research so that I could acknowledge how my interpretations flowed from my personal, cultural, and historical experiences (I addressed my position in detail below.) My intent in the study was to try to make sense of how others view their world and interact within them.

**Ethnography**

In order to investigate the world with constructivism’s assumptions about the meanings being constructed by human beings and arising from interactions with the human community, Crotty (1998) suggested that researchers investigate participants’ interactions with others through the data collected in the field. Ethnography, therefore, is an appropriate research tool to gather data related to interaction among participants as well as collecting rich data from interviews and field observations (Creswell, 2007). By definition, ethnography is a research method to understand the life of individuals connected through group membership (Buchbinder, Longhofer, Barrett, Lawson, & Floersch, 2006; Speziale & Carpenter, 2007). According to Hammersley and Atkinson (1995), Creswell (2007), and Fetterman (2010), an ethnographic study examines people interacting in ordinary settings; ethnographers attempt to discern patterns of interaction in a group of people. In an ethnographic study, researchers collect data through observations,
interviews, documents, and objects; however, observing and interviewing are the most popular forms of collecting data (Creswell, 2007). First hand field study or participant observation characterizes most ethnographic research (Schwandt, 2007). According to Fetterman (2010), an ethnographer interacts with the participants but maintains a professional distance to allow for her or his observations and data recording. In order to record the life of a targeted group, researchers need to have sustained participation and observation of settings (Charmaz, 2006), even if at a professional distance. That is, they participate in people’s daily lives for a period of time to watch what happens, listen to what is said, ask questions, and collect whatever data are available and related to the focus of the research (Hammersley & Atkinson, 1995). Through participant observation, researchers gain an insider’s view of the studied world.

Although working with people day in and day out for long periods of time is what gives ethnographic research its validity and vitality, Fetterman (2010) stated that ethnographic researchers in their own cultures may not require as much time to conduct their studies as those in a foreign culture. Researchers collecting data in their own country are familiar with the language and customs and are already insiders in many respects (Fetterman, 2010). While I may have faced some biases observing in my home country, which I address in the section on reflexivity, familiarity with the culture, roles, and tradition of Taiwan allowed me relative ease transitioning into the environment to collect ethnographic data through observations and interviews. In addition to the length of time involved in conducting an ethnographic study, Hammersley and Atkinson (1995) mentioned the research place. They stated that ethnographic studies normally focus on one or a small number of settings that are geographically close to where the researchers are based. In this study, I had the advantage of doing research in my own culture with the language and customs with which I am familiar. I also followed Hammersley
and Atkinson’s (1995) suggestion and chose two settings that are in the same county where I grew up. That is, I conducted my research in two ADS centers in Taipei County, Taiwan, where my hometown is located.

The length of field observations for a traditional full-scale ethnographic study varies from two months to ten years (e.g., Clair, 2006; Emami et al., 2000; Lareau, 2002; MacTavish, 2007; Magilvy & Congdon, 2000; Salari, 2001; 2006; Salari & Rich, 2002; Tzeng & Lipson, 2004; Townsend, 1996). However, according to Rossman and Rallis (2003), not everyone is available to conduct a conventional ethnography requiring an extended time of fieldwork. Patton (2002) stated that what makes an ethnographic study distinct is not the time commitment in the field or the people observed but the ethnographic means of data collection that can help researchers to gain rich, in-depth information. Nurse researchers have used “mini or focused” ethnographies lasting two weeks to six months to study a specific problem or point of interest (Coatsworth-puspoky, Forchuk, & Ward-griffin, 2006; Speziale & Carpenter, 2007). Morse (1994) described focused ethnographies as time limited exploratory studies within a fairly discrete community or organization. Focused ethnographic studies are shorter in nature in comparison to traditional ethnographic study design; however, they still provide in-depth understandings of groups and places through interviews and intensive participant observations (Roper & Shapira, 2000).

This study utilized a focused ethnographic method including techniques of observations, interviews, and the researcher’s own experience. These techniques are well suited to constructivist frameworks as they provide opportunities for researchers to try to elicit the perceptions, meanings, and experiences of participants and provide rich descriptions of them (Rossman & Rallis, 2003; Salari, 2001; Williamson, 2006). Martyn (2011) used a focused ethnographic method to conduct her study in two hair salons for a two-week period of
observation in each place. I extended Martyn’s length of field observations to three weeks at each ADS site in my study. I became culturally immersed at each site by being a volunteer in each center five days a week for a total of 45 hours per week during a one-month data collection period. Prior to becoming an active participant within each center, I observed for three days before formal data collection.

**Setting**

The setting was two different types of ADS in Taipei County. As mentioned in Chapter Two, Ryvicker’s (2009) study examined two types of nursing facilities in the United States. The “home-like” nursing facility offered elders warmth and nurturance but fostered passive and child-like interaction, whereas in the formal, medically oriented nursing facility, elders became objects of tasks and had less interaction with staff, but they may also have had more opportunities to exercise their adult identities. Therefore, I investigated the similarities and differences of the physical and social environments between two different types of ADS centers in Taiwan, one that is a social model (Center A) and one that is a medical model (Center B). Among four ADS centers in Taipei County, the two of them were selected because of their positive reputation as social and medical models of ADS centers within the community. Center A is well known for providing training for staff in other ADS centers; Center B is renowned for its cooperation with local community. Not only do these centers differ in the aspects analyzed by Ryvicker (home-like versus hospital-like), but they are operated and licensed by two different government systems in Taiwan. Center A (the home-like center) is supervised by the welfare system of the Department of Social Affairs (DSA), whereas Center B (the hospital-like center) is overseen by the health care system of the Department of Health (DOH).
Center A is a freestanding ADS affiliated with an organization providing LTC services in multiple settings. Services in Center A include lunch, morning and afternoon snack, assistance with ADLs, activities, transportation between homes and the center, and services for family caregivers, such as support groups. Center A is open from 8:00 a.m. to 5:00 p.m., Monday through Friday. Monthly fees for each participant are 500 to 600 U.S. dollars for full time enrollment. Center B was established and is run by a hospital associated with a university. Services in Center B include one lunch meal, two snack times, assistances with ADLs, activities, and transportation between homes and the center. The hours of Center B are from 8:00 a.m. to 5:00 p.m., Monday through Friday, and from 7:30 a.m. to 1:30 p.m. on Saturdays. Monthly fees for each participant are around $US 600. A more detailed description of setting, people, and schedule of the two centers is provided in the next Chapter.

Participants

The participants in this study included clients (older adults attending ADS), staff members, and volunteers. Clients in ADS centers attended the center every weekday when the field observations were conducted. Approximately 28 to 34 clients attended Center A each day and 17 to 19 clients attended Center B each day when I conducted this study. Staff members in Center A included one director, one nurse, five nurses’ aides, one social worker, two bus drivers, and one cook. Staff members in Center B were one director, one nurse, three nurse’s aides, one bus driver, and one housekeeper. There were two to three regular volunteers at Center B every weekdays, whereas no volunteers attended Center A regularly. Although there was different staffing of volunteers in the two centers, I included all volunteers in my field notes because they were part of the social environments and could have influenced clients’ behavior when the study was conducted.
**Data Collection**

I used friends, family members in Taiwan, and online resources to locate ADS programs with good reputations. Then I selected two centers that represented two different types of ADS centers to match my research design. The two centers in this study were the social model, Center A, and the medical model, Center B.

My entry in Center A was achieved by directly contacting the center director through international phone calls to explain my research goals and my intention of doing observation there. I gained verbal permission, then written confirmation, from the director to observe at the center, including our agreement that I present myself as a volunteer in Center A when I conducted research there. Meanwhile, I worked on gaining permission to conduct my research at Center B. I first contacted the research department in the hospital through international phone calls to explain my research goals and intention to do research in their ADS center. I was asked to submit a brief research proposal to gain the ADS director’s permission. My initial plan was to start my research at Center A and conclude at Center B from the beginning of January through the end of February 2011. However, the director of Center A recommended that I come to Center A in February after their annual evaluation by the DSA (Department of Social Affair). Therefore, data were collected first at Center B and then at Center A. I spent nine hours a day, five days a week at each site for one month each, resulting in a total number of 270 hours of observations, including recording field notes.

After approval from the Institutional Review Board (IRB) at Virginia Tech, I contacted the two centers again to make an appointment with the two directors. I had an informal visit at the two centers before I officially started my research there. On the first day in each center, I was introduced by the director to other staff members as a doctoral student from the United States.
The director announced my role to clients as that of volunteer and asked me to briefly introduce myself to them by providing information about my study. On the following two days, I did not take any field notes but tried to become accustomed to the environment and become familiar with others in the center. During the remaining days, I was involved in extensive observations and produced detailed field notes, including a description of nonverbal and verbal communications; a map of the center; and descriptions of the décor, activities, interactions of staff and services users, and other items (e.g., outdoor areas, private conversation, solitary pursuits) (Salari & Rich, 2001). I also gained permission to take photos of the physical space of ADS centers without people present.

With the role of volunteer at the research sites, I collected data through participant observation in each center from 8:00 a.m. to 5:00 p.m., Monday through Friday during my time at each center. In order to have enough time for field notes, I requested that the center directors allow me at least a 20-minute break after each activity to write my notes. In order to avoid excess attention from clients and staff, I wrote my field notes in English instead of Chinese. My schedule in each center was to arrive at 8:00 a.m. when I helped with activities until noon with two note-taking breaks. During rest time, I had my lunch or conducted interviews with clients and staff in a separate room in the center. After the rest period, I continued facilitating activities until 5:00 p.m. with another two breaks for recording notes. After 5:00 p.m., I conducted more interviews with staff. My daily schedule in each center can be found in Appendix B.

Observations

Following Salari’s studies, I examined both the physical and social environment in the two Centers. Physical environmental observations included information about the setting, décor, and private space (e.g., private restrooms and a space for clients to converse or rest). The setting
was evaluated regarding whether it provided a classroom-like, hospital-like, or home-like environment. According to Salari and Rich (2001), a classroom-like setting included white boards, bulletin boards, chairs arranged in a circle or around tables, and client restrooms separate from staff restrooms. A classroom setting would foster teacher-student relationships and increase infantilization in ADS centers (Salari & Rich, 2001). A hospital-like setting was expected to support an environment resembling a hospital ward with a check-in station, a station to be used only by the nurses, staff wearing nurses’ uniforms, and a sterile smell. The home-like environment normally would include a separate dining room, perhaps with an adjoining, open kitchen, and a spacious living room with a television and some couches or comfortable chairs (Salari & Rich, 2001). I also evaluated the décor in both centers to see whether it was child-oriented or adult-oriented. According to Salari (2001), a child-like décor may include decorations on the walls with holiday or seasonal themes, and there might be dolls and toys in that environment. Adult-oriented decorations may include pictures or posters that one would find in a person’s home that reflect individuals’ tastes and life experiences. I checked the space for private places for elders to converse or rest safely and restrooms with doors that shut no matter whether staff members were helping clients or not.

For the social environmental observations, I continued following Salari and Rich’s (2001) methodology to record and study client-to-staff, staff-to-client, client-to-client, and staff-to-staff interactions targeting verbal communications, behavior, and activities. The investigation of communication followed Salari’s (2006) approach by focusing on whether there was: (a) child-oriented speech, such as baby-talk, (b) simplified content, which may include short sentences and simplified vocabulary, when it represents low press given the participant’s abilities, (c) inappropriate verbal intimacy, and (d) childish nicknames. Moreover, Chuang (2005)
demonstrated that in Taiwan repeating words, a typical feature of how a mother would talk to her baby, can be recognized as baby talk or infantilized speech. For example, instead of referring to a dog as “gou,” in baby talk it will be called “gou gou,” and similarly, “che” for car will become “che che,” and “chifan” (to eat rice) will be replaced by “chi fan fan” (Chuang, 2005). I added the reduplicating words as one of my foci when I observed the communication between staff and clients in the two settings. My focus on behavior was similar to Salari’s (Salari, 2001; 2006; Salari & Rich, 2002) studies in which inappropriate actions are noted, such as the staff giving exaggerated hugs, tapping on the clients’ heads, interrupting clients’ sleeping and forcing them to join activities, discouraging clients from making choices, disclosing clients’ diagnoses, reprimanding or threatening clients, and confining clients. I recorded whether there were learning-based infantilizing activities such as chanting of the alphabet, answering elementary questions, and doing child-like exercises, games, or stories (Salari, 2002; 2006; Salari & Rich, 2001). Although infantilization has been identified in ADS centers in the United States, there might be other forms of negative and positive interactions between staff members and clients in ADS centers in Taiwan. In order to obtain the holistic experiences of clients in the two different ADS settings in Taiwan, I not only looked for whether there was an infantilized environment and interaction but was open to new and positive experiences.

To examine how the physical and social environments influenced clients in ADS centers, I also observed how clients reacted to infantilization and how staff reacted to clients’ reactions. My field notes helped me to record detailed interaction. I also kept a field diary as an audit trail to chronicle my own thinking, feelings, experiences, and perceptions throughout the research process. Additionally, I also used a digital voice recorder to record the phenomena that I observed when I was not able to write them down in detail immediately.
Interviews

In addition to observations, I conducted interviews with clients, staff, and volunteers in each center (see Appendix C for the interview guide for clients and staff). Following Salari’s (2001) model, I chose interviewees based on my observations and judgment. For the clients, those who had been attending the center for at least six weeks were selected. They were fluent in Mandarin Chinese, able to hold coherent conversations (I judged this characteristic with the staff members’ input), and capable of indicating willingness to participate by completing a consent form. I only could conduct four client interviewees, two males and two females, in Center B due to my criteria that the client be able to hold a coherent conversation. In order to conduct the same numbers of interviews at both centers, I also conducted four interviews with two male and two female clients in Center A, where I next gathered data. Interviews with clients included open-ended, semi-structured questionnaires that asked for their thoughts about their lives in the center, feelings about the activities, circumstances surrounding their attendance, friendships, and relationships with staff (Salari, 2006).

Salari (2002; 2006) only conducted interviews with ADS clients; however, the staff’s opinions about the center provided another crucial piece of information to examine the ADS environments. That is, within the social environments of ADS centers, staff members play important roles as they interact with clients and influence their behaviors. In Ryvicker’s (2009) study comparing a medical model with a home-like model in nursing facilities, administrators’ primary concerns led to different choices about ways to deliver care and create different social environments. For instance, if an administrator’s priority is on professional accountability, there will be a more hospital-like environment concerning care delivery in the facility. But, if the director prefers to emphasize meeting the psychological needs of residents and their family
caregivers, a family-like environment will be created. Therefore, I interviewed the directors of the two ADS centers to explore their approaches to care in relationship to the environment and interactions within the center.

Previous studies have shown how front line staff members play important roles in elders’ well-being (Diamond, 1992; Jarrott & Gigliotti, 2011; Lyman, 1989; Ryvicker, 2009; Williams, 2006). Thus, I interviewed nurses, nurse’s aides, a social worker, a housekeeper, and a volunteer as interviewees who were fluent in Mandarin Chinese and had worked at center for at least one month. Staff interview questions focused on respondents’ perceptions of clients in ADS centers, how they see their own roles in ADS centers, and what they think about ADS centers in general.

All interviews (eight clients interviews and 15 staff interviews) took place in two centers on the second and third weeks in the morning before first morning activities for clients and at the end of day for staff. Each interview was conducted in private, away from other staff, clients, and volunteers. Interviews were recorded and lasted approximately 40-90 minutes. I conducted interviews in Mandarin Chinese, transcribed them into Mandarin Chinese, and then translated them into English.

**Reflexivity of the Researcher**

In qualitative research, researchers themselves are the main instruments or research tools; the data are collected and analyzed by them. However, researchers’ opinions are influenced by age, gender, race, class, nationality, institutional affiliation, historical personal circumstances, and intellectual predispositions (Chiseri-Strater, 1996). Thus, it is necessary to identify researchers’ personal values and assumptions (Creswell, 2007) when reviewing their research findings. Researchers strive to be self-conscious of how they position themselves in their roles as pertains to their construction of knowledge. Knowing this position, readers can better understand
the perspectives from which the research was conducted (Hein, 2004). The importance of understanding a researcher’s “situation” (her or his gender, class, ethnicity, etc.) is not so that “bias” or “distortion” can be removed but to highlight the researcher’s part in interpreting the research product and how that contributes to the understanding of the phenomenon that emerges from the research (Angrosino, 2005; Creswell, 2007). In the following paragraphs, I discuss various aspects of my positions and beliefs as they are related to this research.

I am a 31-year-old female international student born in Taiwan. My perceptions of environment and staff-client interactions in ADS centers were shaped by my experiences in the United States, my cultural background of Confucianism, and my gender identity. All of these created different degrees of influence depending on how I positioned myself.

My personal experiences in the United States might have influenced my observations of the environment and interaction with clients in ADS centers in Taiwan. First, as an international student from Taiwan, I believed that my role was to learn new things in the United States and take them back home later. I could come to subconsciously see what I learned in the United States as having a higher value than what I learned in Taiwan. Thus, I might use ADS programs in the United States as a standard by which I examine the environment of and interactions in ADS in Taiwan. Since August 2009, I have served as a graduate assistant in the ADS center at Virginia Tech. Occupying this role, I was involved in all kinds of activities and worked closely with staff here. I have been exposed to the ADS environment 10 hours a week for more than 12 months. Without any previous work experience in ADS centers in Taiwan or the United States, I followed the staff’s instructions and judged everything that happened in the center as acceptable and reasonable.
When reading ADS or other LTC services research conducted in the United States, there were some things that I believed were true about ADS. I first believed that something was wrong with ADS in general. In literature, researchers have indicated that institutionalized elders in the United States have a poor quality of life, low self-esteem, and a negative self-concept (Antonelli et al., 2000; Kane, 2001). From those readings, I assumed that elders are mistreated in institutions. Researchers claimed that the unfavorable psychological symptoms occurred because of institutional life itself. Institutional regulations focused on efficiency lead to treating residents as objects instead of individuals (Ryvicker, 2009). Studies from the United States also indicated that the institutional characteristics of ADS centers demonstrated infantilization (Lyman, 1988; Salari, 2001; 2006; Salari & Rich, 2002). Therefore, I believed that elders are treated indifferently or like children or are mistreated in other ways in ADS centers in Taiwan.

With the experience of working in ADS centers at Virginia Tech and reading articles based on research performed in the United States, I initially judged the two ADS centers in Taiwan with the standard of the ADS center at Virginia Tech, even though the two sites have highly regarded reputations within their communities. Moreover, I focused more on negative occurrences and paid less attention to positive things occurring in the centers during the first week. However, after three weeks of intensively working in the environment of two centers in Taiwan, I adapted to their culture with less of the American model in mind until I came back to the U.S. to analyze my data. My focus on negative interaction shifted when I got close to staff and had more informal conversations with them, which helped me acknowledge the constraints and advantages of ADS programs, which may facilitate or deter infantilization happening in the center.
When I was in Taiwan, the influence of my cultural background became obvious to me. Growing up in Taiwan, I learned Confucianism in middle and high school and was taught to respect elders. Unlike Western society, elders in Taiwanese culture were represented as possessing wisdom and authority. That is, elders’ wisdom comes from their life-long experience, and their authority is derived from Confucianism’s focus on hierarchical relationship, which lifts elders’ status higher than that of young people and favors males more than females. Immersed within the Confucian society, I was taught to respect elders by not using their full names, not interrupting their talking, not arguing with their statements, not rebelling against their demands, and not criticizing their behavior in front of them. I believed that people in Taiwan are influenced by Confucianism and know how to show respect to elders. I also assumed that I would see less infantilization in ADS centers in Taiwan because of Confucian traditions. However, the first week at Center B became a new lesson for me. I frequently witnessed staff scolding elders with a loud voice and resentful face or forcing them to do something without asking their preferences. Clients’ reactions surprised me more; they did not respond with anger or sadness but showed no response or smiled back. Being well-trained in Confucianism, I had no second thought but viewed this interaction as absolute mistreatment or abuse. However, after two weeks of volunteering in Center B, I gradually sympathized with the staff about their long working hours, and I acclimated to the staff-client interaction at Center B. I still believed that it was important to treat clients with respect and still recognized the reprimands in Center B as infantilization but became less surprised about the incidents that happened at the center. That is, at the beginning, I saw that clients in Center B needed to receive the same respect as other elders outside of the center. While working there as a staff volunteer for three weeks, my views changed. I adopted other staff members’ viewpoints to see clients more like patients who needed
other people’s help; I even learned from the staff to put clients’ food in their bowls to have them eat more, which would be considered infantilization.

In addition to cultural backgrounds, my gender identity also guides how I interact with others and influences my perceptions of social norms (Calasanti & Slevin, 2001). As a woman, my gender identity influenced my assessment of whether ADS provides an appropriate environment for elders. Within a traditional Taiwanese family, old men obtain absolute power over other family members, and the power passes down to young men, then old women, and finally young women. As a young woman in Taiwan, I usually distance myself, emotionally and physically, from old men to show my respect. But my relationships with old women show emotional and physical closeness; I share difficulties with them and ask their help. In other words, I have two different ways of behaving to show my respect to elders based on their gender differences. That is, I bow to old men and remain standing even after they sit down, but I sit close to old women either arm-in-arm or hand-in-hand with them. As a female looking at female staff interacting with clients, I was comforted to see staff provide care for female clients through intimacy, emotional expression, and demonstrating a way of nurturing such as holding their hands, calling them “good girls,” or giving them excessive hugs. However, I was not used to seeing male clients being treated the same way as female clients and labeled the same interaction with male clients as infantilization. When I conduct this study in each center, I kept reminding myself to maintain a neutral role and recognize the same interaction as infantilization for both female and male clients.

As a qualitative researcher, I recognize how important my positions and beliefs described above are, and I acknowledge that they affect my research. According to Rossman and Rallis (2002), unlike allegedly objective social scientists, qualitative researchers value their unique
perspective as a source of understanding rather than something to be cleansed from the study. As described above, my position changed, modified, and refined when I was in the field. That is, after the intensive working hours in the field, I adapted to the environment of each center and viewed clients with a staff’s perspective. However, the transformation of my position was also involved in and influenced the next step—data analysis (Rossman & Rallis, 2002).

Data Analysis

Wolcott (1994) suggested three aspects of data analysis: description, analysis, and interpretation. In description, researchers are storytellers who invite readers to see through their eyes by presenting straightforward descriptions of the settings or events (Wolcott, 1994). Researchers may give information in chronological order or focus on a critical or key event by examining groups in interaction, followed by describing a framework or different perspective through the eyes of participants (Creswell, 2007). Analysis is a sorting procedure used to highlight specific materials and display them through tables, charts, diagrams, and figures (Wolcott, 1994). Schatzman and Strauss (1973) contended that qualitative data analysis should be used to classify things, persons, and events, and the properties that characterize them. The most popular analysis procedure is to search for patterns in the data (Creswell, 2007). In interpretation, researchers may connect data with theories to provide structure for their interpretations.

The analytic process for an ethnographic study emphasizes the description and analysis of the specific and particular aspects of a social setting. An ethnographic analysis involves providing detailed accounts of when, where, and how events occur in a situation (Daly, 2007). Through the interpretation of “what is going on,” researchers may find key events to be analyzed
for meaning, behavioral patterns to compare by observing participants in the setting, and space and time in which events or behaviors occur (Daly, 2007).

The process of analysis started when my observations and interviews concluded, and I immersed myself in the data and repeatedly sorted and coded descriptions. While transcribing, word-by-word, 30 days of field notes, and 24 interviews, I began to review the first completed transcriptions of field notes at Center B using line-by-line coding to summarize each line or sentence in the transcriptions (Charmaz, 2006). Although coding every line, as suggested by Charmaz (2006), works particularly well with data in an ethnographic study, I was confused and got lost by the line-by-line codes, which were not connected to each other. As I discussed the coding process with my committee members, chair, and one peer, their suggestion was to utilize my theoretical framework to organize my rich data. Therefore, I went back to reread my theoretical framework and Salari’s studies (Salari, 2002; 2006; Salari & Rich, 2001) to identify six sensitizing concepts (e.g., clients’ competencies, physical environment, social environment, place rules, clients’ reaction, and staff’s behavior toward clients’ reaction) for categorizing my data. By following those concepts from the theory and literature, I re-coded the transcriptions of Center B’s field notes and had themes and subthemes emerge from the data that could be matched with those concepts. For instance, infantilizing behavior and speech is one of the themes under the sensitizing concept of social environment. Under the theme of infantilizing behavior and speech, six subthemes emerged from the data of Center B that represented as infantilizing behavior and speech (See Appendix A for the final coding scheme). In order to organize my coding data, I utilized NVivo 8, a software program for qualitative analysis, to facilitate data coding. I combined themes and subthemes from field notes and interviews of Center B to code Center A’s field notes and interview transcripts. Some subthemes from Center
B were not evident in Center A; additionally, some new themes emerged from Center A data. This intensive coding process helped me to organize, integrate, and synthesize my data from concepts to theme and subtheme coding (Morrow & Smith, 1995).

**Verification**

To enhance the trustworthiness of this study, I employed a variety of strategies to demonstrate the rigor of this research (Schwandt, 2007). First is the triangulation of methods, which is the use of multiple sources of information as a way to understand more completely the social situation at hand (Daly, 2007). My sources of information included field observations, interviews with staff and clients, informal conversations with staff and clients, and documents of clients’ assessment records. Using methodological triangulation helped me to cross-check my results and analyze them from more than one standpoint in order to give a more detailed and balanced picture of the situation (Altrichter, Feldman, Posch, & Somekh, 2008; O'Donoghue & Punch, 2003). Through the process of triangulation, I increased the range of voices and experiences brought to the data collection effort and, as a result, ensure the credibility of the data (Daly, 2007).

An audit trail was also used to manage records and stimulate reflexivity about procedures and my modified and refined position. A third-party examiner can use my audit trail to attest to my procedures of data collection and analysis to confirm or question my findings (Schwandt, 2007). Using an audit trail to record every step of this study helped me to maintain documentation systematically. The audit trail included a chronological narrative of every research activity from the beginning of the development of my ideas, concepts, and presumptions about the topic before entering the settings. It detailed the process of entry into the ADS centers, doing observations, writing field notes, conducting interviews, writing transcriptions of
interviews and field notes, coding, and evaluating patterns from data (Morrow & Smith, 1995; Schwandt, 2007).

Using detailed descriptions to convey my findings was my third strategy. When researchers provide detailed descriptions of settings, the results are richer (Creswell, 2007). A rich description comes from intensive and sustained observation at the research site. Visiting two centers five times a week across six weeks for a total of 270 hours provided me with information on the environment needed to understand what happened during business hours in the two months.

Assessing accuracy of the logical process of the inquiry, that is the specification and use of codes, was also achieved through ongoing consultation with my chair who served as an expert examiner to check my coding process. Moreover, I consulted with other graduate students from the same department with a similar cultural background as peer examiners (Schwandt, 2007). According to Creswell (2009), this did not mean that I gave them the raw transcriptions to check for accuracy; instead, I showed them polished products, such as themes with illustrative quotes. Their feedback helped me reduce the weakness or intrinsic biases and the problems that come from a single researcher and provided me with new perspectives that I failed to consider as I worked on data analysis.

The last strategy was to engage in self-reflection. Reflexivity was a means for me to critically inspect the entire research process, including reflecting on the ways in which I established a social network of participants in this study, examining my personal and theoretical commitments to see how they serve as resources for generating particular data, and developing particular interpretations (Schwandt, 2007). This process made me more confident that the data and their interpretations were not merely figments of my imagination (Schwandt, 2007).
CHAPTER FOUR: RESULTS

In this chapter, I first provide a snap shot of each center by describing basic information about the physical environment, people, and schedule of the organization. Keeping in mind my theoretical framework, I triangulated my data and organized them within themes of Lawton’s ecological equation of \( B = f(P, E, P \times E) \) to detect whether and how infantilization was expressed, and how the clients reacted to care patterns in those two centers. As described in Chapter One, \( P \) equals the clients’ competence; \( E \) refers to the physical and social environments, such as decoration appealing to adults (physical environment) or staff’s infantilizing behavior (social environment); \( P \times E \) reflects the place rules, such as regulations or activities at the two centers; \( B \) represents clients and staff’s responses to the environments and place rules.

Description of the Two Centers

Center A: Social Model

Physical environment. Center A is on the second floor of a four-floor building that used to be a City Hall. It is located on a four-lane street with moderate traffic and few parking spaces. The area was traditionally a working class neighborhood for immigrants from outside Taipei County. A park next to Center A provides a safe environment for clients to walk in and interact with people.

Center A’s environment was originally designed and built for people with dementia to elicit a sense of their past. That is, the entire setting created an atmosphere of a more old-fashioned Taiwanese living space, which fit the life experiences of elderly people who are now in their 70s to 90s. From the main entrance to the restrooms and from the décor in the living room to the cabinets in the dining room, all were thus designed within a reminiscent orientation, similar to a 1960s and 1970s’ Taiwanese home or community. Center A (see Figure 1) had six
main social spaces for activities: a living room, a meeting room, a temple area, a tea shop, a sensory room, and a dining room.

![Floor Plan of Center A](image)

*Figure 1: The floor plan of Center A*

Before entering Center A, there is a small indoor patio with a fake pond, one stone table, and some stone chairs. A wooden cabinet is placed close to the main entrance of the patio where clients can leave their personal belongings. There are two doors designed for security, where the main entrance has lock codes that a person must enter to get in and out of the facility, and a gate door for the patio that has a secure lock. One office outside of Center A is for the director and social worker.

Inside of Center A (see Figure 2), the nurse’s station just off the main entrance was designed to serve as a Chinese medicine store. Across a hallway from the nurse’s station, the living room has old-style, cushioned bamboo chairs lined up against the walls and cabinet backs, and one old-fashioned TV in the front on a stand, against vintage décor. Clients (see Figure 3) sit
in the living room at unscheduled times and for weekly karaoke. The dining room, next to the living room, has four big round tables and several bamboo chairs with arms. The room (see Figure 4) is used not only for meals, but as a place for cooking activities. Just off the dining room, the kitchen has a brick countertop and a fake stove of a dated design. The staff members prepare food for clients in the kitchen with a portable stove (the director stated that safety regulations of the physical setting in ADS centers prohibit a real built-in kitchen).

*Figure 2: The nurse’s station of Center A*

*Figure 3: The living room of Center A*

*Figure 4: The dining room and kitchen of Center A*

*Figure 5: The tea shop of Center A*
Next to the nurse’s station is a tea shop with two bamboo tables and eight bamboo chairs used for small group activities (see Figure 5). The decoration here reflects the prominence of tea culture in Taiwan, where different styles of tea pots are displayed on a rack. Adjacent to the tea shop there is an old-fashioned drug store, mainly used by the staff to place their belongings during activities. A mini-Buddhist temple was built inside of Center A (see figure 6), and the temple area in front can be used either for small or large group activity. The restroom area (see figure 7) next to the temple has double-side lockable wooden doors and bidet toilets, and is used by both clients and staff. The reason for placing the restroom next to the temple is to help the clients to remember the location of the restroom, as in Taiwan, this is the usual custom. The meeting room and the sensory room are the only two areas that have a modern design. The meeting room (see Figure 8) is on the end of the dining room, used mostly by the moderately demented group for orientation training activities. The meeting room also serves as another exit for Center A, where its secure door connects to the outside. The clients assigned to go home with the first ride are brought out from the room in order to calm other clients down who sit in the living room to wait for their ride.
The sensory room (see Figure 9), mostly used by the people with severe dementia, has a secured door to confine clients throughout their activities. It has a couple of modern sofa chairs, one flat-screen TV, one massage chair, and some sensory equipment (such as a wall of small
colorful therapeutic lights). This room is also called “upstairs,” and served as the stage when it was City Hall. One smaller room inside the sensory room is the only place where clients can lie down on the beds for PT or naps.

**People.** There were between 28 and 34 clients in Center A when this study was conducted. Most of the clients attended the center every weekday, and five or so came two to three times a week. The female clients were the majority, accounting for 65% of the total group. The average age of clients in Center A was 80. Center A is designed specifically for people with varying degrees of dementia, wherein 33% had mild dementia, 56% had moderate dementia, and 11% had severe dementia. Only one female client was disabled and wheelchair bound, and most others were mobile by using a walker and/or with staff supervision. More than half of the clients were widows or widowers and lived with their adult children, particularly their sons. The majority (68%) spoke Taiwanese most of the time in the Center, although some of them (15%) liked to communicate with each other in Japanese. Half had obtained an elementary school degree or never went to school, whereas others had high school or college education.

Including both full- and part-time staff, there were 11 employees in Center A: one director, one social worker, one nurse, one cook, two bus drivers, and five nurse’s aides. These five aides, in their 40s or 50s, were normally on duty every day with two different shifts, and worked nine hours a day in the center with no break. They had obtained a high school or college degree in business, were stay-at-home mothers before working here, and had no prior gerontological education or experience in physical care for elders. After working in the Center, however, all of them attended several different training classes or voluntarily read related books to enhance their elder care abilities. One of the aides, who had a background of taking care of
children, mentioned using the same activities for children as the clients in the center. The average working period among employees was two years.

The nurse, in her 30s, mostly stayed in the nurse’s station working on her record keeping or contacting clients’ families. She sometimes helped lead activities with the aides. Due to her office being outside of the Center (in a room shared by the director), the social worker, in her 20s, was usually busy in her office and inside the Center she scheduled and supervised all daily activities, including contacting volunteers and conducting visitor introductions. During the summer and winter break, she was also a supervisor for the Center’s nursing school’s interns.

The director, in her 50s, has a social work background and worked in a nursing facility for 10 years. She had been in her position since the Center opened in 2005. Normally, the director came in the Center every morning to greet clients, and occasionally assisted the staff in cooking or joined the clients for lunch in the dining room. The two bus drivers and one cook were part-time staff who appeared in the Center at certain times, such as before and after lunch or in the afternoon to drive clients home.

Because none of the clients and staff wore uniforms or name tags in Center A, it may be difficult for visitors to distinguish between clients and staff members, unless one considered their different ages. During morning group activities, however, the aides prepared a name card for each client to assist with introductions. Using a custom that shows respect for elders, clients were generally called by their first name with “grandpa/ma” or “uncle/aunty” preceding it, where those younger than 70 were referred to as uncle or aunty.

**Schedule in Center A.** Before 9:00 a.m. daily, staff members greeted clients with warm water and gave some their medication. Between 9:00 a.m. and 9:40 a.m., the staff took the blood pressure of every client, while those waiting or finished with their blood pressure check used
pedal machines in the temple area. After 9:40 a.m. an hour-long orientation activity of staff reading newspapers or discussing current events with clients helped train or maintain their cognitive functions. Clients were arranged into three different groups of mild, moderate, and severe dementia for the orientation activity followed by a 20-minute restroom break and snack, usually a cookie and cup of warm tea. Every Monday to Wednesday from 11:00 a.m. to 12:00 p.m. a second morning group activity was added.

Different types of activities are hosted on scheduled days for people at different levels of dementia. Reminiscence was for people with mild dementia, sensory activities (such as listening or visual stimulation) were for people with moderate dementia, and speaking training was for people with severe dementia. While the aides and clients had lunch together every day, each Thursday morning they prepared their lunches together, an activity called “happy lunch.” Clients were assigned to do various tasks, including rinsing vegetables, cutting meats, or preparing ingredients depending on their physical and cognitive abilities. On Friday mornings, the “clean-up and make-up” activity required that male clients shave their beard and female clients trim their fingernails. The clients were also grouped for this activity based on their cognitive functions (group one for the males with mild dementia, group two for females with mild dementia, group three for those with moderate dementia, and group four those with severe dementia).

Lunch was served at noon with plates brought from the clients’ homes, a practice identified by one staff member as a way to create a home-like eating environment that could increase the clients’ appetite. The clients who were able to eat lunch by themselves stayed in the dining room, whereas the clients who needed staff supervision or assistance for lunch stayed in the temple area or tea shop. Clients took an hour nap after lunch, when aides used the time to do
their paper work or have staff meetings. As there are only two beds in Center A, most clients took their naps while sitting on bamboo chairs in the living room. While the staff invited clients who liked to take naps in the sensory room on a rotating basis, one male client with mild dementia normally stayed in the meeting room alone for his naps.

Activities in the afternoon, from 2:00 p.m. to 3:00 p.m. were more flexible and varied. Preceded by another snack period, these events may include a therapeutic physical therapy class, a birthday celebration, cooking for afternoon snacks, singing karaoke, or outings such as bowling or visits to flower exhibitions or folk museums. After 3:30 p.m., some clients prepared to go home, and others listened to music or watched movies in the living room. By 5:00 p.m., all clients had left for home, and half of the staff stayed in the Center for cleaning.

Center B: Medical Model

**Physical environment.** Center B is located on the first floor of a two-floor building within one hospital facility in north Taiwan. One side of Center B faces a two-lane street with low traffic and no parking spaces, and the other side faces a garden connected to other buildings within the hospital. Across the street is a two-floor hospice facility. There is an elementary school and a small park within a five-minute walking distance. The neighborhood is pedestrian-friendly and has a covered sidewalk.

Center B, originally designed for an emergency room (ER), now uses its second floor for a nursing home. Figure 10 provides a schematic of Center B’s physical space. Among the three doors that connect to the outside, the main entrance faces the street, and has a small lock to prevent the clients from leaving. The second door, which a lock opens automatically when a code is entered, leads to a small garden within the hospital. Staff and those bringing meals enter and clients going to PT exit through this door. These two doors face each other, while the third
door, located in one of the Center’s corners, has another automatic door with codes that is connected to the ER. On rainy days, clients exit for PT through this door.

As Center B was designed for an ER, the whole environment has the appearance of a hospital, with white walls, green curtains, beds covered with hospital sheets and quilts, and staff who wear white uniforms. Center B had three main social spaces: a living room, a dining room, and a lobby, where most activities take place in the living and dining rooms.

![Floor plan of Center B](image)

*Figure 10: The floor plan of Center B*

The nurse’s station, adjacent to the second door (see Figure 11), has a hanging board that identifies the room’s function. Clients are forbidden to go inside the nurse’s station, and its door is closed at all times. Between the main entrance and the nurse’s station, the lobby (see Figure 12) contains red sofa chairs lined up against the wall. The clients stay here when waiting to go home. The dining room (see Figure 13), separated from the lobby by a wall, has one space with a big square table for eight people and another two small square tables for five people. A CD player on one of the small tables is used by staff to play older songs. There are three big picture
windows in the dining room not covered with green curtains, so clients can look to the street. A small kitchen inside the dining room is mostly used by the nurse’s aides. The staff’s restroom, next to the kitchen, is also locked at all times. Clients’ restrooms (see Figure 14), separated from that of the staff, include three toilets, where two are located in the rest area, a small space with plastic shutters as its doors, and the other larger restroom is near the third door. The environment of all these restrooms is dark and humid, with some level of mold. The living room (see Figure 15), in the middle of Center B, has red chairs with metal arms placed at the back, and a TV and stand in the front of the room, where a hallway between these leads to the rest area. The windows in the living room are covered by green curtains, shutting out sunlight. Just off the living room, the rest area (see figure 16) contains eight beds for the clients to use during nap time. Because clients have to pay extra fees to take naps on these beds, only three clients at the time of this study used them. Per Center A, most clients took their naps sitting on living room or lobby chairs.
**Figure 11:** The nurse’s station of Center B  
**Figure 12:** The lobby of Center B

**Figure 13:** The dining room of Center B  
**Figure 14:** The restroom of Center B
Center B does not have cabinets for clients to place their personal belongings, so the staff stack clients’ bags and jackets on a cart in the nurse’s station. If staff members need the cart for other purposes, they leave the clients’ possessions on the floor.

**People.** There were between 17 and 19 clients who attended Center B daily during the time of this study. The number of female and male clients was almost even in Center B, where 58% were female and 42% were male. The average age of the clients in Center B was 80. The clients in Center B can be divided into three groups, where about half had cognitive impairment (52%), a minority had physical impairment (17%), and about one third had both cognitive and physical impairment (31%). Five of the clients (two males and three females) were disabled users of wheelchairs and needed staff assistance to use the restroom. Three of the clients with severe dementia needed the staff to feed them. Nine were able to walk by themselves and used the restroom without supervision. Like Center A, more than half of the clients were widows or widowers and lived with their adult children, with sons in particular. Mandarin was the language
used by the majority in Center B, where only two to three clients spoke Taiwanese most of the time, and two female clients talked to each other in Cantonese. Half of them had obtained at least a high school degree.

The full-time regular staff of six in Center B included one director, one nurse, one housekeeper, and three nurse’s aides. These three aides were in their 50s and were on duty every day with three different shifts. Normally they worked nine hours a day, and sometimes they took a nap with the clients after lunch. They had no gerontological education and received most of their training at the Center through their work experience. Having worked in Center B for more than 15 years, all of them had obtained a Governmental Certificate as nurse’s aides. They were in charge of both physical care and planning and leading activities. They formerly had regular job training in the nursing home upstairs, but the current director had not assigned them to any recent classes.

The nurse, in her 30s, spent most of her time in the nurse’s station working on her record keeping and answering phone calls. She was the one to greet clients and distribute their medication in the morning and during lunch. The housekeeper, in her 40s, was mainly occupied with cleaning, yet she sometimes helped aides assist clients during snack and meal times. The director, in her 50s, has a nursing background and worked in the hospital for 32 years. She is not only the director of Center B, but is also in charge of the nursing home within the hospital. Most of the time she stayed in the nursing home, yet she sometimes checked up on administrative operations at Center B or supported them when they were understaffed.

Both staff and the clients in Center B wear name tags, the director, nurse, and three nurse’s aides wear white uniforms, and all volunteers and housekeepers wear orange uniforms. Some clients are called by the familial “grandpa/ma,” yet others are called by their whole
names, considered a more disrespectful way to refer to elders in Taiwan because only children are called by their full names by their parents when they are in trouble.

**Schedule in Center B.** Compared to Center A, the daily schedule in Center B is much more flexible. In the morning, Clients in Center B are served a cup of warm water upon arriving at the center. The daily schedule starts with the clients reading newspapers alone at 8:00 a.m. for around one hour, followed by an hour long snack time. From 10:00 a.m. to 11:00 a.m. there are daily activities such as doing light exercise, playing cricket or bingo, or watching TV. Because there is no formal weekly schedule prepared in advance as in Center A, the aides repeat the same activities every week. There is an hour-long break before lunch so that aides can escort some clients to the restroom, while other clients watch TV in the living room without staff supervision. Lunch is prepared by the central kitchen in the hospital and delivered to the Center at certain times. Each client has a lunch box with his or her name on it, so the staff members can identify personalized meals. Most clients have lunch in the dining room, and aides feed three of those in wheelchairs in the lobby, as there is not enough space for their wheelchairs in the dining room.

After lunch, there is a one-hour naptime from 12:30 p.m. to 1:30 p.m. During the nap, staff members have their lunch in the lobby area, where some of the clients are napping. One female client, in fact, complained about the staff sometimes being too noisy in the lobby during naptime. At 2:00 p.m., there is a half-hour exercise time, and the afternoon snack is at 3:00 p.m. After snacks, the clients watch TV again in the living room or wait in the lobby before going home. There is only one bus to drive Center B’s clients, so drivers have to make two trips. The bus is actually a family van, and only clients in the front seat can buckle their seat belts. The bus driver normally has his first trip leaving at 4:00 p.m. and comes back at Center B at 4:30 p.m.
Then the bus driver waits until 5:00 p.m. to depart as the clients’ family members might not be back home from work before 5 p.m.

### The People, Environment, and Behavior in Center A

Utilizing Lawton’s ecological equation, \( B = f(P, E, P \times E) \), the following demonstrates the clients’ competencies as \( P \) and then investigates the physical and social environment to represent \( E \). The physical environment information was focused on how the social model of Center A facilitated and/or deterred infantilization. The social environment was represented by staff’s characteristics and their infantilizing or age-appropriate interactions with clients. \( P \times E \), as place rules, was revealed by the ageism reflected in regulations, rules created by the staff, and activities in Center A. The clients’ responses to infantilizing or age-appropriate treatment are represented as \( B \). From the observations and interviews, I found that the clients’ reactions may lead to another infantilizing interaction or an age-appropriate treatment from staff. I thus included the staff members’ reaction to the clients’ behavior to demonstrate the cyclic interaction between them and clients.

### Clients’ Competencies \((P)\)


**Cognitive ability.** The clients’ cognitive performance can be detected by objective and subjective assessments (Moore et al., 2003). The objective assessment was based on their scores on the Mini-mental State Examination (MMSE; Folstein, Folstein, & McHugh, 1975). The clients in Center A had scores ranging from 6 to 26 that show differences among their cognitive
abilities. More than half of the clients had moderate or severe dementia (MMSE score less than 9). The subjective assessment was developed from the interviews with the staff and field observations. The staff described the clients as a whole as having memory problems, yet the staff did recognize clients’ different levels of memory loss. The staff members grouped the clients and compared them as “elders with mild dementia” and “elders with moderate or severe dementia.” For example, when asked about the clients’ maintained abilities, the social worker stated, “If you ask them what they did for the first activity, the elders with mild dementia might be able to tell you, whereas the moderately and severely demented elders might not remember anything at all.” One of the nurse’s aide indicated that, “The elders with mild dementia are more capable of finding the new things, whereas the severely demented elders are unable to notice the environment being changed.”

Staff perceived clients’ different cognitive abilities and interacted with them differently when leading activities. The nurse’s aides told me that they have to use a range of ways to lead activities within different cognitive groups. Two nurse’s aides provided the following explanations when asked how the clients affect programming at the center:

For the severely demented group, I cannot just keep asking questions because the elders might not be able to answer all the questions and get mad. Therefore, I have to be careful to select simple questions for them. Moreover, I also provide hints for them to make the answer easy. For the mildly demented elders, I ask fewer questions and let them talk more.

Another staff member indicated:

If I am with the severely demented elders, I don’t just read through the newspapers but have to reorganize stories in an interesting and way that is easy to understand. When I am
with the mildly demented group, I have to be aware of what I say because they still have clear minds and will correct you if you say something that is incorrect. When I am with the severely demented group, I feel less pressure because they don’t have the ability to understand precisely what I am saying.

Being aware of the clients’ competencies in comprehension, the staff members at Center A seemed to facilitate more when engaging in activities with clients having severe dementia, but give more autonomy to clients with mild dementia. The director even wanted to give the clients with mild dementia more power over decisions related to activity and food:

We will let the elders with mild dementia have more influence on food and activities. For the severely demented elders, they just know to follow our direction to eat and to go for activities.

The varying treatments among clients with different cognitive abilities are evident in my field observations. For example, the clients with mild dementia normally had their meal in the dining room with staff supervision, whereas the clients with moderate or severe dementia had their lunch in the temple area or tea shop with the nurse’s aides who put food into their bowls, reminded them to eat slowly, or actually fed them. The staff members not only had different ways to lead activities within groups, but also adjusted their manners to interact with the clients in a mixed group. For instance, when playing ball toss, a nurse’s aide asked each client to count his or her points. When it was the turn of the mildly demented clients, the nurse’s aide gave them time and hints to respond. For the clients with moderate or severe dementia, the nurse’s aide counted for them. When the clients with mild dementia were playing, the aide just watched them and occasionally reminded them about the rules. When the severely demented clients were playing, however, the aide accompanied them and directed them to play. The ways of talking to
the clients were different as well. When telling the clients to go for the activities, the aides used a more authoritarian manner in directing the clients with moderate or severe dementia, such as “Go upstairs for the class.” The aides changed the way of talking to the clients with mild dementia, giving instructions such as, “Let’s go to the temple area.”

**Emotional expression.** In addition to cognitive ability, the clients in the Center A were described by staff as persons who “have their emotions,” “have emotional problems” or “cannot control their emotions.” The social worker and director both mentioned in interviews that the clients with *mild dementia* had “more emotional problems” and “are easily influenced” by the staffs’ emotions, whereas other staff members described the clients as a whole as having “emotions.” Three of the nurse’s aides assumed that the clients’ emotional problems were derived from their family issues, whereas the social worker attributed them to dementia. Some of the nurse’s aides viewed their job as solving emotional problems. The staff members related the clients’ emotional problems with their behavior, as a nurse’s aide said in referring to a client, “When [a client] is not in a good mood, she becomes obstinate.” In discussing the clients as a group, the nurse pointed out, “Because they cannot control their emotions, they sometimes have weird behavior, which mostly happens before going home.” Staff did not use clinical terms, such as depression or anxiety, to discuss the clients’ emotional health.

**Physical health.** Clients’ physical health was mostly characterized by manifestations of their diseases. That is, the staff described the clients who “have varied conditions each day because of their chronic disease.” Due to their “diseases,” the nurse takes their blood pressure every weekday to “track their physical condition.” One nurse’s aide reported that the staff had to prepare bland food for people because of their diseases (such as kidney problems). The social worker talked about assigning the clients to different activities based on their physical condition,
stating, “For elders who had strokes, I think it is inappropriate for them to use knives. I therefore assign them to use scissors or use only hands for their tasks.” Walking problems and fall risks were also mentioned in the interviews. One aide mentioned that, “Some of the elders are really not capable of walking by themselves, so we have to walk with them arm-in-arm.” Although the aide said that “not every elder needs help with walking,” I found that the staff almost always walked arm-in-arm with clients even if they had no walking problems.

**Individual differences.** Just as clients in Center A had different cognitive, emotional, and physical conditions, they also had diverse backgrounds, life experiences, and personalities. The following summary of selected clients in Center A shows individual differences. The first four clients were interviewees; the other four were frequently mentioned in my field notes with observable challenging behavior.
Table 1

*Characteristics of Selected Clients in Center A*

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Cognition</th>
<th>Physical</th>
<th>Former job</th>
<th>Life experiences</th>
<th>Trait</th>
<th>Reaction toward infantilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helen</td>
<td>Mild dementia</td>
<td>No help needed in walking</td>
<td>Nurse</td>
<td>Born in Taiwan</td>
<td>Speaks out for her rights; prefers sitting with females; stresses mutual respect; is proud of herself being well-educated; likes to talk about lives in the U.S.</td>
<td>Challenge/conversion</td>
</tr>
<tr>
<td>Bella</td>
<td>Mild dementia</td>
<td>No help needed in walking</td>
<td>Secretary</td>
<td>Born in Taiwan. Studied Japanese in elementary school. Lived in the U.S. for 30 years. Widow and now lives with son.</td>
<td>Describes herself as a fool; is easily influenced by friends (i.e., Helen) in the Center; encourages or shows her appreciation to others.</td>
<td>Colonization</td>
</tr>
<tr>
<td>Josh</td>
<td>Mild dementia</td>
<td>No help needed in walking</td>
<td>Government official</td>
<td>Born in Chain. Was a soldier and came to Taiwan with the army. Widow and now lives with daughter.</td>
<td>Tries his best to follow the direction of the group.</td>
<td>Colonization</td>
</tr>
<tr>
<td>Don</td>
<td>Mild dementia</td>
<td>Walks slowly with a walker</td>
<td>Director of post office</td>
<td>Born in Chain. Had a colorful life growing up. Widow and now lives with son.</td>
<td>Confident of his knowledge, likes to talk with staff rather than other clients.</td>
<td>Colonization/conversion</td>
</tr>
<tr>
<td>Coco</td>
<td>Severe dementia</td>
<td>No help needed in walking</td>
<td>Owner of a seafood restaurant</td>
<td>Born in Taiwan. Widow and now lives with daughter.</td>
<td>Tries to do whatever she feels like to do; Expresses her will and frequently argues with staff; fights for “her place”</td>
<td>Challenge</td>
</tr>
<tr>
<td>Ruby</td>
<td>Severe dementia</td>
<td>No help needed in walking</td>
<td>Secretary</td>
<td>Born in Taiwan. Widow and now lives with son.</td>
<td>Suspicious; murmurs to herself; still maintains a sense of dignity.</td>
<td>Challenge</td>
</tr>
<tr>
<td>Ben</td>
<td>Severe dementia</td>
<td>Needs supervision in walking</td>
<td>Factory worker</td>
<td>Born in Taiwan. Had a stroke. Being taken care of by his wife who is much younger than he.</td>
<td>Lacks patience; works better with encouragement than directives.</td>
<td>Challenge</td>
</tr>
</tbody>
</table>
Physical Environment ($E$)

Although Lawton (1983) stated that sometimes people do not pay attention to their physical environment or are not aware of the influence of the physical environment on them, to explore the interaction between people’s competence and their physical environment I asked the interviewees their opinion on the setting, décor, and other physical characteristics in Center A. Both the staff and clients discussed in detail the old style setting in Center A as a positive environmental force.

Old-style setting. Almost all of the staff members in Center A believed that the old style setting fit the clients well. The social worker stated, “I think that this old style environment corresponds to the environment of when these elders grew up.” The nurse remarked on its benefit for the emotions of clients who are in their 70s to 90s, stating, “This kind of old style environment here matches the elders’ life experiences. The elders grew up in an environment like this, so they feel secure in the Center. When they feel secure in this environment, their emotions become calm and stable.” One nurse’s aide told me that the familiarity Coco, a female client with severe dementia, felt in the Center’s environment let her easily accept staff directions. Other advantages of the old style environment are that it helped clients to “become accustomed to a new environment quickly” or “creates a therapeutic atmosphere to help the elders remember and talk more about the past.”

The clients in Center A also had a positive view of the old style setting. For instance, Josh told me that, it “helps us to talk more about our lives in the olden days.” Bella said, “Here it is just like the place I grew up.” Don praised the old style environment for how it helps him to create a feeling of belonging in Center A.

Although clients and staff like the Center’s setting, and some staff members offered
suggestions for the physical environment, such as, “The old style setting might not fit my generation when I am in my eighties. The setting should be changed in time based on the clients’ needs.”

**Cleanliness and safety in the open space.** The clients in Center A found the environment to be “very clean.” Don praised the Center as clean and indicated it is not for people who are insane or poor (a stereotype in Taiwan is that houses for the poor, homeless, or mentally disabled people are not normally clean). For Josh, Center A is not only clean but helped him feel secure, as he stated, “A sense of safety is very important for elders.” For staff, the open space is one of the designs that “helps (staff) control the elders’ safety” because the staff can “easily and quickly find where the elders are in the Center.” Moreover, the open space design keeps sight lines clear. That is, if Center A was not designed as an open space, it would likely have many partitions that would block staff members’ view of clients. Other safety features were mentioned by the staff, such as handrails for each wall, wheelchair and walker accessibility, and the main entrance with codes on the lock which protects the elders. Observation of the space also revealed safety features that included a wide walkway, bright lights, even floors, and a clear layout.

**Limited seats in the living room.** From my observations, I found that one negative element of the physical environment of Center A was that there were not enough seats for every client in the living room. Moreover, some seats were more desirable than others and that caused some of the female clients (including Helen, Coco, and Bella) to fight over those seats. In discussing a client with mild dementia, a nurse’s aide said:

“Wellen suggested that we let each elder here have his or her own regular seat in the living room. She complained that sometimes she could not find a seat to sit down in the living room. She might stop complaining after her dementia progresses. We cannot do it
because we do not have enough soft chairs for every elder in the living room.”

This physical characteristic of limited seats in the living room that staff members are unable to address created environmental press for clients in Center A; complaints were one way that clients reacted to this press.

The social worker expressed that, “the clients view the seats that they normally sit on in the living room as their regular seats. The regular seats for them are just like they have in their own rooms at home. Regular seats bring them a sense of belonging.” The clients not only “viewed” that the seats they normally sat on as “their seats,” but actually did something to protect or occupy their seats or the seats near their seats as if protecting their own property. Coco, a female client with severe dementia, was described by a nurse’s aide as having “a strong sense of her seat.” That is, if a stranger or male client came into the living room, she would do something to prevent the stranger from sitting next to her. For instance, one morning when Coco saw Josh come into the living room, look for a seat, and walk close to her, she told him, “Your seat is over there” while pointing at the seat farther away from her. Coco demonstrated her authority over her seat by turning over the cushion after someone sat on it. She even fought with anyone who took over her seat. During one naptime, a female client with moderate dementia was assigned to sit on Coco’s seat because of her weak physical condition. Coco was furious to find that her seat was taken by someone when she came back to the living room after nap time. No matter how hard the staff members explained to her, Coco was still mad. She refused to sit on another seat and asked to go home.

Clients stayed in Center A’s living room during unscheduled time. For most clients, the first thing to do when they arrived at the center was to find a seat in the living room. They also sat in the living room during breaks, nap time, and before going home. The living room for the
clients seemed to be a place to relax and rest from the activities, where some, as the social worker said, deemed the seats in the living room as theirs in order to form a sense of belonging they may feel at home. When clients could not find a regular seat in the living room, their sense of belonging may have been disturbed, and so they reacted to the physical environment with irritated behavior and started to wander around or asked to go home.

**Place Rules (P x E)**

Place rules, which can serve as a link between human activities and the physical setting, are imbued with a socially constructed sense of purposefulness (Moore, 2005). Some place rules are explicit (i.e., no parking from 9 a.m. to 5 p.m.), but most are implicit (Moore, 2005). In this study, the explicit place rules were the regulations from the Department of Social Affairs (DSA) that strictly indicated rules of ADS centers. The implicit place rules were the shared understanding in Center A, where rules and associated activities created by the staff were followed with more flexibility depending on who performed them.

Clients in Center A were recognized by staff through labeling related to their age or diagnosis of dementia. Labeling clients via their ages or diagnoses, therefore, became the shared understanding for using many place rules in Center A. In addition to the regulations, staff members created their own rules to bring order to the institutional setting. The activities demonstrated the combination of regulations and rules of the staff. That is, activities were held within a regulated physical environment and were followed with a protocol created by the staff. The place rules in Center A thus involved governmental regulations and labeling as well as rules and activities designed by staff, which created a unique environmental press in Center A.

**Regulations.** The staff members referred to regulations that legitimized their staffing stating, for instance, “We follow the ADS’s regulations to have the ratio of one staff member to
six clients,” or, “Based on the regulations, a facility like this Center only needs one social
worker.” The director, however, did not agree with the regulation on staffing, and told me that,
“If other ADS centers hire the number of staff based on the regulations, their expenses will
definitely exceed their revenue at the beginning.” In order to follow the staff-client ratio without
overspending, the director sought to “get more volunteers.” But the social worker worried that
having more volunteers might create problems for the clients by saying:

Volunteers sometimes bring problems. Volunteers have their own way of thinking, and it
is hard to find volunteers who think like us….We used to have some volunteers who were
willful and argumentative with the elders. Then we had to be busy comforting both of
them.

Having volunteers may thus lead to unwanted change for the people involved in Center A’s
environment and influence the person-environment dynamic in unforeseen ways.

Labeling. Both clients and staff members seemed to consensually label the clients with
certain characteristics because of their age or diagnosis. Clients described themselves or other
clients as persons who, “will become senile,” “sit and then fall asleep,” “have a childish mind,”
and “are similar to children” because of their age by indicating, “We elders…,” “old people…,”
and “I am old…” Staff members described the clients in Center A as forgetful, having
hallucinations, having emotional and behavior problems, showing their emotions like children
through physical reactions, and easily becoming irritated because of their dementia by
mentioning “…because of dementia,” “…due to the dementia,” “…because they or we are sick,”
and “a demented person like…” Having memory problems and acting like children were
consensual comments among the staff and clients regarding the clients. The clients only
connected those two comments to the social label as “they are old,” yet staff members
commented on clients’ challenging behavior with a medical label by indicating their mental impairment. According to labeling theory, those clients’ self-labeling and the staff’s labeling gave staff members the power to create and enforce rules that control client behavior (Becker, 1973; Triplet & Jarjoura, 1994). The rules created by the staff, shown below, demonstrate how they created the environmental press or an atmosphere of infantilization.

**Rules created by the staff.** The first overarching rule in Center A was, “to make sure the clients are safe.” The director asked the staff members to watch the clients “all the time to make sure they are safe.” The nurse’s aides therefore paid attention to the clients at all times so as to “prevent accidents from happening.” In addition to continually watching over the clients, staff members walked with some clients who were not capable of walking by themselves arm-in-arm “for their safety.” Focusing on physical care can be seen as another way to make sure the clients are safe. That is, the staff members reminded or took the clients to wash their hands and use the restroom during every unscheduled time period and sometime forced the clients to go to the restroom. The nurse’s aides come to ask them one-by-one, asking, “Grandma, Grandpa, do you want to use the restroom?” If the clients refuse, the nurse’s aide asks again or takes them to the restroom without getting their responses.

Another rule created by the staff in Center A was related to usage of the living room, in that for unscheduled time, the clients were gathered or confined in the living room. On several mornings, I observed that clients who were wandering around the Center were taken back to sit in the living room and told, “You have to sit here in the morning.” When clients were finished with their lunch, they were told, “Let’s go to sit in the living room.” This also happened more frequently when the clients waited to go home. Some with moderate or severe dementia left the living room and went to stand in front of the main entrance, where the nurse’s aides then came to
them, held up their hands or arm, and told them, “Let’s go back to sit in the living room.”

Although the staff tried hard to keep them in the living room, almost every client went to the nurse’s station to express his or her will to go home. The staff members had to repeatedly tell them their rides would come soon, and took them back to sit in the living room. Trying to keep all clients in the living room might have been an easy way to supervise and control their behavior in order to make sure they are safe, though it required effort to contain them in the space.

Following a routine schedule was another place rule for both staff and clients in Center A. The nurse’s aides followed the schedule to lead activities or bring some of the clients to the restroom. The clients “followed a routine schedule of things to do” so as to “help them remember” what to do and where to go in the Center. Staff members would therefore “try to give them a routine life, so they wouldn’t be confused by schedule changes.” The activities occupied most of the time on the daily schedule because the staff believed clients could benefit from them, as stated, “The activities are good stimulation for the demented elders” and they can “prevent behavior problems” and “slow down their dementia progress.”

Activities. Salari (2001) discovered that infantilized activities in some ADS centers in the United States reinforced the infantilizing interaction. According to Salari (2006), child-oriented games, songs, and toys are indicators of infantilization. Moreover, central mandatory activities, activity questions that are far below the clients’ cognitive functioning, and frequent repetition of activities, per Salari’s (2006) study, were also recognized as infantilizing activities in this current study. All activities in Center A are listed below and described as infantilizing or adult activities.

The most relevant infantilizing activities were using a children’s book in the activities, singing a children’s song with dancing, giving the clients some children’s toy to play with, and leading children’s games. The clients in Center A had their own perspectives for judging whether
the activity provided was for children. For example, one morning I was asked to play with a yoga ball with clients in the living room. When I brought the ball in the living room and invited the clients to play with me, Kelly, a female client with mild dementia, said, “This is for children. Why do you ask us to play this childish game?” Although Kelly indicated that playing with a yoga ball was a childish game, she still joined the group to play with the ball and even switched her seat to help the game go more smoothly.

As mentioned earlier, both the staff and clients had to follow a routine schedule to do activities in Center A. This central mandatory activity format left clients with no excuse to escape any activities in the Center. Two examples from my field notes include: A nurse’s aide went to a male client with severe dementia and said, “Go upstairs.” The client objected, saying, “No, I don’t want to.” The nurse’s aide replied, “You cannot say ‘no.’ Everyone has to go upstairs. If you don’t go upstairs, you will not have lunch.” The client then went upstairs with the nurse’s aide. A nurse’s aide went to the tea shop and told Regis, who has hearing impairments, “Uncle, let’s go to the living room to sing Karaoke.” Regis refused, so the nurse’s aide told him, “All of the clients are in the living room to sing Karaoke, so you have to go there. Let’s go.” Regis then went with the aide to sit in the living room.

Although the two clients initially declined to go for the activities, they eventually responded with conformity because they had no choice. When I asked the clients, “When the staff members invited you to join the activity, you listened to them?” Don, a male client with mild dementia, gave me a passive response: “I am not ‘invited’ but ‘assembled.’ They just announce, ‘Go to the tea shop,’ so I know where to go and what to do.” Josh, another male client with mild dementia, not only conformed to participate in the central, mandatory activities but justified following staff instructions in stating, “They direct us to do things. Their direction is not
only for me but for the whole group. This kind of facility is established for people who need it, so the staff members have their procedures and goals to run this Center.” The social worker admitted that the clients “have to follow our directions while doing things. Freedom might be the thing that elders here do not have.” Corresponding to Josh’s idea, she thought that central mandatory activities in the Center were “just like at school” as “individuals have to fit their desires to the group activities. If the elders just do whatever they want at the Center, they will break the rules and make things difficult for us.” That is, the clients in Center A could not act as if they were at home, but had to participate in the central mandatory activities just as people in most all institutions must follow group rules.

Among the central mandatory activities, staff members repeatedly asked time and place orientation questions at the beginning of every activity. From the morning to the afternoon, the clients in each group were asked time orientation questions four times a day. For clients with moderate or severe dementia, these orientation questions might serve as a good training to help them maintain their cognitive ability. But for people with mild dementia, those questions might become annoying because they were far below the clients’ cognitive functioning. For example, Kelly complained about the orientation questions, stating, “Those things are repeatedly asked a hundred times every day.” Not every client in Center A, however, viewed the repeated orientation questions as inappropriate. Josh, in referring to other clients, stated, “Some people are tired of doing the same things every day, but I am okay with that. Some people are tired of being asked the same questions in every activity every day, but I think those questions help old people to maintain their memory.”

The staff in Center A provided various activities for clients based on their interests, backgrounds, or their cognitive abilities such as cooking, doing crafts, holding a birthday party,
singing Karaoke, playing card games, and reminiscing. The nurse said, “Some elders are able to speak Japanese, so we gather them together in the Japanese speaking group once a week. Other elders like to sing Karaoke, so we have them form a singing group.” The social worker told me, “Some of the elders have forgotten how to talk like us, so we have speaking classes for them. Most of the elders here talk more about stories in the olden days, so we have reminiscence classes for them.” When leading the activities, staff members were aware of the need to select topics related to the past to help the clients maintain their memory from former days (Wellin & Jaffe, 2004). That is, the staff in Center A used the knowledge of clients’ biographies not only for designing activities, but also for engaging them in positive social interaction. The importance of staff in shaping the social environment of the long-term care settings had been a key theme in literature on resident quality of life (QOL) (Kane, 2003; Robinson & Rosher, 2006). The staff as an element of social environment are described below based on how their characteristics influence the dynamic of interaction.

**Social Environments: Staff Characteristics (E)**

The director and front line staff members with a range of backgrounds have created different social environments in Center A. The five nurse’s aides who provide care for and spend most of their time with Center A clients said that their lives in the Center were busy, but they liked their job and felt happy being in Center A because they received support from each other. In addition to the nurse’s aides, the director of Center A was essential to the operation, and could influence its dynamics. She told me that “To give the elders the best we can” was her principle for client care in Center A. She thus assigned the aides duties such as attending different training classes to learn more creative activities for clients. In order to maintain a good social environment, the director tried to find a way to keep her staff happy at work by creating a
good communicative environment among staff. A staff member reported that, “The director is helpful and willing to solve problems with us.”

According to the interviews, all staff members emphasized the importance of controlling their negative emotions, such as frustration, anger, and impatience, when working with clients. The director stated that, “Taking care of the elders with dementia is a tough job, so it is important for our staff members to control their own mood.” Controlling emotions became a place rule for staff and influenced their working attitudes. The nurse said, “We do not allow our individual emotions to blend into the working environment.” The nurse’s aides stressed their ability to control their emotions by “having patience to take care of children and elders,” “tolerating [the clients’] actions and emotions,” and recognizing their jobs were to get their work done instead of getting involving in the clients’ emotions. If one of them loses patience, “other staff members will remind her to calm down.” The inability to control negative emotions was recognized as problematic by the staff and for the clients as well. That is, as a component of the social environment, the staff of controlling their negative emotions influenced the clients who were involved in that environment and assumed to do the same thing.

Social Environments: Staff Infantilizing Behavior and Speech (E)

Studies done in U.S. aging services and institutions demonstrated that elders were mistreated by staff members’ infantilizing behavior or speech, such as public disclosure of clients’ condition, prohibiting sleeping, reprimands, punishments or threats, and baby talk (Diamond, 1992; Lyman, 1989; Salari, 2001; 2006; Salari & Rich, 2002; Ryvicker, 2009; Williams, 2006). I utilized the infantilizing patterns from these U.S. studies as my reference to examine the field notes and interviews in Center A, and I was open to discovering new patterns. The results revealed that the staff in Center A displayed both U.S. patterns and other patterns of
infantilizing speech and behavior in interactions with clients.

**Sleep prohibition.** Consistent with Salari’s studies (2001, 2006; Salari & Rich, 2002), clients in Center A were also prohibited from sleeping and their preference for sleeping was ignored. This happened mostly during the exercise times and orientation activities in the morning. The nurse’s aides tried to wake the sleeping clients by doing exercises in front of them, sitting next to them to poke them and talk to them, asking them to throw the ball again, or giving them something to do to keep them awake. Whenever the aides found their clients asleep or sleepy, they immediately did something to wake them up. An aide said, “If the elders fall asleep during the exercise, we will wake them up and ask them to exercise. Sometimes we help them to exercise by grasping their arms or hands to move.” When asked why clients were prohibited from sleeping, one aide stated that, “I think they are not here for sleep, so I try to interact with them all the time.” Another reason to prohibit clients from falling asleep was the fear that it indicated failure to lead a good activity. A nurse’s aide told me that, “When I lead activities, I try to let everyone talk. I am afraid of finding them falling asleep because it will be hard for me to lead the activities without getting their responses.” Another aide shared the same idea, saying “I am afraid of the elders falling asleep during activities. If they fall asleep, I will assume that I didn’t do a good job of leading the activities.” That is, in order to ensure that the staff members feel good about themselves and are presenting a good image of the center, the aides tried hard to keep them awake.

**Didactic interaction.** In addition to sleep prohibition, I found that the interactions between staff and clients at Center A were mostly initiated by the staff. That is, the staff provided direction or instruction and asked the clients to follow. Ryvicker (2011) described this interaction as a didactic, task-forced pattern of staff-resident interaction within a medical model.
of a nursing home. Consistent with Ryvicker’s (2011) study, I found that the staff initiated a one-way, call-and-response form of communication during activities, particularly with the clients who had severe dementia, by telling them “you have to…,” “you cannot …,” “you should …,” or by giving them directions step-by-step.

Leading sensory activities with the severely demented group exemplified the didactic style of activities. An aide led the sensory activity by first giving the clients musical instruments and asking them to play them with the music she prepared. When Betty, a female client with severe dementia, started to play the instrument before the aide’s direction, the aide stopped her and said, “Don’t shake it now.” When the aide had the music ready, she told the clients, “Shake it now… Shake harder… Aunty Coco, shake your instrument.” If the clients did not follow her direction, the aide went to them and told them how to use it, saying, “I will count one, two, three, so we can start at the same time.” The aide showed the clients how to use the instrument by stating, “Look at me. Okay, let’s play together. One, two, three, and four. Stop. Good job. You all paid attention to what I told you.” The aide continued to show the clients how to use the instrument, saying “Follow me. Follow the music… now you have to shake quickly… Follow me… Aunty Coco, do it quicker… Stop. Listen to the music carefully…” The whole activity was thus centered on the task of playing the music instrument with little or no dialogue taking place.

In order to have the clients follow their direction, staff members not only told them how to do things but sometimes took control of their bodies. For example, when playing basketball games, one nurse’s aide announced, “Let’s play basketball. You have to be careful when you throw the ball. Grandma Coco, you go first to throw, so you won’t fall asleep.” The aide did not wait for Coco’s response and came to grab her two hands and pulled her up from the chair. Coco was then accompanied by the aide to throw the ball. After Coco, the aide came to Ruby and
invited her to play. As per before, the aide grabbed Ruby’s two hands and pulled her up from the chair without waiting for her response. Ruby then was led to the front of the stand and made to follow the aides’ direction to throw the ball. Controlling clients’ behavior also occurred during therapeutic exercises. An aide serving as a leader came in front of some clients who did not meet her standard of movements and “helped” them by grabbing their hands and moving them. Other aides serving as assistants for the therapist not only demonstrated the movement but also went to the clients to “help” them do the exercise by pulling their arms forward.

**Teacher-student interaction.** For the clients with mild dementia, the staff adopted another style, didactic interaction, to interact with them during activities. Didactic interaction also facilitated a teacher-student format of communication between the staff and clients. Orientation activities provide a good example. The aides “reminded” the client that they were “in the class to study,” so they could not sleep. The aides asked the clients to answer questions by saying, “Let me ask you the questions again to see who can answer me with a loud voice” and encouraged the clients to prepare for the next activity by telling them, “The next holiday is the Lantern Festival. We will guess at riddles on Wednesday. You have to study hard at home to prepare for that.” The aide praised the clients by saying: “Wow, great, you all get 100 points,” “Good. You are concentrating in the class,” or “Good, I am satisfied with your answers for today.” Although the aides did not explicitly introduce themselves as teachers or call the clients “students” during activities, the way they interacted with the clients implied a teacher-student relationship in Center A.

Salari’s (2002; 2006; Salari & Rich, 2001) studies predominantly focused on the negative interactions in ADS centers, yet I found that some interactions in Center A helped clients maintain their adult identity and support their psychological well-being. While infantilizing
interaction happened mostly during activities as a consequence of the central mandatory activity format, the age-appropriate interaction could be found during unscheduled time in Center A. The staff used more infantilizing behavior and speech toward the clients with moderate or severe dementia, whereas they had more age-appropriate interaction with the clients with mild dementia.

**Social Environments: Staff Age-appropriate Behavior and Speech (E)**

Age-appropriate treatment in the U. S. includes staff providing choices for clients, greeting each client individually, exchanging conversation with clients, and so forth (Salari, 2002). Because of the influence of Confucianism in Chinese culture that stresses respect for age and seniority, the age-appropriate interaction with clients in ADS centers in Taiwan is demonstrated by showing respect for them. There were two forms of showing respect for clients in Center A, calling the clients by “grandma” or “grandpa” and greeting, listening, and talking to them in a sincere manner.

**Show respect by calling clients “grandma” or “grandpa.”** In Taiwan, elders who are 65 or over are called “grandpa” or “grandma” even though they are not biological grandparents. These are respectful titles for elders that honor their life experiences. To call elders by their full names is viewed as inappropriate or impolite. In Center A, the clients were called “grandma,” “grandpa,” “uncle,” or “aunt” all the time depending on their age. Within the group, the staff also welcomed clients by calling a group “grandpa” and “grandma.”

**Show respect by greeting, listening to, or responding to clients.** Staff members in Center A viewed clients as their family members, so they “greeted every elder” and “tried to comfort them and respond to their every question.” In my field notes, I found that the nurse’s aides not only greeted every client at the beginning of the activities by “good morning” or “good
afternoon,” but also showed their appreciation at the end of the activities by telling the clients, “We are finished with singing Karaoke. Thank you for your participation. Let’s sing again next Friday.” During the activities, the aides sometimes reversed their roles and praised the clients with mild dementia as their teachers from whom they can learn, stating, “I learned a lot from you and will remember what you taught me today,” or “Everyone in this group is my teacher. You have to teach me more…” So clients in Center A were not all viewed as passive receivers who only learn from the staff, but could be contributors or teachers who share their knowledge. In order to create a friendly environment for clients’ conversation, the aides invited them to share their ideas one-by-one. When the clients were talking, the aides paid attention to them by responding with, “Umm,” “Yes,” and/or nodding their heads.

Responding to feedback from clients was also a common form of showing respect to elders. For instance, when an aide accompanied a client to the hallway for the blood pressure check-up, the client forgot where they were going and asked, “Where will we go?” The aide replied immediately, “We will go to take blood pressure.” When the clients helped an aide to make paper balls for activities, a client asked, “What are those balls for?” the aide responded, “We can play with them without getting hurt.” Most of the time, the aides responded to the clients right after their questions and explained what was happening, just as clients expect to be treated at home.

Having discussed elements of $P$, $E$, and $P \times E$ in Center A above, the following focuses on B as the behavior or emotion reflecting or reacting to $P$, $E$, and $P \times E$, particularly under the infantilizing environment. The clients’ adaptive behavior to infantilizing behavior or speech is addressed first. I then demonstrate staff reactions to the clients’ challenging behavior to show the intertwined interaction between staff and clients in the Center.
Clients’ Adaption to Infantilizing Behavior and Speech (*B*)

When the institutional goals did not match individual needs, individuals might adapt through withdrawal, rebellion, making the best of the situation, and imitating the majority (Goffman, 1961; Salari, 2006). The following shows the clients’ adaptation in Center A, where I classify their adaptive behavior into four categories, using Goffman’s (1961) typology in relation to self-mortification: challenge, withdrawal, colonization, and conversion.

**Challenge.** Most clients in Center A with mild dementia challenged the didactic interaction or other infantilizing aspects of the environment by confronting staff with challenging language. For example, Lucy, a female client with mild dementia, once stood up and left the living room during the activity. An aide noticed her leaving and called her name immediately. Lucy responded, “I just need to go to the restroom, can’t I?” The aide did not say anything and let Lucy go to the restroom by herself. Another incident happened when the aides were teaching the clients to do the Rabbit Dance. An aide found that Helen, a female client with mild dementia, did not follow her direction to dance, so she stood in front of Helen to show her the proper movement. Helen responded, “This dance is useless for us. We elders don’t know how to dance this kind of dance.” The aide did not say anything but went to another client. Helen, not only challenged the activities (e.g., she complained about the repetitive orientation questions and childish games), but sometimes refused to follow staff direction. When most clients followed staff direction to walk in the park with a partner hand-in-hand, Helen refused to have a companion, saying “I don’t need help. I can walk alone.” The staff thus let her walk alone within the group. In addition to expressing her thoughts on activities, Helen also complained about the food in the Center. One day, when the staff prepared hamburgers for lunch, Helen complained,
“This kind of food is what I most dislike to eat.” Although Helen did not want hamburger for lunch, she had no choice and ate it.

Some clients responded to the situation with more aggressive language to express their feelings when staff members failed to show respect to them. There were two instances during lunchtime, one of which related to Regis, a male client with mild dementia and hearing problems. Regis was told to go to the tea shop for lunch, but when he went to the tea shop, he did not find his lunch there and became mad. So he went back to sit in the living room, and refused to go to the tea shop again. An aide went to him and said, “Uncle, let’s go to the tea shop for lunch.” Regis responded furiously, “There is no lunch for me.” The social worker also went to Regis to convince him that his lunch was in the tea shop. When an aide in charge of taking care of Regis went to him and comforted him, Regis then went to the tea shop with her.

The other instance happened with Shelly, a female client with mild dementia. Shelly was asked to go to the dining room for lunch. She waited for her lunch delivered by nurse’ aides when most of the clients had already received their lunch. An aide finally brought her lunch but soon took it away from her without saying anything. Shelly then became furious, left the dining room, and said angrily, “Let me wait for such a long time and don’t allow me to have my lunch. I don’t want to eat my lunch anymore.” Another two nurse’s aides came to her and tried to explain why the aide took her lunch away, but Shelly was still angry and resisted having the lunch. A nurse’s aide in charge of taking care of Shelly approached her while saying, “Eating is the most important thing, isn’t it? Don’t bother thinking about that annoying thing. Let’s have lunch first.” Shelly then followed the aide back to her seat and had her lunch. On the next day, the aide who took away Shelly’s lunch walked into the living room and talked to Shelly and another female client, “Grandma, come to help me make the paper balls.” Shelly refused, saying, “No. I don’t
know how to do that.” The aide kept persuading Shelly to help, and said, “Neighbor, come together to help.” (Shelly is a neighbor of the nurse’s aide). Shelly became mad and yelled at the aide, “You took away my lunch yesterday while telling me that I could not eat. I don’t want to go with you.” Shelly remembered what happened the day before, was still mad at the aide, and felt she was mistreated. The aide then stopped asking Shelly to help and turned to look for other clients who could participate.

Clients with severe dementia were less capable of expressing their dissatisfaction through words but reacted to staff’s infantilizing treatment with violent behavior. One incident occurred before going home, when a female client was stopped by an aide from going out with clients with the first ride. The aide did not give the client an explanation but just grabbed her arm to confine her behavior. The client was so angry that the aide held her back by pulling her arms, she reacted by beating the aide with her hands. Another aide went to her and explained to her that her ride would come later. The female client then calmed down and went back to the living room to sit.

Withdrawal. In addition to complaints, some clients with mild dementia adapted to the environment by withdrawing. Because of the central mandatory activity format, there were few withdrawals in Center A. One example happened during morning exercise. Helen was unhappy about her seat being taken by another female client. She told an aide, “That is my seat. I have sat on that seat since this morning.” The nurse’s aide responded to her, saying, “Please forgive us. You are a kind person and willing to lend your seat to her [the client who sits on Helen’s seat.]

Here is another seat for you.” The aide ignored Helen’s desire but directed her to another seat. Helen, however, refused to stay in the temple area and walked into the living room. The aide did not follow Helen but let her sit in the living room. Another example was during Karaoke. Most
clients were told to play the music instrument while other clients were singing. Shelly and Helen, however, neither played the musical instrument nor looked at the clients singing. They just sat there doing nothing, and no aide asked them to play the musical instrument. It seemed that the aides permitted their withdrawing behavior.

**Colonization.** In addition to complaining about the situation or withdrawing from activities, most of the time the clients were implicitly forced to follow the staff’s direction to maintain Center A’s goals. Goffman referred to this as colonization, but the practice may be more easily understood as coercion. One afternoon when clients were sitting in the living room waiting to go home, I asked Don, a male client with mild dementia, “How is the TV show, grandpa?” Don replied, “Not too good but not too bad. There are no other shows for me to choose. I cannot change it to watch other shows. The only thing I can do is to watch it or not and take a nap.” When I interviewed four clients in Center A, they said, “I just follow whatever they tell me to do,” “I just follow their [staff members’] direction to do whatever they tell us to do and to go wherever they tell us to go,” “We follow the staff’s direction to do whatever we are supposed to do,” or “I cooperate with their [staff members’] direction. All their responses indicated that they followed the same format, adapting to the situation by following the staff’s direction. A client with mild dementia told staff members, “You ask us to come here, so we are here. You ask us to eat, so we eat. We have to remember that (to follow the staff’s direction).” Even though the staff members told me that they had given the clients with mild dementia more autonomy, these clients still felt that they were like the other clients and were forced to follow the same directions.

**Conversion.** The clients with mild dementia could not change the institutional environment of having to follow the same directions and do the same things together, so
sometimes they turned their attention to commenting on other clients’ behavior in order to
differentiate these clients from themselves. Helen, a female client with mild dementia, liked to
comment on other clients in Center A as being “undereducated” or “impolite.” For instance, one
morning she found that there was a male client sitting next to her. She commented that, “People
here are undereducated. He is a male and supposed to sit on the male’s seat over there. In the
United States, people know the rule of separating male’s and female’s seats. Staff here has to
know that.” Helen’s life experiences of having males and females sit separately were not
addressed in the Center, so she responded to the situation by commenting on other clients being
undereducated and not knowing the rule. Helen also commented on individuals in the Center,
such as Ruby, a female client with severe dementia, stating, “She is insane,” when she saw Ruby
button up and unbutton her jacket or murmur to herself. Helen commented on Coco, who has
severe dementia, by saying, “That person belittles people….She bullied me when I first came
here. Every time she tried to bully me, I fought back.” Helen again tried to distinguish herself
here from other clients by commenting that others were doing something wrong. Helen
sometimes comments on other male clients as “old people who like to sleep” when she first
arrived in the center and sat in the living room doing nothing.

Don, a male client with mild dementia, was another client who adapted to the situation by
commenting on other clients. As he had a college degree, Don told me that he used to suggest
topics to the staff members, such as the solar system, the ecology of the earth, and life and death
issues during group activities. But he stopped suggesting topics to the staff members because,
“other [clients] were not educated enough to talk about those topics.” Don thus compromised his
interests to match that of other clients by saying, “The staff members cannot pick a topic that is
too hard for their audiences. They have to have their topics match the average level of the group
members.” About the activity in Center A, Don commented that, “No one here has a special characteristic or talent for dancing and singing to accompany me….If I could have more people and more chances to play Chinese chess, it will be good for me….I used to play Chinese chess with other elders here, but not anymore. The reason no elder wants to play with me is because I won most of the time.” Don faced the situation of lacking personalized activities here by interpreting that other clients were not educated enough to accompany him.

**Clients’ Reactions to Age-appropriate Behavior and Speech (B)**

Infantilizing interaction occurred in Center A and fostered clients’ challenging behavior, whereas age-appropriate interaction also existed and led clients to show their concerns for the staff. During interviews with staff, they mentioned how the clients were concerned about them. The nurse said, “They can tell when we are sick and have an uncomfortable facial expression. They will come to us and ask us whether we are sick.” Some clients remembered which staff member was absent the day before and came to them by asking, “Why did you not come here yesterday?” The nurse’s aides were touched and felt happy to hear these questions and appreciated their concerns. That is, the way of staff treating clients with greetings, and listening and responding to them created a friendship between clients and staff members. The clients also showed their concerns for the staff by offering support when the staff needed help.

In Center A, stories did not end with how the clients reacted to their environment, but sometimes continued with staff reactions to the clients’ challenging behaviors. As seen in the literature, little is known about how staff members deal with complaints lodged by residents in LTC settings (Persson & Waserfors, 2009). Likewise, there is insufficient knowledge about how staff members cope with clients’ behavior in ADS centers. Using qualitative data obtained from
intensive observation and interviews with staff, I was able to analyze staff members’ reaction to client behaviors.

**Staff’s Reactions to Clients’ Challenging Behavior (B)**

As one component of social environment, staff’s reaction could be either a negative environmental factor to reinforce infantilizing interaction or become a positive component by reacting with age-appropriate behavior. There were five different manners adopted by staff in Center A: justification, enforcement, distracting, compromise, and consulting with families (Persson & Wasterfors, 2009).

**Justification.** When complaints were brought by the clients with mild dementia, the staff offered justifications for their behavior by denying the clients’ arguments so as to try to change their thoughts. For example, a nurse’s aide went into the living room to greet the clients. When she greeted Helen, Helen responded, “I don’t want to talk to you.” When the aide asked her why, Helen said, “In the United States, no male will sit next to a female,” as she pointed to a male client who sat next to a female client. The nurse’s aide responded, “We have different customs from the United States. People here are close to each other regardless of gender difference. Moreover, he [the male client] sleeps so deeply there, it might not be a good idea to wake him up now. You just need to take care of your seat and don’t have to worry about other things.” Helen became silent without further argument, so the staff member continued her greeting to other clients. One more example occurred during activity, where the complaint was also related to a female client sitting with male clients. In the sensory activity, Kelly complained, “We used to have a female group here. Now we sit with males.” The aide immediately responded to her, “We come here to know each other no matter whether we are males or females.” The staff’s justification also stopped Kelly’s complaint, but silence as an expression is not necessarily a sign
of satisfaction (Persson & Wasterfors, 2009). I still heard their complaints on the same issue, but they expressed fewer complaints in front of the staff and more to me or other clients.

**Enforcement.** Justification was used for clients with mild dementia, whereas staff members enforced compliance with directions when dealing with clients with moderate or severe dementia. Enforcement was used mostly when clients refused to go for activities. Moreover, when directions were assumed to be good for clients’ health or safety, aides insisted on following them even though the clients first declined. For example, a nurse’s aide came into the living room with a cup of warm water and told a male client with severe dementia to drink it. The male client refused to do so and tried to leave the living room. The nurse’s aide then talked to him with a loud voice, “Why do you refuse to drink? Sit down.” The client then followed her direction and sat down to drink the water.

**Distracting.** When justification and enforcement did not work to minimize clients’ aggressive language and behavior, staff used the strategy of distracting them. One example was during the first morning activity with the severely demented group. Coco, a female client, left her seat suddenly and asked to go home. She tried to open the door but failed. She then became mad and talked in a loud voice, and her behavior distracted other clients’ attention from the activity. Ruby, a good friend of Coco, also left her seat and asked to go home. An aide went to Coco and tried to force her to sit back with the group by talking to her in a loud voice. Coco refused and continued looking for a door to exit. The aide then turned to talk to Coco with a gentle voice and distracted her by inviting her to sit with her on a sofa at the other side of the room. When the aide asked Coco about her life experiences, Coco became calm and talked about her early life instead of asking to go home. Then the aide invited Coco to sit on a massage chair, where Coco became quiet and enjoyed the massage chair until the end of the activity.
Compromise. When clients’ reaction, in staff’s view, did not disturb the flow of activities or harm their health or safety, staff compromised their demands by giving them more autonomy. One morning an aide approached Ann, a female client with severe dementia, and tried to take her to the restroom by telling her, “Aunty Ann, good morning. Let’s go to the restroom.” Ann refused to go, saying, “I just arrived here. Why do I have to go anywhere?” The aide then distracted her attention in order to take her to the restroom, stating “Someone is looking for you. Let’s go there to check out what is happening.” Ann still resisted going with the aide, so the aide gave up and followed Ann’s will, saying “Okay, we can go later” and left Ann alone.

Another staff-compromising instance happened when an aide tried to lead a specific song to end the activity. The clients, however, had different opinions on which song they wanted to sing. At first the aide announced, “Let’s sing a song. Let’s sing Four Seasons” without asking the clients’ preferences. Shelly then started to sing a Japanese song instead of following the aide’s direction. The aide thus asked other clients to follow Shelly in singing the Japanese song together. A female client refused, stating, “I forget how to sing the Japanese songs because I haven’t sung those songs for a while.” The aide then changed her mind and said, “All right, how about Taiwanese songs. Let’s sing Four Seasons.” A male client suggested singing another Taiwanese song, so the aide followed his suggestion and led that song. This singing incident revealed that the aide tolerated the clients’ challenges and accepted their suggestions rather than insisting on her direction and forcing them to follow. The aide may have tolerated the clients’ behavior because she was with the clients with mild dementia who still possessed the ability to select songs to sing.

Consulting with families. If clients’ behavior became too challenging for staff members to deal with, they turned to the client’s family for help. The social worker told me that they used
to have an elder who had aggressive behavior at the Center and influenced the other elders likewise. When most of the elders were affected by her, it became hard for staff to lead the activities or direct them to do things. The staff had tried different ways to manage the client’s behavior but did not succeed. They then consulted with her family and found that she frequently became emotional because she had quarrels with her daughter-in-law every day before coming to the Center. The social worker thought that if the family tried to change the situation at home, the clients’ challenging behavior in the Center may decrease. Yet normally, “the family members just want to use medication to solve problems,” the social worker said. Although the social worker felt frustrated about using medication to solve the clients’ challenging behaviors, she admitted that this was the most effective way to make this change.

In sum, the social model of Center A with its unique physical and social environment ($E$) and place rules ($P \times E$) produced both positive and negative environmental press to deter and foster the infantilization. The clients ($P$) in Center A with their diverse competencies and backgrounds reacted to the infantilizing treatment in four different ways ($B$). The staff-client interaction did not conclude with clients’ challenging behavior, but rather continued with the staff’s infantilizing or age-appropriate treatment in response to clients’ challenging behavior. In other words, the interaction between staff and clients could be an ongoing process depending on how clients or staff responded to each other. Because staff in this study were recognized as one part of the social environment, clients’ reaction to their treatment was not only the result of person-environment interaction but also represented a new factor that influenced the dynamic of the social environment. Ryvicker (2011) indicated that residents in various types of nursing home facilities faced a range of interactions, received different care, and had disparities in their quality of life. The life of clients in Center A should be expected to differ from that of the clients
in other ADS centers. The following analyzes a medical model of ADS center (which is named Center B) to compare its person-environmental interaction with Center A.

The People, Environment, and Behavior in Center B

Center B is located in a hospital with different clients and varying physical and social environment which could trigger different interactions and reactions between clients and staff members. The analysis in Center B also follows Lawton’s equation $B = f(P, E, P \times E)$ by first describing its clients’ competencies ($P$) and physical environment ($E$), and then discussing place rules ($P \times E$) and social environment ($E$). The patterns of reaction from clients and staff ($B$) are listed at the end of this section.

Clients’ Competencies ($P$)

From my interview and observation data in Center B, I only had enough information to assess clients’ competencies within two domains: cognitive ability and physical health. Unlike in Center A, Center B’s staff did not refer to the emotional health of their clients in interviews.

Cognitive ability. Because of the hospital’s rule that prohibited my access to clients’ scores on the Mini-Mental State Examination (MMSE) in Center B, I obtained information about clients’ global cognitive ability from the staff and my field observation. Although Center B was not established only for people with dementia, the staff still associated clients with dementia symptoms. From the staff’s description, most clients in Center B have dementia, particularly moderate dementia. Although the staff did not explicitly mention their course of treatment for clients with different levels of cognitive ability, an aide indicated her preference to take care of people with moderate or severe dementia, “because most of them are confined to wheelchairs,” whereas “people with mild dementia are able to do whatever they want and become harder to control their behavior.” From my observation, I found that clients with mild dementia were given
more autonomy, whereas those with moderate or severe dementia were more controlled or confined under the staff’s direction.

**Physical health.** In terms of their physical ability, clients in Center B seemed to be segregated into two groups: people who were disabled and wheelchair-bound, and people who were able to walk. When the clients arrived at Center B in the morning, most of those using wheelchairs were placed in the lobby area, whereas others were led to sit in the dining room. Debbie, a female client with mild dementia who used a wheelchair, was the exception to sitting in the lobby. According to the staff, Debbie lived one month with her oldest son and another month with her youngest son. Her two daughters-in-law competed with each other to provide the best care for Debbie, so they called the Center frequently to check on her. Because of this family’s pressure, the staff treated Debbie differently from other clients with disabilities and sat in the dining room instead.

The first morning activity normally took place in the dining room, so most of the wheelchair users usually were left in the lobby area doing nothing. Sometimes the aides “remembered” those in wheelchairs in the lobby, and then moved them to be close to the dining room. The nurse’s aides explained that they left these disabled clients in the lobby because the dining room was too small to include all of the clients. Yet when it came to the TV watching time in the living room, the disabled clients were still sometimes left alone in the lobby.

Although Debbie was the only one wheelchair user who had a seat in the dining room, she occasionally was misplaced in the lobby when the aides were busy serving other clients. One afternoon after being taken to the restroom, Debbie was placed in the lobby alone facing the wall. One nurse’s aide told her, “You don’t have to go back to sit in the living room now. Eat your snack here.” After snack, no staff member moved her back to the living room, so she just
looked at the wall and did nothing. I noticed Debbie’s situation, so I went to her and asked, “Grandma, may I take you back to the living room?” Debbie responded, “Sure, otherwise, I will be here looking at the wall forever.” Disabled clients can only rely on the staff members to take them around. Because their physical condition requires extensive help from the staff, one of the nurse’s aides expressed pressure exerted on her to take care of them by saying, “I wish we didn’t have so many disabled elders because they need two aides to accompany them to the restroom. Then we might not pay attention to other clients and some of them might fall without our supervision.”

**Individual differences.** The clients in Center B were not only different in cognitive and physical ability but were also diverse in their various backgrounds, life experiences, personalities, and living arrangements, a situation that also influenced the staff-client interaction (where Debbie was a good example). The table below is a summary that shows the individual differences of clients in Center B. Like in Center A, the first four clients were the selected interviewees and the rest of them were frequently shown in my field notes as having more obviously challenging behavior.
### Table 2

**Characteristics of Selected Clients in Center B**

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Cognition</th>
<th>Physical</th>
<th>Former job</th>
<th>Life experiences</th>
<th>Trait</th>
<th>Reaction toward infantilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lynn</td>
<td>Mild dementia</td>
<td>No help needed in walking</td>
<td>Secretary</td>
<td>Born in China and has lived in Taiwan for 50 years. Widow and now lives with daughter. Has fallen at home twice.</td>
<td>“Has a clear mind” Is like a big sister in the Center who tries to help other clients or scolds some clients, such as Phoebe. Friend of Vivian.</td>
<td>Challenge/ conversion</td>
</tr>
<tr>
<td>Nancy</td>
<td>Mild dementia</td>
<td>No help needed in walking</td>
<td>Vendor</td>
<td>Born in China. Understands Mandarin but can only speak a few sentences in Mandarin. Widow and now lives with daughter. Has fallen at home once.</td>
<td>Does not like to gossip about other people. Likes to do exercise. The eldest client in the center (92 years old).</td>
<td>Colonization</td>
</tr>
<tr>
<td>Tom</td>
<td>Moderate dementia</td>
<td>No help needed in walking.</td>
<td>Government official</td>
<td>Born in China. Was a soldier and came to Taiwan with the army. Widower and now lives with son and daughter-in-law.</td>
<td>Easy-going. Is usually called by full name in Center B. Likes eating and reading newspapers at Center.</td>
<td>Colonization/ challenge</td>
</tr>
<tr>
<td>Vivian</td>
<td>Mild dementia</td>
<td>No help needed in walking.</td>
<td>High school teacher</td>
<td>Born in China. Widow and now lives with son and daughter-in-law.</td>
<td>Has a strong mind and “does not cooperate all the time.” Friend of Lynn. The staff members usually call her teacher Vivian. Often complains about son and daughter-in-law with other female clients.</td>
<td>Challenge</td>
</tr>
<tr>
<td>Phoebe</td>
<td>Severe dementia</td>
<td>Needs supervision in walking.</td>
<td>Baby-sitter</td>
<td>Born in China. Widow and now lives with daughter.</td>
<td>“Bound in a wheelchair” frequently. Likes wandering around at Center and taking the Center’s things back home. Is put on medication to control behavior.</td>
<td>Challenge</td>
</tr>
<tr>
<td>John</td>
<td>Mild dementia</td>
<td>No help needed in walking.</td>
<td>Government official</td>
<td>Born in China. Was a soldier and came to Taiwan with the army. Widower and lives alone with one daughter visiting him frequently.</td>
<td>Has speaking problems. Likes to read books. Walks around in the hallway several times a day.</td>
<td>Colonization/ challenge</td>
</tr>
</tbody>
</table>
Physical Environment (E)

When asked the interviewees’ opinions on the setting, décor, and other physical characteristics, both the clients and the staff members only indicated the drawbacks of the physical environment of Center B, which were described as a hospital-like setting, a small space, and having blind spots.

Hospital-like setting. As described above, the physical environment of Center B has been determined by its conversion from an emergency room. From my observation, I found that the newcomers were uncomfortable staying in this hospital-like environment by saying, “I am not sick, so I don’t have to stay in this hospital,” or “Can I go home now? I feel good now and do not need any treatment.” Even though the staff and other clients told them that they were not in the hospital, those newcomers still deemed Center B as part of the hospital.

Small space. Both clients and staff complained about the small space in Center B. Leo, a male client with mild dementia, suggested enlarging the space, so the clients “can easily walk in the Center.” Lynn, a female client with mild dementia, complained about the space being “too small,” so she could not find a place for herself to rest privately. The staff members indicated that the space “is too small to allow all of the clients to join the activities in the dining room.” When the dining room became crowded with half of clients, the small space “increased the risk of falling” for clients passing through the narrow pathways.

Blind spots. Staff members indicated that having too many blind spots in Center B was another big problem. That is, too many walls in Center B created many blind spots where the aides and the clients could not see each other. While these blind spots required more staff supervision, the understaffing problems (discussed later in the section of regulation) magnified this disadvantage.
The staff members believed there is a need to remodel the physical environment of Center B, but they expressed little hope about such a remodeling. One aide said, “It is hard to do any changes here…we have to rely on the hospital to make the changes. However, the hospital does not pay attention to this Center.” Operated under the hospital system, Center B is not only limited in terms of physical environment, but is also influenced by the hospital place rules. The following section demonstrates how the hospital regulations influence the place rules, social environment, and the interaction between staff and clients in Center B.

**Place Rules (**\(P \times E\))

The explicit place rules in Center B were the hospital regulations, and the implicit place rules were derived from the shared understanding of the image of the clients, the regulations created by staff members, and activities in Center B. I first address regulations of the hospital and show how they guide the staff to treat their clients in particular ways. The shared understanding of the image of the clients refers to how staff and clients label elders. The rules created by staff reveal how regulations indirectly guide them to create and implement rules in Center B. I then show how the interaction between the staff and the clients might be limited or influenced by which activities the staff leads.

**Regulations.** According to the nurse, the regulations of the hospital indicate that people who are 65 and over have a risk of falling and need supervision all of the time. That is, no matter what physical and cognitive condition the clients have in Center B, they are all recognized as having a risk of falling and needing constant watching. Moreover, in order to prevent the clients from falling, hospital regulations also indicated that *clients must sit in a wheelchair, wearing a seat belt, when they went out of the Center.* So, even though the clients were capable of walking without help, they were made to sit in wheelchairs to go to PT in the hospital. One day a male
client in good physical condition was strapped in a wheelchair to go to PT. He asked one of volunteers who accompanied him, “Why do I have to sit in the wheelchair even though I can walk?” The volunteer replied, “This is the hospital’s regulations. We have to obey the regulations as volunteers in the hospital.” That is, the hospital’s regulation to see all clients as the same as frail elders led to another regulation to confine the clients in wheelchairs because of safety. One nurse’s aide said, “This hospital focuses on safety….we were trained to know that safety is more important than anything.” In order to make sure all of the clients are safe, the staff members not only strapped the clients in wheelchairs when they went out, but also frequently confined clients with severe dementia in a wheelchair, in particular, Phoebe.

Except for the director, all of the staff reported a problem of understaffing. The director stated that she hired the number of the nurse’s aides in Center B based on the hospital regulations for nursing homes. Like Center A, the ratio of nurse’s aides to clients was one to six in Center B. Unlike Center A, however, staff members in Center B complained more about feeling stressed, having few chances to talk to the clients, working overtime, and having no time to plan for activities. The nurse told me that she wished to have more interaction with the clients, but had “too much paper work to do every day.” The three nurse’s aides complained about being ignored, stating, “The hospital never sends people to check our work here and does not know that we have been working overtime for a while.” One aide felt that activities were bad in Center B because they did not have enough aides to facilitate good activities. She said:

We want to offer elders great activities, but we also need to take them to the restroom during the activity. Some disabled elders need two aides to accompany them to the restroom. If there are only two aides on duty, the activity then has to be stopped.
The staff expressed that leading activities and taking care of the clients’ physical needs were too much for them because of understaffing. Due to the hospital regulations and understaffing, the nurse’s aides prioritized the clients’ physical care and expected the volunteers to help with emotional care. As the regulations did not explicitly address the job of volunteers, they might not have known that their job was to take care of the clients’ psychological well-being. The insufficient and imbalanced care might therefore have undermined clients’ quality of life in Center B.

While the regulation of confining ADS clients in wheelchairs can also be seen as ageism, taking a negative view of elders was also dominant among staff and clients in Center B. The following shows how staff labeled their clients by their age and medical diagnosis, and how clients described themselves or other elders.

**Labeling.** Both staff and clients expressed ageist views by saying, “they are old, so they cannot do…” or “we are old, so we are not able to…” Staff members said clients due to their age, “cannot do anything,” “have a risk of falling,” “have to sit in wheelchairs to go out,” “have to have their blood pressure checked every day,” “need to use the restroom frequently,” “are like children,” and “have some bad habits.” The clients also labeled themselves in an ageist manner, saying things such as, “We elders cannot do whatever we want but have to compromise with whom take care of us,” “I am old and feel sorry about getting my children into trouble,” “I am old and have become useless,” “We elders have to learn not to care too much,” and “Old people are useless and need international caregivers to take care of them.”

In addition to ageism, the staff also labeled clients based on their medical diagnosis. For instance, the aides described clients as “dependent,” “incompetent,” “crazy,” “confused,” “forgetful,” “having abnormal behavior,” “being like children,” and “sick” by connecting
behavior to their dementia symptoms. That is, in the medical model of Center B, all staff, from
the director to the nurse’s aides and volunteers, related the clients’ behavior problems to their
dementia diagnosis. For example, the director stated, “Most of the elders in Center B have
dementia and hallucinations easily. Their sundown syndrome makes them ask to go home every
afternoon.” The nurse also linked the clients’ violent behavior with dementia, saying, “Some
elders break our Center’s doors and have violent behavior due to their dementia….Like Phoebe.
She used to break the door in the Center, and it may be dementia that triggers her desire to go out
or to wander around the Center.” One nurse’s aide also agreed with the nurse by telling me, “We
used to have a grandma throwing things everywhere….her dementia made her out of control.”
Another aide even described the clients as “sick,” so “they are irritated,” “are not normal,” and
“mostly are not treated with respect.” One volunteer justified the staff’s behavior toward clients
with severe dementia, saying, “Some clients with severe dementia are bound in the wheelchairs
because we don’t know when they will go crazy….I don’t know how to let them know what we
want them to do. The only thing I can do is to tell myself that they are sick.” The lack of training,
perceived lack of staff, and the medical environment led most of the staff members in Center B
to automatically connect the clients’ challenging behaviors to their diagnosis.

Sometimes the staff even took advantage of the clients because of their dementia
symptoms. One day when the clients were gathered in the living room to watch a TV drama, a
female volunteer tried to figure out which episode the clients watched the last time so as to
continue where they left off. But one aide told the volunteer to just pick whatever she liked to
watch because, “it doesn’t matter. They don’t remember what they saw.” Here, the aide with an
ageist point of view place all clients in a homogenous category as old age and treated them the
same. Moreover, the staff judged the clients’ behavior because of their dementia. One morning,
when Nancy, a female client with mild dementia, saw that Phoebe, a female client with severe
dementia, was sitting on a seat next to hers, she stopped moving toward her seat. A nurse’s aide
then talked to Nancy, asking, “Grandma, do you forget where your seat is? Your seat is there. Go
to sit down. You also have to remember to sleep on your bed for the nap. You always forget
that.” The nurse’s aide assumed that Nancy forgot where her seat was, yet it appeared that Nancy
knew which was her seat, but was reluctant to sit next to Phoebe.

Under the shared understanding of labeling clients by “old age” and diagnosis as well as
experiencing the pressure of understaffing, the staff came up with some rules to control the
clients’ behavior to make sure that they were safe. The two main rules created by the staff in
Center B were gathering the clients together in one area and providing care that focused on
clients’ physical well-being.

**Rules created by the staff.** According to the director, the nurse’s aides were told to
gather the clients together in one area for activities so “they won’t miss any clients.” That is, the
staff had the clients stay in the living room for the activities, in the dining room for lunch, and in
the lobby when waiting to go home. When it was the time to watch TV or exercise, the clients
were told to go to the living room. When it was the time for lunch, the clients were told to sit
back in the dining room. I found that the clients were usually gathered in the living room to
watch TV when the nurse’s aides took disabled clients to the restrooms, which were close to the
living room. Although the clients were told to stay in the living room, some of them who were
able to walk were allowed to leave and go to other places in the Center. Unlike Center A, the rule
of gathering the clients together to do the same things was not strictly performed in Center B. For
example, John, a male client with mild dementia and who needed no help when walking, was
allowed to stay in the dining room to read his book alone without being forced to exercise in the
living room with other clients during my last week of observations. Leo, another male client with mild dementia who walked with a cane, sometimes left the living room in the middle of exercise time and sat in the lobby alone. No staff member went to him and forced him to go back to the living room for exercise. It seems that the clients in Center B, where activity participation was not so important for the staff, had more autonomy to decide whether to participate in activities than clients in Center A, where mandatory participation in activities was one of its place rules.

The hospital’s regulation focusing on the clients’ safety led to another place rule, targeting the clients’ physical care. In order to have the clients remain safe in the Center, the staff members took disabled clients to the restrooms every two hours, bound some clients in wheelchairs to prevent them from falling, and put the food into some clients’ bowls to “help” them eat all the food. The staff members assumed that physical care was more important than emotional care, and provided it without asking and ignoring the clients’ preferences, which can be counted as infantilizing behavior or speech. In addition to the regulations and rules created by the staff, activities held in Center B are also crucial in influencing the interaction between clients and staff.

**Activities.** In Center B, there were two forms of infantilizing activities: childish games and repeated activities. Although Bingo was not recognized as a game for children in Salari’s (2006) study, Vivian, a female client with mild dementia, said Bingo “is for children.” This attitude might be because bingo is mostly played by children in Taiwan, yet Vivian also commented that coloring is for kids, saying, “I don’t like to do coloring. That is for kindergarten students, but they [the staff members] asked us to do it….why do I have to spend money on doing things for kids…” When asked about their feelings about the activities in Center B, three of four clients mentioned that, “There is nothing here for us to do,” “We had nothing here,”
“There is nothing that can be counted as an activity in the center,” and “I don’t think what they [the nurse’s aides] led can be counted as activities.” The reason that the clients did not feel that there was any activity hosted in Center B might be because those activities repeated too frequently. A male volunteer told me, “You can see that we list all the activities on that poster that is hanging in the lobby, but we only do some of them. The elders knew that some activities were held frequently and that they might get tired of having them so often.” A nurse’s aide admitted that, “We have been here for a long time and have led almost the same activities for a long time.” From my three weeks observation, watching TV, doing exercise, and playing bingo and croquet were repeatedly led by the aides in Center B. The clients might see those repeated activities as childish games or routines that they were told to do in the Center instead of those they enjoyed.

Although activities in the Center B were less diverse than in Center A, the clients in Center B were given more autonomy to decide their participation. That is, the activities in Center B were neither mandatory nor held with a fixed schedule. Lynn said, “We can sit wherever we prefer and talk whenever we like here. They [staff members] didn’t force us to do anything.” Nancy expressed the same, stating, “I can choose to join the activities I like. I like to exercise, so I join them every time. I don’t have to join the activities that I dislike. I can freely make the decision to join the activities or not.” This indicates that the staff members in Center B focused more on client physical care and cared less about whether clients participated in activities. This observation is similar to Ryvicker’s study in a hospital-like nursing home where staff focused on physical care of the body and paid less attention to building relationships with residents.

Additional staff characteristics, the components of social environment, are described below.
Social Environments: Staff’s Characteristics ($E$)

Nurse’s aides at Center B expressed their love for their job, but indicated that it was “not an easy job,” and felt tired or exhausted while working these days. All of the aides had approximately 15-years of work experience, they were proud of their abilities to take care of clients, as seen in the statement, “We know what they [the clients] want to do from looking in their eyes.” But other staff members had an opposite view on the aides’ competencies. The director told me,

“To be honest with you, I think our nurse’s aides need to have more training. They are the senior staff members in this hospital, and may think they have much experience in Center B, and assume everything they do is right. But they may not always treat all of the clients appropriately. They need to be trained to control their emotions.”

Although the aides focused more on physical care, the director told me that “I care more about the daily activities” and stated that “the social worker and volunteers help organize and facilitate activities, such as the gardening, storytelling, and music therapy.” The truth was that the social worker was responsible for the whole hospital and only came in Center B a few times a month. While the volunteers came to Center B regularly, they were not trained to lead the activities. The nurse and the three nurse’s aides did not directly tell the director the problem of understaffing, but asked me to suggest this to her. It seemed that there was a communication gap between the director and other staff members in Center B. This communication gap created unsatisfied working environment and may diminish quality of care provided for clients.

Like in Center A, controlling emotions was essential for the staff in Center B, and this was well known by the aides. One aide told me that, “We cannot be angry with the elders. If the elders make us mad, we will leave them temporarily. Our job is to serve people, so we cannot
have our own emotions influence others.” Yet the director indicated the aides’ failure to control their emotions was serious, stating, “The nurse’s aides have to learn more about how to keep their emotions out of their jobs…they lose their patience and get tired of taking care of Phoebe [a female client with severe dementia] when she messes things up.” The housekeeper also mentioned that the aides had “unstable moods,” yet she explained this was because “their work is so demanding. Some of them have family members who need to be taken care of, so they may feel stressed.” That stress contributed to losing emotional control was also echoed by one male volunteer, who said that the aides are “sometimes rude to the elders because they have too much stress.” He even suggested that the hospital have a psychologist to help the aides release stress. Losing the ability to control their emotions might create negative environmental press for or create infantilizing interaction with the clients in Center B.

Social Environments: Staff’s Infantilizing Behavior and Speech (E)

In Center B, I found several patterns of infantilizing behavior or speech depicted in Salari’s (2006) study. Reprimanding clients and publicly disclosing information about clients’ condition were the most commonly expressed views of the nurse’s aides or volunteers. Confinement and baby-talk were also frequently observed in Center B. Three other forms of infantilizing behavior in addition to the U.S. patters were didactic interaction, neglect, and calling clients by their full names.

Reprimand. Both nurse’s aides and volunteers reprimanded certain clients often during activities, particularly in playing Bingo and doing exercises; Mary, for example, was scolded by the staff frequently, and was labeled as “lazy” when she did not follow the nurse’s aides’ or volunteers’ direction to do activities or exercise. One afternoon a nurse’s aide led exercises in the front of the room. When she saw Mary sitting on her seat with limited movement, the aide
scolded her, staying, “Mary Lee, move your body. You have to work hard. You are ill because you are too lazy to work out.” This aide, therefore, not only reprimanded Mary for being lazy but also interpreted her laziness as related with her diagnosis. During a restroom break, another aide went to Mary and said, “You are so lazy. You need to walk more. Why not walk to the restroom now?” The aides’ comments sometimes broke the privacy boundary, such as, “Mary you are too lazy….Your husband did not want to talk to you because you are too lazy.” Volunteers sometimes followed aides in treating Mary inappropriately. During the coloring activity, one male volunteer went to Mary and reprimanded her, saying, “Come on, use the pen to draw. Don’t be so lazy.” While all of those reprimands against Mary sounded harsh for me, Mary did not show any resentful emotions and sometimes even smiled back. The aides and volunteers thus continued labeling her as “lazy” in front of other clients in Center B. Staff treatment of Mary can thus not only be seen as a reprimand but as a disclosure of her private life, which became a topic of chat among staff members. The staff not only disclosed Mary’s personal issues but also talked about other clients’ conditions in front of the clients.

**Public disclosure of the clients’ conditions.** In addition to Mary, I found that other clients’ conditions were gossiped about among the aides, the bus driver, and volunteers in front of the clients at Center B. One morning, Lynn and John, both with mild dementia, talked to each other in the dining room. Lynn praised John’s jacket and asked him where to he got it. John tried to reply to Lynn’s question, but a nurse’s aide interrupted their conversation and said, “His daughter bought it for him. His daughter treats him well because he is her only dad. He brought her a lot of trouble though.” That aide could have mentioned that his daughter bought that jacket, yet she disclosed John’s relationship with his daughter without his permission. Another public discourse happened to May, a female client with mild dementia, who attended the Center twice a
week. When all of the clients stayed in the lobby to wait for their rides, one of the aides talked about May by pointing at her and referring to her as, “that person.” Although May just sat two seats away from the aides, the aide continued talking about May’s family issues as if she were not in the lobby. The aide here not only public disclosed May’s privacy, but also treated May as an object by talking about her in the third person, as if she were not there. This kind of objectifying was found more frequently in Center B than Center A and is consistent with Ryvicker’s (2009) findings in the hospital-like nursing home where there was a tendency to treat residents as an object.

The public disclosure occurred mostly in the morning when volunteers arrived, and in the afternoon when the bus driver came. The clients’ private lives thus became topics of chat the aides shared with them. Not all the staff in Center B, however, joined or agreed with this treatment. The housekeeper commented that, “I did not think it was appropriate to discuss the elders’ condition publicly. Sometimes they [the aides] gossiped about Debbie’s family in front of her. We as the staff members should not talk about the elders’ private matters in public.” While the housekeeper indicated her disagreement with those privacy violations, she never stopped the aides broadcasting clients’ privacy and sometimes joined them in commenting on the clients’ conditions.

Confinement. Although the clients did not need staff permission to move around in Center B, the disabled clients or those with severe dementia were normally confined in wheelchairs and relied heavily on the aides to move around. One volunteer expressed this confinement as a way to deal with the clients’ challenging behavior, stating, “Except for strapping them in wheelchairs, we don’t know other ways to deal with their being restless.” Phoebe, a female client with severe dementia, was capable of walking alone, yet was strapped in
a wheelchair every day to control her aggressive behavior and prevent her from falling. During the interview, the nurse of Center B justified the confinement, saying, “Phoebe has a risk of falling due to her medication [to control her aggressive behavior]. In order to prevent her falling, we have to confine her.” Phoebe, however, was not satisfied being confined in a wheelchair and tried hard to get out of the wheelchair by taking off all her clothes. So the confinement for Phoebe triggered another challenging behavior. But as the physical safety of clients was the first priority in Center B, staff would rather let Phoebe continue struggling in a wheelchair than let her freely move around and risk her falling.

**Baby talk.** The aides used baby talk with certain clients occasionally. Age-inappropriate nicknames as one type of baby talk was seen in Center B when, Phoebe, doing something that was not allowed by the staff, was called “a bad girl.” One day during lunch, when Phoebe was confined in a wheelchair, she struggled to escape and put food all over her body. An aide went to her and said, “You are really a bad girl. You do not deserve to eat lunch.” Phoebe’s name was sometimes modified as “Phoebebe” when the nurse wanted Phoebe to take her medication without any resistance. As mentioned in Chapter Three, using reduplicating words in Taiwan is a typical feature of how a mother would talk to her baby, and can thus be recognized as baby talk or infantilized speech with elders. The nurse used reduplicating words to coerce Phoebe to take her medication smoothly.

**Didactic interaction.** While I also found didactic interaction in Center B, it was less frequent than in Center A. Giving direction in Center B mostly happened during lunch when the aides and volunteers were telling clients how to eat their food. In order to have them eat consistently, the nurse’s aides and volunteers put the clients’ food into their bowls by saying, “You have to eat more of this food….This food is all good for you. You have to eat it all.” The
director of Center B claimed that what the aides did was to help the clients, saying, “Most of them [the clients] disliked having vegetables, so the nurse’s aide helped them to put the vegetables into their bowls by telling them that the vegetable is good for their health. Then the elders eat them all.” The staff thought they were helping the clients, yet Leo, a male client with mild dementia, disagreed about this kind of “help.” He told me, “I did not want to eat vegetables, but they [the aides] forced me to eat them. They said that vegetables were good for me. I did not care and got angry about their behavior.” Directing the clients how and what to eat might be viewed as the consequence of following the regulation of concentration on physical care. The staff in Center B may have thus cared more about the clients’ physical well-being as indicated by food intake and ignored the detraction from psychological well-being resulting from being forced to eat. The aides not only directed the clients how to eat, but also controlled their pace of eating. In order to avoid the hassle of being too late for the restroom, an aide told one disabled client to rush his meal, saying, “Hurry up. Eat fast. You have to eat fast and finish your food as soon as possible. Otherwise, it will be too late for you to use the restroom, so you may pee your pants again.” The aides also have to return the clients’ lunch boxes to the kitchen, so sometimes they pushed the clients to eat faster.

Neglect. Consistent with Ryvicker’s (2009) study done in a medical model of nursing homes, absence of conversation between the staff and clients was more common in Center B than Center A. This happened mostly during afternoon exercise when the aides were tired and led the exercises while looking down on the ground. Sometimes the aides did not pay attention to the clients, but chatted with each other when leading exercise. One day after exercise, an aide turned on the TV and selected a show she liked. The aide did not ask the clients’ preferences but kept changing channels based on her own wishes. Vivian, a female client with mild dementia,
made an annoying sound to express her anger about the nurse’s aide’s behavior. The aide ignored Vivian’s feelings and continued changing channels. Sometimes two aides watched TV with the clients in the living room and chatted with each other over clients who sat between them. The staff in Center B seldom initiated a long conversation with the clients but liked talking to each other, volunteers, the bus driver, and family members. The conversations between staff and the clients with mild dementia were few, and were rare or non-existent between staff and clients with severe dementia.

**Calling by full names.** As mentioned before, calling Taiwanese elders by their full names is considered a disrespectful and age-inappropriate behavior. Only children or students are called by their full names when they were in trouble. In Center B, however, Tom, Mary, and Phoebe, who possessed mild, moderate, or severe dementia respectively were often called by their full names when the aides gave direction or delivered their meals, whereas other clients were mostly called “grandpa” or “grandma.” I found that the volunteers followed the aides in calling some clients by their full names. For example, during one breakfast, a female volunteer followed one aide to look for Phoebe to join the meal. An aide called Phoebe by her full name, and the volunteer also followed the aide to call Phoebe. When they found Phoebe in the living room, the volunteer helped the aide bind Phoebe in a wheelchair and told her, “Phoebe Lee, be good and have your breakfast.” Phoebe, Tom, and Mary showed no reaction after being called by their full names, but John, a male client with mild dementia and speech disorders, did not tolerate it. One afternoon when a male volunteer helped the aide deliver afternoon snack to the clients, calling John by his full name when delivering his snacks, he became furious and told the volunteer, “You cannot call me by my full name.”

Although staff in Center B showed more types of infantilizing interaction with their
clients, they also used age-appropriate behavior, such as asking the clients’ opinion and allowing some clients to freely move around. This age-appropriate interaction was more frequent between staff and clients with mild dementia. That is, infantilizing interaction was in place for every client in Center B, whereas age-appropriate treatment was given for clients with more competencies.

**Staff’s Age-appropriate Behavior and Speech (E)**

*Asking the clients’ opinion.* While I have indicated that the staff had less interaction with the clients or ignored them during the afternoon exercises in Center B, some age-appropriate conversation took place in the morning when the Center had few clients, and when aides were not too tired to interact with clients. Once all the clients had arrived at the center, staff became busy taking them to the restroom and had no time to interact with clients or ask their opinion during activities. One rare example of a staff member seeking a client’s opinion happened in the morning when Nancy, a female client with mild dementia, arrived at the Center. A nurse’s aide helped her comb her hair. The aide tried to make a hair bun for Nancy, but Nancy’s hair band was too short to do so. The aide then went to take one of her own bands and asked Nancy for permission, saying, “Grandma, is this one okay for you?” After getting Nancy’s permission, the aide then started to make the bun with her own rubber band. After breakfast, another aide brought a cushion into the dining room and asked Nancy to sit, saying, “Please sit on this cushion and let us know if this dining table is still too high for you.” Another example also happened in the morning when Mr. G (who had had a stroke but possessed clear thinking) was increasing the music volume in the dining room. An aide went to him and said, “Grandpa, can I turn the volume down, so it will not be too loud like noise?” Mr. G nodded his head to show his agreement. After receiving Mr. G’s permission, the aide then turned the volume down.
Allowing the clients to freely move around at the Center. Except for wheelchair users and Phoebe, most of the clients in Center B could freely walk around during scheduled and unscheduled time. One aide told me, “If they are able to walk or do things by themselves, we will let them do it by themselves with our supervision, so they won’t lose their ability to do things.” John and Nancy walked around the center regularly after lunch, and Lynn was allowed to pour warm water from the hot pot without the staff’s help. During activities, the clients sometimes were allowed to leave and rest in the lobby. For example, Leo disliked doing exercises. When it was time for exercise, he moved from the living room to the lobby. Sometimes the aides invited him to join other clients, but most of the time they just let Leo sit in lobby alone without forcing him to exercise. Vivian and Lynn did not like singing hymns with a Christian volunteer group, and the staff members allowed them to leave. They even turned on the TV in the living room for Vivian and Lynn. For the clients with mild dementia who were able to walk by themselves, the staff members did not force them to participate in activities and allowed them to do what they liked. Allowing the clients to move freely at the Center, however, did not apply to clients with severe dementia and a risk of falling. Phoebe, for example, was normally not allowed to freely move around at center.

Clients’ Adaption to Infantilizing Behavior and Speech (B)

In Center B, the clients’ adaptive behavior toward the infantilizing treatment can also be categorized as challenge, withdrawal, colonization, and conversion. Within each categorized behavior, some differences may be found within groups. For instance, the clients might challenge a situation by complaining, or they may fight back with more aggressive language or violent behavior. The following describes each category by including inner differences.

Challenge. From my observation, clients in Center B normally challenged uncomfortable
situations, such as the staff or volunteers who tried to control their behavior or ignored them, with *challenging language*. One example happened when a female volunteer tried to direct Leo how to play Bingo. She told Leo with a loud voice that he did not get the right number, stating, “Hey, you, you missed the right number. Hurry up to cover that one.” Leo responded with anger, replying, “Don’t be so pushy with me.” The volunteer did not say anything else and walked away to work with other clients. Another incident took place when the clients were making crafts quietly in the dining room, and the conversation between the aides and volunteers became too loud, affecting the clients’ concentration. Vivian, a female client with mild dementia, complained to the aides and volunteers, saying “You were too noisy and disturbed my work.” The staff then quit their conversation after hearing her complaints. One day when a female volunteer brought a picture to share with the clients in the dining room, she asked the clients about the animals on the picture. She tried to tease the clients by asking them, “Are they chickens?” Lynn, a female client with mild dementia responded, “Of course not. Don’t try to fool around with us.”

Based on my observations, when clients had strong feelings of being mistreated, they *fought back with more aggressive language*. This kind of adaptive behavior occurred occasionally in Center B. One afternoon when the aides delivered the clients’ snack in the living room, Vivian found that she was the only one who did not get milk with her snack. The aides did not explain to Vivian why this happened and ignored her feelings. Vivian became so mad she talked to an aide with anger. After noticing and being influenced by Vivian’s aggressive language, the aides then started to explain to Vivian and tried to solve the problem by calling the kitchen where the snacks were made.

If the clients were really angry at the staff’s or volunteers’ behavior, they might *react violently* to show their strong dissatisfaction. During my three weeks’ observation in Center B, I
only witnessed Phoebe exhibit violent behavior toward the staff when being bound in a wheelchair. Phoebe often beat the aides with her fists to try to stop the aides’ behavior, yet her challenging behavior was controlled after being strapped in a wheelchair. During the interview, Leo told me about his potential violent behavior if he got mistreated. He said, “I didn’t want to eat vegetables, but they forced me to eat them. I may get angry and beat the staff if they continued forcing me to eat the things I dislike…If I get mad at them I will beat them. I don’t care who they are.” A nurse’s aide proved that the clients’ violent behavior did occur in Center B, stating, “We helped some elders, but they returned us with scolding and beating.” That is, if the staff’s “helping” behavior is recognized by clients as mistreatment, their violent behavior, aggressive language, or complaints might be provoked to challenge or stop the staff’s behavior. If the situation of mistreatment was not too harsh for the clients, they might just withdraw instead of confronting the staff.

Withdrawal. As mentioned above, the clients in Center B had more autonomy to decide whether to participate in activities or leave in the middle of them. The withdrawal behavior was also adapted when clients were not too interested the activities. For example, Leo and Vivian disliked singing Christian songs due to their own religious background. One morning when most of the clients followed the Christian volunteers’ direction to dance, Vivian and Leo did not pay any attention. Vivian showed no eye contact with the volunteers, and Leo did not dance at all and fell asleep on his seat. Neither the volunteers nor staff members forced Vivian and Leo to follow other clients in dancing but allowed their withdrawal. But clients were not allowed to freely withdraw from all situations. Most of the time, the majority of the clients just followed the staff’s direction as if they were being colonized.

Colonization. According to the nurse’s aides, the clients normally did whatever they
were told to do. Although Lynn told me that she felt free in Center B, she admitted that, “It is better to follow their [the staff members’] direction. They tell us to go there, so we have to go there. They ask us to come here, then we have to come. We follow their words. That is the way we do here.” The clients explained that their colonization response occurred because they “cannot change” or “everyone did that.” Leo and Lynn commented that “There is nothing we can change here. There is nothing we can do.” Lynn expressed more, saying, “We cannot ask them [the staff members] to do anything for us. We have to do whatever they tell us to do.” Colonizing the situation can thus be seen as a consensual rule among the staff and the clients. Tom said, “We have to follow them [staff members] when we are here. Here is [a place] for everyone to do the same things together. Here is not for individuals to do their personal things. I don’t care if I like or dislike the activities they scheduled for us. I just follow whatever they tell us to do.” Lynn also agreed with the idea of individuals compromising within a group, stating, “The Center is not just for one person but for everyone here as a whole.” The clients’ colonizing behavior might also be related to their cohort backgrounds. Most of the clients in Center B were born in China and were in the army when it retreated to Taiwan. The army is an example of a total institution where soldiers are required to follow all the directions, live with the same schedules, and give up self-authority in order to increase technical skills (Goffman, 1961; Janowi, 1960). The directive nature of Center B, for clients in the army, did not pose a problem. Tom, for example, has been used to conforming since his time in the army; therefore he went along with directives in Center B.

**Conversion.** Consistent with Salari’s (2006) study, some clients also distanced themselves from other clients Center B. Clients with mild dementia relied on ageist attitudes to distinguish themselves from those with low cognitive functioning by commenting on them as
“troublesome,” “sick,” “insane,” “confused,” or “useless.” Phoebe received the most comments from other clients. For example, when she was bound in a wheelchair and tried to escape by taking off her clothes, Lynn and Nancy (both with mild dementia) made comments on her behavior by calling her a “troublesome person.” Lynn even agreed with the aides’ practice of strapping Phoebe in a wheelchair by saying, “That old woman is taking her clothes off again. She has to be bound there. Otherwise, she will mess up everything.” When Phoebe was released from the wheelchair and wandered around in the living room, Lynn scolded her, saying, “Hey, you blocked our sight. What an insane person you are.” Conversation also happened when a new male client tried to convince the staff that he was normal and did not need to stay in Center B. The client separated himself from other clients in stating, “I am different from those disabled people here. I want to go home now…I am not like other sick people here, so it is not necessary for me to stay here anymore.”

In many cases the clients’ behavior was a reflection of the staff’s behavior, just as the staff’s behavior at times was a response to the clients’ behavior. Most studies have focused on analyzing the type of clients’ challenging behaviors or measured their frequency and circumstances in which these occurred. As described above, the staff’s reaction to client behavior also plays an important role for future practices and research. In Center B, the staff’s reaction behaviors can be classified into three types: withdrawal, distracting, and consulting doctors.

**Staff’s Reactions to Clients’ Challenging Behavior (B)**

**Withdrawal.** When staff at Center B encountered clients’ challenging behavior, they normally withdrew from the situation. A nurse’ aide told me, “When elders refused to eat with verbal expressions or violent behavior, we [staff members] quit forcing them to finish eating their lunch.” One day when a client was in a bad mood and complained about the services in the
center to an aide, the aide just frowned and left the client alone without asking her the reason she was mad or trying to comfort her. During lunch an aide went into the dining room to check the clients’ food intake. When she saw a new female client did not drink her juice at all, she told the client, “Drink your juice. It is very expensive.” The client rejected, “I am too full to have anything.” The aide then took away her juice without saying anything. It seems that the aide just performed her routine duty to check on the clients, and withdrew from encouraging the client to drink more. This kind of indifferent manner, however, somehow gave the clients more ability to make decisions on things that did not threaten their safety.

**Distracting.** If the staff’s withdrawal did not stop the clients’ challenging behavior in Center B, the staff members then adopted another strategy, distracting the clients’ attention. For example, a new male client asked to go home and tried to break the door to exit. An aide took him to sit in the lobby and asked him some questions related to his life experience in order to distract him from trying to go home. The client, however, refused to reply to her question but instead said, “I am different from those disabled people here. I want to go home now.” The aide found her way of distracting did not work well, so she turned to Nancy, a female client with mild dementia, for help. The aide invited Nancy to talk to the male client because both of them could speak the same Cantonese dialect. The male client after being addressed by Nancy then became calm and did not ask to go home for an hour. The nurse discussed her experience of dealing with John’s challenging behavior, telling me, “I remember one day when John insisted on going home to welcome his friend from the U.S.A. I had told him that his daughter had called the Center about his friend’s delayed arrival, but John thought that we deceived him in order to strap him in here. Without male staff, it was really hard for us to keep him in the Center. After pondering for a while, I went to mess up the quilts in the rest area and then asked him to help fold them. John
then came to fold those quilts and forgot about asking to go home.”

**Consulting doctors.** If withdrawal and distracting could not solve the clients’ challenging behavior, the staff then turned to the doctor for help. Unlike Center A, the nurse explained her concerns about asking help from the clients’ family members, stating, “We cannot just call the clients’ family and ask them to come every time the clients have challenging behavior. Their families brought them here because they were too busy to take care of them during the day. Our job is to take care of the clients so their family member can concentrate on their work.” To deal with the clients’ aggressive violent behavior, the staff members first tried to distract them from acting out. If the situation did not change, and the staff did know what else to do, they sent the clients to the doctors to seek pharmacological treatment for the problematic behaviors.

The medical model of Center B had its own physical and social environment ($E$) and place rules ($P \times E$) to produce both positive and negative environmental press that deters and fosters infantilization. Unlike Center A, infantilizing interaction occurred mostly during unscheduled time, such as during meals or restroom breaks, and sometimes happened during activities with childish games when the staff tried to control the clients’ behavior. During the scheduled time, staff members in Center B were busy leading the activities and, so they might be too tired or distracted to interact with clients and thus exhibited fewer infantilizing treatments to the clients. Infantilization occurred during some activities, particularly repetitive, children’s games. During the lunch time and restroom break, however, staff could concentrate on one task, taking care of clients’ physical well-being, so they had more didactic interaction with clients to direct them how to eat and use the toilet..
The clients (P) in Center A were treated differently based on their physical and
cognitive abilities and reacted to the infantilizing interaction in four different ways (B).
Encountering the challenging behavior of clients, the staff responded within two trajectories:
withdrawing from the situation or distracting clients’ attention. Compared to staff in Center A,
who focused on leading good activities, staff members in Center B were busy providing physical
care with less attention given to activities, which gave clients with mild dementia more freedom
to exercise their autonomy. A more detailed comparison between the two centers is analyzed in
Chapter Five from a cultural lens perspective.
CHAPTER FIVE: DISCUSSION

In this study I investigated how elders experience their daily life within the physical and social environment of two different types of ADS centers in Taiwan. I present my findings by first addressing each research question and connecting my results back to extant research. I address the limitations of this research project as well as contributions to practice. Further, I present implications of my findings for theory with emphasis on an ecological equation that illustrates how the factors of the clients’ characteristics, the center’s physical and social environment, and place rules of each center influence the interactions between the clients and staff members. Finally, I recommend new directions for future ADS research.

Findings from Research Questions

Infantilization Expressed within the Context of Taiwanese Culture

Although there were some slight differences in infantilization expressed in the two centers, I found that the infantilization was evidenced through activities and infantilizing interactions in both centers. Using Salari’s (2006) classification, infantilizing activities in Center A consisted of central mandatory activities with the occasional use of children’s books, and in Center B the infantilizing characteristics were repeated activities and childish games. The infantilizing interactions found in both centers included staff members’ use of sleep prohibition, public discourse of conditions, confinement, threats, limited interactions with clients, calling the clients by their full names, and didactic interaction, which happened frequently in both centers. According to Ryvicker (2011), didactic interaction is when staff members give directions without considering clients’ competence or personalities. Salari (2002, 2006; Salari & Rich, 2001) showed very little evidence of didactic interaction in her ADS studies; however, I was
surprised to find more evidence of it than other forms of infantilizing interactions in my study sites.

To explore the reason for having more didactic interaction in two Taiwanese ADS centers, I reexamined the Taiwanese culture in which I only expected to see Confucianism manifesting by showing respect to clients. I traced back Taiwanese history to attempt to find the relation between the Taiwanese culture and the didactic interaction frequently observed at the centers.

Taiwan is located southeast across the Taiwan Strait off the coast of continental China. Historically, it has been an island of immigrants who migrated mainly from the southeastern region of China bringing with them the Chinese life style and cultural traditions (Few & Wang, 2002). Following the Sino-Japanese War (1895), Taiwan was ceded by China to Japan as a colony. After a half century of Japanese colonization, the island was taken over in 1949 by the Nationalist regime that had retreated from continental China. Therefore, Taiwanese culture is formulated by Chinese cultural tradition and Japanese colonial cultivation.

As I mentioned in Chapter Two, Taiwanese culture is influenced by Confucianism and manifested by filial piety. Taiwanese culture also reflects the Confucian philosophy of “benevolence”, which emphasizes harmonious interpersonal relationships between people (Chao & Roth, 2005). Individuals in Taiwan are expected to be patient, well-mannered, cooperative, and compromising instead of confrontational; they are expected to be self-suppressive rather than self-expressive. Embedded within the culture that emphasizes harmony and collectivism, individuals may have fewer tendencies to express dissatisfaction, and the focus is placed on group goals and needs (Lee, 1999). Confucian philosophy stresses hierarchical relationships as well. In order to maintain order and harmony, individuals are taught to surrender their autonomy
to a higher authority to reach a group goal or better outcome. Traditionally, parents have absolute
power over their children at home; teachers have absolute power over their students at school;
supervisors have absolute power over their employees at work; and people with professional
specialties have absolute power over those seeking their services.

The hierarchical relationship was also stressed during the period of Japanese
colonization. First, Japanese colonial government gave certain occupations a higher social status
(such as teachers, doctors, lawyers, and policemen) and more power to rule over others. Second,
through education, Taiwanese people were taught to absolutely obey the words from those
specialists. Therefore, anyone socialized in the Japanese educational system was expected to
respond to authority. People who were in the positions of teaching, curing disease, suing for
righteousness, and maintaining society’s order were viewed as having authority over others.

After China reoccupied Taiwan, Confucianism was reintroduced in Taiwanese culture. When the
Nationalist regime took control of Taiwan, many soldiers and their families moved from China
to Taiwan and infused more Confucianism into Taiwanese society.

The colonial history combining Confucian philosophy and emphasizing hierarchical
relationships supports the power of the ADS staff over their clients to reach the administrative
goals of maintaining the clients’ health and the center’s order. Furthermore, the Confucian
philosophy of harmony and collectivism suppresses the clients’ expressions of authority or
individuality in order to reach group goals. Clients’ less challenging behavior toward the didactic
interaction reinforced or justified staff’s power to rule over them. While one party (the staff) was
proactive to direct clients’ behavior, the other party tolerated the staff’s authority, and didactic
interaction, therefore, became a common ground shared between clients and staff.
Both centers demonstrated didactic interaction; however, they functioned within two different formats: a teacher-to-student format in Center A and a nurse-to-patient format in Center B. The didactic interaction in Center A was performed through a teacher-to-student format, which was presented within a hierarchical relationship of teachers versus students. The aides were trained to act like teachers, performed like teachers, and demonstrated teachers’ power by choosing topics for discussion, setting rules for activities, and controlling the clients’ behavior. The clients were expected to respond like students by following the aides’ direction, particularly during activities. When clients tried to challenge the aides’ direction, the aides reinforced the teacher-student relationship by reminding them of their student status or enforcing their authority by making decisions for them. Most of the clients of Center A lived nearby in a neighborhood populated largely by citizens who had lived through Japanese occupation in Taiwan. More than half of them received a Japanese education, which stresses teachers’ power, and they followed “teachers” (staff’s) direction most of the time. Their tolerance bolstered the power of the staff and may have supported didactic interactions. Two male clients, for example, expressed a very positive view of the didactic interaction and thought that was a good way to organize a group of people. Helen, however, complained about it, which might reflect her 30-year residency in the United States with less Taiwanese cultural competence to adapt to the situation.

In Center B, the didactic interaction was practiced through a nurse-to-patient format, which was presented within a hieratical relationship of professional versus non-professional. The positioning of staff, including volunteers, as “experts” was demonstrated first through their uniform (staff at Center A did not wear uniforms), which represented their profession, particularly in the hospital setting. The nurse’s aides focused almost exclusively on physical care work; therefore, they exercised their professional power by directing the clients on how to eat,
when to use the restroom, or confining them in wheelchairs to reach the center’s goal of keeping the clients healthy and safe. Unlike Center A, the didactic interaction occurred in Center B mostly during the lunch time and the unscheduled time for restroom usage. Clients of Center B also tended to live nearby, in a neighborhood occupied largely by citizens who were born in China and retreated to Taiwan after the Chinese civil war. Some clients in Center B had more Confucian training and were more capable of adapting to a didactic situation than others with less education. For instance, Tom, who retreated from China with a bachelor’s degree, told me that the life in Center B was about collectivism. However, clients like Leo, who did not retreat from China and had no Japanese educational background, had fewer chances to be educated and socialized within the Confucian or Japanese traditions and had less competence to adjust to the didactic treatment. In turn, such clients exhibited more conflict with staff under the didactic interaction. The unique Taiwanese culture, embedded in Confucianism and derived from Japanese colonialism, demonstrates characteristics of collectivism, harmony, and hieratical relationships, which support didactic interaction in both ADS settings. Thus, infantilizing interactions between staff and clients are dominant in both centers. The clients steeped in Confucianism or Japanese colonial culture were better able to adjust to didactic interactions, whereas the clients with less Confucian and Japanese cultural competence had more trouble adapting.

**Social vs. Medical Modals of Centers Influence Infantilization with Ageism**

Compared to Western societies, Taiwanese culture stresses respect to elders and describes them with positive attributes such as having rich experiences and wisdom. However, researchers find that more negative perceptions, including losses in health, status, relationships, and work were attributed to Taiwanese elders when compared with perceptions of young and middle-aged
people (Lu, Kao, & Hsieh, 2009). People of different age groups in Taiwan all possessed generally negative attitudes toward elders, so ageism remains prevalent in Taiwanese society (Lin, 1987, 1993; Lu, Kao, & Hsieh, 2009). Ageism, according to Law (1995), is a form of oppression that not only limits people who are the object of that oppression but which also shapes perceptions of people, both young and old, who hold ageist attitudes. Ageism occurs not only through attitudes but involves exclusionary behavior by which people who are marked as “not old” stigmatize “old” group members, resulting in a loss of power, autonomy and authority (Calasanti, 2007). Elders experience the process of disempowerment within four stages: to be doubted about their ability to live independently after retirement, to be doubted about their abilities or behavior to do certain things, to be inducted into a role of sickness and dependence, and to identify self with a sick role and impaired self-efficacy (Kuypers & Bengtson, 1973). In the next paragraph, I examine how clients experienced ageism through the process of disempowerment or were excluded from other groups in the two types of centers.

The social model of Center A, with an old-style environment, created a reminiscent atmosphere. The staff, from the administrator to the nurse’s aides, may also have taken traditional approaches of treating elders with respect; they viewed the clients as their parents or grandparents and tried to show their respect for these elders by doing things for them. The staff called the clients by names associated with a family relationship such as “grandmother,” “grandfather,” “uncle,” or “aunt,” which was indicative in Chao and Roth’s (2005) study of a welcoming environment and positive manner for elders. However, this family-like relationship manifested itself as implicit ageism in Center A. Similar to Ryvicker’s (2009) study in one family-like nursing home facility, the kin-like relationship between the staff and clients in Center A eroded the clients’ autonomy in areas where they might otherwise have been able to exercise
it. That is, staff members viewed clients as their parents or old relatives when providing care for them. The staff respected their age; however, they performed their caregiving by treating clients as dependent and not capable of doing things by themselves. According to Bugental and Hehman (2007), the staff of Center A held a benevolent (or paternalistic) view of clients who fit a “grandparent” role. Their benevolent ageism might reflect a belief that elders deserve to be treated with more respect than younger adults and that elders are less competent than younger adults. Such beliefs are consistent with individuals’ common tendency to “over-help” elders in the same way that they “over-help” children (Hagestad & Uhlenberg, 2005). Staff at Center A, therefore, demonstrated their respect to elders by doing things for them just like they serve their aging parents at home by doing everything for them.

Studies have shown that providing care for aging parents affects the quality of parent-child relations and increases feelings of ambivalence (Willson, Shuey, & Elder, 2003). This subtly ageist elderly parent-adult child type caregiving in Center A also brought tension between staff and clients and often occurred when the staff forced the clients to attend activities and follow their direction to perform or exercise with a belief that their clients would benefit from the activities. The clients, as the beneficiaries of such efforts, sometimes expressed feelings of helplessness as a result (Avorn & Langer, 1982).

The medical model of Center B, consistent with previous ethnographic studies in nursing home settings, demonstrated the culture of ageism and the stigma associated with their clients’ (in)abilities (Ryvicker, 2011). The hospital’s regulations were applied at Center B and explicitly highlighted the frailty of old age. For example, because persons age 65 and over have a higher risk of falling, no matter how capable the clients were, they were all treated simply as bodies to be cared for and forced to sit in wheelchairs during outings to reduce the risk of falls and injury.
The hospital-like environment, with fewer interactions between the staff and the clients, in Center B facilitated ageism with the staff labeling the clients as “old people” in order to distance themselves from the clients (Shiwld, 1988). The staff’s disclosure of the clients’ diagnosis or confinement of the clients inside the center may have contributed to clients labeling themselves as powerless or useless, particularly those with mild dementia who are more cognitively able to respond to staff’s labeling. That is, the clients of Center B adapted to the hurtful ageist environment by colonizing the idea and self-labeling.

Ageism was not only perceived and explicitly demonstrated by the staff members but was evident among clients who demonstrated a negative attitude toward other elders and themselves. The clients expressed their own ageist behavior differently in the two centers. In the social model of Center A with a kin-like relationship between staff and clients, ageism was expressed by some female clients with mild dementia who would sometimes chidingly describe male clients in the center as old people who have nothing to do but sleep. In the medical model of Center B with nurse-patient interactions, clients with mild dementia engaged in hurtful ageism frequently by describing themselves or other clients as useless or worthless. In Center B, clients’ choice to ascribe negative evaluations to themselves might have resulted from staff-client communication that focused more on care tasks and failed to meet clients’ psychological needs. As part of the social environment, Center B staff members’ pattern of describing clients in a negative manner based on their age influenced the clients to ascribe negative attitudes to themselves. The clients’ ageist self-labeling may lead to more dependent behavior later (Lyman, 1988).

Researchers have demonstrated that didactic care-focused interaction typically reinforces dependent resident behaviors and thus a lower self-evaluation as opposed to more desirable outcomes such as optimal performance or client empowerment (Baltes & Wahl, 1996; Williams,
The current study, furthermore, showed that staff disclosure of clients’ diagnosis and disrespect for their privacy reinforced client self-labeling as incompetent and dependent. Clients’ ageist self-labeling was expressed less in Center A with a home-like environment of staff respecting clients with fewer explicitly ageist statements, whereas clients in the medical model of Center B showed more negative self-concept with staff frequently describing their clients with explicitly ageist statements.

Different approaches to care delivery and place rules at each center derived from ageism and resulted in disempowered clients with limited ability to exercise their autonomy. However, clients in the home-like environment of Center A referred less to ageism, whereas clients in the hospital-like environment of Center B experienced more ageist treatment. Clients in Center B exhibited more ageist self-labeling behavior, which may have lowered their self-esteem and harmed their psychological well-being (Bugental & Hehman, 2007).

**Various Reactions to Infantilization Based on Individual Differences**

According to Lawton and Nahemow (1980; Lawton & Nahemow, 1973), individuals’ behaviors and expressed emotions can be viewed as the result of individual competencies influenced by environmental press. Behavior, therefore, becomes an essential indication of the fitness between the individual and his or her environment. As mentioned in the Introduction, Lawton’s conceptualization of behavior as adaptive or maladaptive was not sufficient to describe individuals’ reaction to infantilization. Goffman (1961)’s “self-mortification” demonstrated four different types of reaction behaviors (challenge, withdrawal, colonization, and conversion), which were utilized in this study to supplement Lawton’s theory and to interpret reactive behavior.
Congruent with Lawton’s theory, ADS clients with different competencies came to experience the same environment differently both by exhibiting different reactions to the same environment or similar reactions to different types of environmental press. The clients with moderate or severe dementia had fewer competencies to adapt themselves to the environment to meet their optimal fit level and expressed more challenging behavior, such as aggressive language or violent behavior. The clients with mild dementia were more able to respond to environments by following the staff’s direction, complaining privately to me, volunteers, or other clients, or withdrawing from the situation.

The clients’ competencies not only influenced how they reacted to the environment but also affected how the staff interacted with them. As described in the last chapter, the staff gave the clients with mild dementia more autonomy but had more control over the clients with moderate or severe dementia. The clients with moderate or severe dementia had fewer possibilities for adapting to the situation and experienced more of staff’s controlling behaviors (environmental press), so they reacted with more violent behavior. In comparison, the clients with mild dementia had more competence to adapt the situation, and they faced less staff’s controlling (environmental press), so they responded with less aggressive behavior.

Lawton (1982) indicated that individual competencies include biological health, sensory-perceptual capacity, motor skill, cognitive capacity, and ego strength. Ego strength reflects individual differences in psychological strength; however, it is hard to measure psychological strength through quantitative methods and was excluded from Lawton’s measurement of competence. My ethnographic study allowed me to explore clients’ competencies with a broader lens by embracing their life experiences when investigating their reaction to infantilization (See Table 1 and 2 for clients’ individual information). Take Helen and Bella for example. Both of
them had similar cognitive abilities with mild dementia but reacted to the same didactic interaction differently. The disparity of life experiences contributed to their propensities to react in a certain way. As mentioned before, Helen lived in the United States for 30 years and just moved back to Taiwan recently. Her life experience led to less familiarity with Taiwanese culture, making her less accepting of the didactic interaction, so she viewed it as negative and challenged the situation with complaints. Bella lived in Taiwan for her whole life with a background of being a child bride, who has to obey her groom’s family absolutely. Therefore, Bella might have viewed the didactic interaction as neutral with neither positive nor negative affect and, as a result, adapted easily to the routine of didactic interactions.

In addition to the external measureable competence that was indicated by Lawton, other indicators need to be included, such as life experiences, gender, and individual traits. Like Bella, most female clients in Center A grew up in a traditional Taiwanese culture influenced by the Confucian philosophy and Japanese colonial culture which grants women less social status than men and asks people to surrender their authority to their supervisors. Traditionally, young females had no voice in the family and were taught to obey men’s or older females’ direction. Bella’s child bride background reinforced her understanding of obeying a higher authority. She never reacted with any challenging behavior during my observations in Center B. Bella’s behavior brought no trouble to staff and might be seen as an adaptation in the center. However, in the interview, she described herself as having been a fool for her whole life and reported that she needed the staff’s direction. Bella’s self-labeling of herself as a fool stead from her child life experience and was reinforced by staff’s excessive help. In other words, Bella’s life experience might have led her to not resist the ageism in infantilization, but it is the latter that caused her to see herself as a fool.
Observing Bella’s external behavior alone may lead to the conclusion that she adapted well in the ADS environments when staff treated her well as a result of her acquiescence. However, including data from interviews, informal conversation with staff, and the clients’ individual assessment data record helped me to view the routines and adaptive behaviors of clients differently. Bella’s reaction to infantilization was not only influenced by the Taiwanese culture but a recalled experience from her childhood. Labeling herself as a fool was the way that Bella adapted to her tough childhood; however, using the same strategy at Center A might have led her to recall these early, negative experiences and had a detrimental effect on her psychological well-being. Staff might overlook the intricacies of the links between her youth and her experience of old age and simply view her as a “good” client who followed their directions.

Challenging behavior demonstrated a mismatch between the environment and clients; however, adaptive behavior, which normally was ignored, also reflected a less than perfect fit, which I will address later in the discussion. Expanding the dimensions for analyzing clients’ competencies will help future researchers to better understand the interaction between the environment and individuals in ADS settings by including clients’ life experiences and comparing individual differences.

**Limitations**

Several limitations of this study are important to note. Although this study only involved two ADS centers in Taiwan, the rich data from intensive observation and interviews helped shape subsequent evaluations of other ADS centers. As mentioned in Chapter Two, more than half of ADS centers in Taiwan were private owned with their own regulations. The two research sites were both supervised under government agencies, so I have no idea whether interactions between staff and clients will be different at private-owned centers where their different
regulations may drive the staff’s action. Moreover, the two centers with their different client populations, characteristics, and regulations cannot be compared as equivalent programs.

In this research project, only ADS clients and staff were included as sources of data. In order to capture a holistic view of individual differences, Carroll and her colleague (Carroll, Holmes, & Supiano, 2005) suggested including a third party, in this case - clients’ family members or caregivers, to more fully understand individuals’ experiences. Obtaining data from all groups (clients, caregivers, administrators, nurses, and nurse’s aide) will help future research to better understand the fitness of the environment for individuals in ADS centers. Therefore, additional interviews with clients’ primary caregivers or family members would be needed to provide further insight into the individual life course factors affecting the ADS environment and thus the clients’ quality of life at ADS centers.

Although I included clients’ voices through interviews, only people who could hold a coherent conversation were interviewed. In order to treat all clients equally, it is important to find a way to include clients with moderate or severe dementia in the interviews (O’Keeffe & Siebenaler, 2006). As a volunteer at both centers, I was able to include ethnographic data stemming from opportunities to interact with clients with moderate or severe dementia. In addition to traditional methods of interviews and field observations, Hulko (2009) recommended that collecting data from participants with cognitive impairment should also involve photography and photo elicitation. Photographs provide a good starting point for discussion and make it easier to talk about sensitive subjects. Structured observation, such as the Dementia Care Mapping method (e.g., Jarrott & Bruno, 2003), have been used to provide proxy data on the experiences of persons with dementia in institutional care settings. Research has shown the effectiveness of utilizing visual data created of people with dementia interacting in their social worlds to interpret
the quality of their care environment and the adults’ functioning within the environment (Harper,
2000; Judge, Camp, & Orsulic-Jeras, 2000). Future researcher could consider using photography
and photo elicitation in interviews with clients with moderate or severe dementia.

**Contributions**

As a qualitative study, I obtained insights about two ADS centers in Taiwan, which
demonstrated the clients’ life experience in two different types of ADS centers and highlighted
the role of individual characteristics, physical and social environments, and place rules in
shaping the interaction between the staff and clients. The rich data from observations and
interviews provided a multi-dimensional understanding of person-environment interactions when
interpreted with Lawton’s theories and a consideration of Taiwanese culture. Such an
understanding can inform efforts to improve clients’ quality of life in ADS settings by providing
a better fit environment for them.

The first significant strength of this research design was utilizing both qualitative
interviews and observations. Data not only reflected subjects’ views of their lives in ADS centers
but also included the researcher’s views on interactions within the settings. Results from the in-
depth interviews and field observations in the two centers presented the infantilizing interaction,
considered mistreatment in Salari’s (2006) study, but also included positive interactions, which
can be used to identify exemplars to improve ADS quality. Much ADS research does not
distinguish between types of centers studied, or the researchers focus mostly on its influences on
family caregivers (e.g., Gaugler & Zarit, 2001; Tse & Howie, 2005). The current study
demonstrates that a social model of Center A differs from a medical model of Center B, and their
distinct care delivery and staff-client interactions may affect clients’ self-identities and
psychological well-being differently (as pointed out by Herman & Williams, 2009; Ryvicker,
2009, 2011). More qualitative inquiry needs to be done to compare social and medical models of ADS centers to confirm the results of this study and provide more understanding of clients’ lives in different ADS settings. Additional data could inform the development of quantitative scales to streamline the assessment of some aspects of the ADS environment.

Although Salari (2002, 2006; Salari & Rich, 2001) used nonparticipant observation to conduct all her studies, I found the participant observation method that I used helped me to build close relationships with clients and staff that facilitated their openness during interviews and conversations at each center. Participant observation, as Fetterman (2010) and Charmaz (2006) recommended, allowed me to obtain rich data and get an insider viewpoint (Lyman, 1988). As described earlier, Taiwanese culture values self-suppression over self-expression, so clients and staff in ADS settings may not disclose their every thought but limit their requests or complaints and control their desire for self-expression in order to avoid conflict or being labeled as troublemakers (Chao & Roth, 2005).

If I had employed nonparticipant observation methods, I might not have built a close relationship with clients and staff and may have only obtained superficial data with defensive responses. Being a volunteer at both centers allowed me to get members’ feelings and thoughts through informal conversations that helped me to critically compare individuals’ statements with my own observations. Clients who were reluctant to share their perceptions with care providers, causing a possible disruption of harmonious relationships, were willing to share their ideas openly with me. The staff appreciated my help and were less defensive about my presence at the center and shared openly with me, although some of their interview responses seemed to contradict my observations. Clients’ and staff’s openness helped me to be better understanding their role at each center. Moreover, participant observation helped me understand the person-
environment interaction and analyze the staff’s ageist behaviors. Using participant observation, I determined that staff’s ageist behavior may derive from societal embedded ageism or it may result from being in a partial institution where behavior is shaped by the institution’s need for efficiency or security. The latter is especially apparent in Center B, where the medical model led staff to care for clients by focusing on their bodies more than their minds. The most critical point of using participant observation is to allow me to analyze the client-staff interactions with a different perspective. As stated earlier, after working in these centers, I understood how staff came to treat clients in this manner. The ageism that I observed is not a result of “bad people” but instead stems from societal ageism and life in a partial institution where behaviors are shaped by the institutions’ needs for efficiency. This is especially apparent in Center B, where hospital regulations focus on clients’ bodies more than minds.

With my theoretical framework synthesizing models of environmental press, place rules and total institution, I was able to expand Salari’s studies (Salari, 2002, 2006; Salari & Rich, 2001) to not only focus on the physical setting of and social interactions within the two centers but also staff characteristics and center place rules as social environment with clients’ competencies to investigate the cause and effect of infantilization. Results of the current study revealed that even though the physical setting and activities tended to be more adult appropriate in one center, its staff’s characteristics and place rules still led to infantilizing interactions.

This study not only expanded the horizon of infantilizing research by incorporating multiple dimensions of physical and social environments into my analysis, but it also investigated the details of infantilizing behavior by identifying staff-client interactions. A cultural lens allowed me to examine the environment of two ADS centers in Taiwan and uncover how interactions between clients and staff reflected a larger cultural influence of Confucianism
and Japanese colonization on infantilization. Moreover, this research project illustrated that individuals with different life experiences perceived and responded to infantilizing treatments differently. This result, however, raised a question on how to analyze each client’s differences and required including more theories to enhance the theoretical framework of this study. Paying attention to individual differences raised another practice-related question on how to provide services to fit individual competencies and needs. The potential solution for theories and practice can be found in the next two sections.

**Implications of the Study for Theory**

Lawton’s ecological equation and environmental press theory provide a framework to examine how well the environment fits people by investigating individuals’ competence and physical and social environments. Moore’s place rules help me include both societal and cultural norms as well as the ADS sub-culture, which influences staff-client interactions. Goffman’s total institution theory provides a model for examining clients’ reaction toward infantilization or other environmental press. Therefore, I have modified Lawton’s ecological equation to encompass these other influences, which can be presented as below to evaluate ADS centers:

\[
\text{Clients’ behavior (challenge, withdraw, colonization, or conversion)} = \text{Clients’ competencies} + \text{center’s physical and social environments (staff’s behavior and staff-client interaction)} + \text{Place rules (regulations, ageism, rules of the ADS center, and activities)}
\]

Although Lawton indicated that individuals’ competencies play an important role in how they adjust within their environment, he focused more on functional competencies to the exclusion of other personal factors. Examples from individuals at centers demonstrated the limitation of Lawton’s theory and reflected a need to include individuals’ life experiences when examining the person-environment interaction. In order to improve the theoretical framework of
this study, a life course perspective is considered valuable. I will illustrate using clients at the two centers as examples. According to Elder and his colleagues (Elder, Johnson-Kirkpatrick, & Crosnoe, 2003), there are five principles for life course perspective, and three of them can be used for this study. The first principle is that human development and aging are lifelong processes, and the influence of childhood experiences may last to adulthood. This principle explains Leo’s reaction toward infantilization in Center B as a mal-adaptation because of his lack of early education during Japanese colonization with less knowledge of hieratical relationships. The third principle refers to the influence of historical time and place, leading investigators to interpret clients’ competencies as embedded in and shaped by their experiences of different historical periods (Elder et al., 2003). Some male clients in this study were born in China, grew up during the Chinese civil war, and retreated to Taiwan as soldiers. Their experiences of joining the army during the civil war provided them with the competence to adapt to didactic interactions.

The last principle acknowledges the importance of social bonds. Elder and Johnson-Kirkpatrick (2003) emphasized that individual lives are embedded within and influenced by relationships with family and other social networks. This principle can explain that clients’ behavior in the center was also influenced by interactions with their family. A good example, as I mentioned in Chapter Four, is that a female clients’ challenging behavior at the center was related to her quarrel with her daughter-in-law before coming to the center. A life course perspective expands the person-environment theories from the two dimensions of person-space interaction to the three dimensions of person-space-time interaction. Because an ADS center is a partial institution, clients’ lives outside of the center influence their lives at the center. Therefore, using the life course perspective to include clients’ family and other social networks within the
analysis can help researchers to better understand clients’ behavior as a reflection of their social environment both inside and outside of the center.

Combining a life course perspective with Lawton’s environmental theories, Moore’s place rules, and Goffman’s total institution theory, the equation, therefore, can be presented as:

\[
\text{Clients’ behavior (challenge, withdraw, colonization, conversion)} = \text{Clients’ competencies + Clients’ life course + center’s physical and social environments (staff’s behavior and staff-client interaction) + Place rules (regulations, ageism, rules of the ADS center, activities)}
\]

The equation displayed above reveals that ADS clients’ behavior is the consequence of four components interacting and intertwining with each other. Those four components are interrelated; if one component changes, the client’s behavior changes as well. Consistent with Gubrium’s ideas (1978), this equation shows that clients’ behavior was related to whom, where, when, and what staff members assessed. One client’s challenging behavior can be viewed as a reflection of the coherent fashion of his or her competencies and life course, the physical and social environment he or she is involved in, and the place rules he or she encounters. Therefore, this equation might help future researchers to expand their measurements not only focusing on clients’ pathological symptoms but also including other components of my modified equation to examine ADS or other LTC services. To prove or improve ADS benefits, researchers need to consider the four components as a whole that shape clients’ behavior at ADS settings.

**Implication of the Study for Professional Practice**

This study provides some practical implications. Research on environmental design for elders in LTC services addresses a need to build a well-designed environment to support clients’ capabilities and enhance their quality of life (Brawley, 2001). Studies reveal the influence of the physical environment on frail elders’ physical activity and suggest that a poorly designed
environment may limit elders’ mobility and independence and affect their health and behavior (Lu, Rodiek, Shepley, & Duffy, 2011). The old-fashioned setting at Center A creates a home-like environment that helps new clients adjust easily to the setting; it also encourages other clients to talk more during activities. Its open-space design reduces staff’s job loads because they do not have to follow every client at center to know about their safety. In contrast, the hospital-like setting at Center B creates a nurse-patient environment. New clients express their discomfort in that hospital-like environment and show more challenging behavior such as agitation. Moreover, Center B’s non-open space design creates many blind spots that block staff’s view to supervise wandering clients. Therefore, staff members at Center B have to look after clients to make sure they are safe. However, staff members normally do not follow after the clients but confine wandering clients in wheelchairs. In order to improve clients’ quality of life at LTC services, a home-like reminiscent environmental design could be considered; at the least the facility should offer more open lines of site for staff.

Literature and this study have indicated the benefit of a “home-like” care environment for clients; however, in the LTC industry “home-like” typically means little more than having less non-institutional furniture, the absence of ceiling mounted fluorescent light, and carpeting on the floor (Calkins, 2001). Still, a home-like environment is much more than a place that looks like home, but is an environment that feels like home. According to Calkins (2001), a home-like environment depends on the patterns of activities and interactions, the ways meals are prepared and served, and opportunities for greater control and privacy, which are typical at home. Furthermore, the structure of the relationships between the caregivers and care recipients can also affect the extent to which a setting is experienced as like home, such as whether staff sit
down and eat meals with clients. In order to recognize a setting as a home-like environment, we need to examine multiple dimensions of the environment.

This study incorporates a holistic strategy by investigating not only the physical design but also social environments, place rules, and interactions between staff and clients in a setting. The home-like environment of Center A with staff and clients wearing casual clothes without name tags and having lunch with clients might be assumed to have an optimal fit environment for their clients. However, staff’s benevolent ageism suppressed clients’ opportunities to reach their maximum performance potential. Moreover, the place rule of focusing on activities created a teacher-student relationship at Center A. The interactions between staff and client during activities were more school-like with staff as teachers directing clients as students and limiting clients’ decision making, independence, and privacy, which are critical qualities of a home-like atmosphere.

Compared to Center A, Center B lacks a home-like physical environment with staff wearing uniform, clients wearing nametags, and lunch served in hospital lunch boxes for clients only. However, staff members distance themselves from clients and that gives clients more control over activity participation. Clients in Center B treat each other more like family by showing their care and concerns for others, whereas clients in Center A care more about their own rights and benefits and fight with other clients. This finding is consistent with Ryvicker’s (2009) studies about two models of care with contradictory practices. In a “home-like” facility as Center A, staff members not only offer clients warmth and nurturance but also deprive them of rights to make decisions and treat them as child-like. In a medically oriented facility as Center B, clients receive less social and emotional support from the staff; however, that creates opportunities for clients to exercise their authority in ways often lacking in Center A. The results
of those two models contradict expectation and raise a question of defining and implementing “good” care.

Investigators or family members who glance around both Center A and Center B may see Center A as a better fit for elders with its home-like environments and well-scheduled activities. However, staff with benevolent ageism treat clients as their family members with too much protection and undermine clients’ opportunities to exercise their rights. Therefore, based on Lawton’s press theory, clients at Center A may locate in the zone of maximum comfort that may be associated with smugness, lassitude, dependency, and underachievement (Lawton, 1982). The hospital-like environment of Center B with a laid-back schedule, however, unexpectedly created some good things, particularly empowering clients with mild dementia to exercise their right to achieve a better performance fit. Therefore, a good home-like environment of care program combines elements of each center, providing not only a good environment but also a choice for clients to exercise their authority or autonomy. Program investigators must not just pay attention to a center’s socially acceptable rules but should provide opportunities for clients to exercise their autonomy in order to improve the quality of life at centers.

In order to provide quality care in a home-like environment, the physical environment, social environments, and place rules need to be assessed. That is, even though the staff members receive training on communication with elders, other factors, such as place rules, may influence the impact of the intervention. For instance, Williams (2006) implemented a two-month intervention to improve staff-resident communication in three nursing homes. She found that post-intervention conversations between staff and residents were rated as less controlling, but more respectful and caring; however, after two months, communication had reverted back to being more controlling, less respectful, and less caring. Results suggest the need for ongoing
reinforcement of training and a comprehensive plan to implement an intervention by including all components (staff, clients, physical settings, social interaction, and place rules) of the environment.

In this study, clients reveal their opinions of services and environments at centers through interviews. Because clients are the customers at ADS centers, program administrators need to directly assess the clients if they will enhance their quality of life. In order to include people with dementia in the evaluation of service, Carroll and her colleagues (2005) used closed-ended questions addressing environment, food, safety, activities, help and guidance, autonomy and respect, and communication and socializing and open-ended questions regarding likes and dislikes. ADS practitioners or directors can hire researchers to use the same questionnaire to interview clients and act on their responses not only to understand clients’ evaluation of services and the environment but to let clients feel that their opinions are valued and their input will make a difference. In other words, while ADS practitioners have the moral and ethical responsibility to provide quality care, in part by ensuring that their clients’ voices are heard.

Conclusion

The current research project was intended to replicate Salari’s (2002; 2006; Salari & Rich, 2001) studies to explore clients’ lives within two ADS centers in Taiwan by examining their physical and social environment. In order to expand Salari’s research on how and why infantilization happened within Taiwanese cultural context, I utilized Lawton’s (1979, 1982) ecological model and environmental press theory, integrating Moore’s (2004, 2005) idea of place rule, and Goffman’s (1961) total institution theoretical framework to develop a central concept for this study. Ryvicker’s (2010, 2011) studies on two different types of nursing home facilities demonstrating different resident-staff interaction triggered my interest in conducting a
comparison study of two different models of ADS centers to expand previous research involving only one ADS model. I selected two centers that had a high reputation within their own communities as my research sites and adopted the ethnographic methodology to collect data through field observation and interviews. Using a life course perspective encouraged me to look at clients’ individual differences in their personalities, backgrounds, and relationships with family members, which also influenced how clients interacted with their physical and social environments in ADS centers.

The results of this study support and add to current literature on people and environment relationships in ADS settings, specifically in regard to how different models of ADS environments influence interactions between the staff and clients. That is, each center has its unique physical and social environments that informed care providers’ perceptions of the clients for whom they care and how care should be provided. Center A, as a freestanding facility with a social work director, emphasizes activities and infantilizes within a teacher-student format. Center B, located inside of a hospital with a nurse administrator, emphasizes physical care and infantilizes within a nurse-patient format.

Clients with different competencies and life experiences adapt to infantilization with four different behavior patterns: challenge, withdrawal, colonization, and conversion. The first two behavior patterns are easy to capture through observation and might be seen as behavior problems that need special attention. However, clients’ maladaptive behavior sometimes changes the environments and leads to a better environmental fit for them. Colonization and conversion reflect Taiwanese culture of Confucianism, which stresses harmony and collectivism. Those two behavior patterns are usually ignored by the staff and might be recognized as adaptive if clients appear to voluntarily comply with staff. Interviews with clients, however, revealed that
colonization and conversion could be consequences of self-labeling, which might lead clients to form a low self-esteem or negative self-concept. In order to provide a good quality of life for each client in ADS settings, centers’ administrators and staff members should be mindful of clients’ different reactions to the same social environments as they reflect a complex interaction between clients and their environment. Insight may be gained by reviewing clients’ social history, by regularly interviewing clients about satisfaction with the program or by directly observing the clients in different settings. In order to help clients exercise their right to reduce negative environmental press, my findings support research to highlight the use of critical theory with action research (Bubolz & Sontag, 2009), which incorporates the richness of individual variability, multiple dimensions of human competence, and the powerful influence of physical and social environments. My study also recommends a person-centered approach of care in ADS centers with attention to the physical and social environmental fit for individual clients to optimize their well-being.
References


166


inmates. Chicago, IL: Aldine.


Hagestad, G. O., & Uhlenberg, P. (2005). The social separation of old and young: A root of

Tavistok.

Lincoln (Eds.), Handbook of qualitative research (pp. 717-732). Thousand Oaks, CA:
Sage.

The American Journal of Occupational Therapy, 13, 199-205.

Hein, S. F. (2004). Embodied reflexivity in qualitative psychological research: The disclosive
capacity of the lived body. In S. P. Shohov (Ed.), Advances in psychology research (Vol.

of long term care. In J. N. Henderson & M. D. Vesperi (Eds.), The culture of long term
care: Nursing home ethnography (pp. 37-54). Westport, CT: Bergin & Garvey.


175


## Appendices

### Appendix A: Occurrence of Themes at the Two Centers

**Table 1**

*Compared themes in the two centers*

<table>
<thead>
<tr>
<th>Sensitizing concepts</th>
<th>Themes and subthemes</th>
<th>Center A</th>
<th>Center B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P = Clients’ competencies</strong></td>
<td>Cognitive ability</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Emotional expression</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Physical health</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Individual differences</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>E = Physical environment</strong></td>
<td>Old style setting</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Cleanliness and safety in the open space</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Limited seats in the living room</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hospital-like setting</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Small space</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blind spots</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>E = Social environment</strong></td>
<td>Staff’s characteristics</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Infantilizing behavior/speech</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Sleep prohibition</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Didactic interaction</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Reprimand</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Confinement</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Baby talk</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Neglect</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Calling clients by their full names</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age-appropriate behavior/speech</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Show respect by calling clients “grandma” or “grandpa”</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Show respect by greeting/ listening to/responding to the clients</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Sensitizing concepts</td>
<td>Themes and subthemes</td>
<td>Center A</td>
<td>Center B</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Asking the clients’ opinion</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Allowing the clients to freely move around at the center</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>P x E = Place rules</td>
<td>Regulations</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Labeling</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Rules created by staff</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Activities</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>B = Clients’ reaction</td>
<td>Challenge</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Withdrawal</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Colonization</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Conversion</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>B = staffs’ behavior toward clients’ reaction</td>
<td>Enforcement</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distracting</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Compromise</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Withdrawal</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Consulting with families</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consulting with doctors</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Appendix B: Observation Timelines in the Two ADS Centers

Timeline in Center A (Freestanding ADS)

8:00 Arrive at the center
8:00~8:40 Help serve tea or warm water to service users
8:40~9:00 Take field notes on the physical environment
9:00~9:40 Facilitate exercise(es)
9:40~10:40 Facilitate cognitive activity(ies)
10:40~11:00 Take field notes when clients have their snacks
11:00~12:00 Facilitate group activity(ies)
12:00~12:30 Take field notes and have lunch
12:30~13:30 Conduct interviews with clients during the nap time
14:00~15:00 Facilitate activity(ies)
15:00~15:30 Take field notes when clients have their snacks
15:30~16:30 Do observations when clients listen to music or watch movies
16:30~17:00 Take field notes as clients prepare to go home
17:00~17:30 Interview staff

Timeline in Center B (ADS in a Hospital)

8:00 Arrive at the center
8:00~9:00 Help with staff members reading newspapers
9:00~10:00 Take field notes when clients have their snacks and use the restroom
10:00~11:00 Facilitate activity(ies)
11:00~12:00 Take field notes when clients use the restroom
12:00~12:30 Lunch time
12:30~13:30 Conduct interviews with clients during the nap time
14:00~15:00 Facilitate exercise(es)
15:00~15:30 Take field notes when clients have their snacks
15:30~16:30 Facilitate activity(ies)
16:30~17:00 Take field notes when clients prepare to go home
17:00~17:30 Interview staff
Appendix C: Interview Questions Guide

Interview Questions Guide for Client in English

Date of interview: Pseudonym:  
Interview start time: Interview completion time:  
Center A Center B Gender: M F

Hello, My name is Ling. I have a few questions I would like to ask you about your experiences here at _______. If you want to stop the interview at any time, just let me know. Also, you don’t have to feel obligated to answer all of the questions.

1. Please tell me what you do here on a typical day.
   What do you do when you first arrive? (Or what happens when you first arrive?)
   What do you do in the morning, at noon, and in the afternoon? (Or what happens here in the morning, at noon, and in the afternoon?)

1) Tell me about activities here.
   A. What activities do you participate in or join in the center?
   B. Can you decide whether you want to participate in an activity or not? Do you have a choice of different activities? When you do have a choice, what activity(ies) do you choose? Why do you choose to participate or not participate in activity X/Y/Z?
   C. How do you feel about the activities and services in the center? (e.g., Do you enjoy the activities, feel bored by the activities, etc.? Do you receive the services you need or are there some services you would like to receive but they are not offered?)

2) Tell me about the space we are in (the whole center). What do you think of it?
   A. How do you feel about the setting here?
   B. How do you feel about the décor here?
   C. Are there spaces where you can have some privacy here? How do you feel about these?
   D. How do you feel about the smell here?
   E. How do you feel about the temperature here?

3) Tell me about the people in this center.
   A. Tell me about the staff in this center. (Tell me about the people who take you to the restroom, the people who host the activities, the people who take your blood pressure and give you the medication, the people who bring you here?)
      i. What do they do that you like? Why do you like those things?
      ii. What do they do that you dislike? Why do you dislike those things?

187
B. Tell me about the other clients here.
   i. How do you feel about them? What is your relationship with them?
   ii. Which clients do you visit with here? Why do you visit with these people?
4) Are there any other people here that you would like to discuss?
   A. Is/Are there someone/some people with whom you interact a lot/don’t like to
      interact with? Tell me about her/him/ them.

2. What changes, if any, would you like to see in the center?
   1) Would you like to see changes in the space?
   2) Would you like to see changes in the staff (or how staff members interact with people)?
   3) Would you like to see changes in the other clients?
   4) Would you like to see changes in the activities?

3. How do feel about your life in this center?
   1) How do you feel about spending time here?

4. How would you describe your health?
   1) Is your health condition excellent, good, fair, or bed?
   2) Why you think that?

5. What things do you need help doing when you are here? (e.g., walking, using the
   bathroom, eating, doing activities, exercising)
   1) Who are they and how do they help you?

6. Are you told what to do in the center?
   1) Do they tell you that you must now do activity X, Y, Z?
   2) Do they tell you how you should eat your lunch?

   IF YES, how do you feel about it?
   1) How do you feel about their telling you that you must now do activity X, Y, Z? Why do
      you feel that way?
   2) How do you feel about their telling you how you should eat your lunch? Why do you
      feel that way?

*Items in italics are prompts to be used if the response does not address the content of the
prompt.
您好，我是劉芷綾，想跟您聊聊您在這裡（日間照護中心）的生活經驗。如果您中途不想繼續，請隨時告知我，對於我所提出的問題，您也不需全都回答。再次謝謝您的參與。

1. 我想知道您在中心生活的點點滴滴，可以請您分享您在中心的一天?
   比方說一早剛到中心，您在做什麼(或是當時有什麼活動正在進行)?
   那在中心的早上、中午及下午您都做些什麼 (或是當時有什麼活動正在進行)?

1) 讓我們聊聊在中心的活動
   A. 您知道在中心有哪些活動可以參加? 請問您有參加哪些?
   B. 請問您能自由選擇參加中心的活動嗎?
      您能選擇參加不同的活動嗎？什麼活動是您選擇參加？為什麼您選擇／選擇不參加這（些）活動?
   C. 您對中心的活動與服務的感覺是？（覺得中心的活動很有趣或是很無聊？滿意中心的服務？有需要增加的服務？）

2) 讓我們聊聊中心的硬體設備與環境，可以請您形容一下中心的環境，那您對中心環境的想法？
   A. 您覺得中心的室內設計如何？ (有沒有安全感? 有無壓迫感?
      死氣沉沉? 像家/像醫院?) 為什麼
   B. 您覺得中心的裝飾擺設如何?
   C. 您覺得中心的空間如何？可以找到您獨處的空間嗎?
   D. 您覺得中心的氣味如何？ (有食物的味道/)
   E. 您覺得中心的溫度如何?

3) 讓我們聊聊在中心出現的人，可以告訴我他們是？
   A. 讓我們聊聊在中心的工作人員？（比方說帶您去廁所的人？帶活動的人？幫您量血壓的人？帶您從家中到中心的人？）
      I. 他們做什麼讓您很歡喜？為什麼您感到歡喜？
      II. 他們做什麼讓您很不歡喜？為什麼您感到不歡喜？
   B. 讓我們聊聊在中心的其他長者
      I. 您對其他中心長者的感覺是？您跟他們的相處關係是？
      II. 您最常與中心的哪位長者在一起？為什麼您常與他（們）再一起？

4) 還有在中心的其他人您也想聊聊嗎？
   A. 有誰讓您覺得最舒服？有誰讓您覺得最不舒服跟他（們）相處
2. 如果中心要进行改变，您最乐意见到的改变在？
   A. 中心环境？
   B. 工作人员（服务态度）？
   C. 中心长者？
   D. 中心的活动？

3. 您觉得在中心的生活是？
   A. 您觉得在這裡的時光是？

4. 您觉得您的健康状况是？
   A. 非常好，很好，馬馬虎虎，不好？為什麼您會這麼覺得？

5. 在中心，有什麼事是您需要別人的協助（像是行走，使用廁所，進食，做活動或運動）
   A. 是誰服務您？他們如何服務您？

6. 在中心，您是被告知有做什麼？
   A. 他們告訴您什麼活動一定要參加？
   B. 他們告訴您要如何吃午餐？

如果是，您覺得如何？
   A. 當他們告之您一定要參加某些活動，您感覺如何？為什麼您會這麼想？
   B. 當他們告訴您要如何吃午餐，您感覺如何？為什麼您會這麼想？
Hello, My name is Ling. I have a few questions I would like to ask you about your experiences here at _______. If you want to stop the interview at any time, just let me know. Also, you don’t have to feel obligated to answer all of the questions.

1. What is your background in elder care?
   1) What is the highest level of school that you have completed?
   2) Did you receive any educational training for this particular job?
   3) How long have you been employed at this center?
   4) Do you have other relevant experience in elder care?

2. What is your typical day like?
   1) What do you do first?
   2) What do you do in the morning, noon, and afternoon?

3. How do you perceive working as a paid staff member (nonpaid volunteer) here?
   1) Please describe the demands you face in your role at the center.
   2) Please describe the support you receive in your role at the center.

4. How would you describe your clients here?
   1) What are some of their limitations?
   2) What are some of their abilities?

5. How do your clients affect the ADS in which you work (e.g., the physical space, social interaction)? How does the ADS in which you work affect your clients?
   1) How do your clients influence the setting, décor, and private space here (e.g., Does the center have safety features to protect the clients? Does the center have design features that appeal to the clients? Does the center have spaces designed for persons with dementia? Do clients influence decisions about activities or food here at the center?)?
   2) How do the setting, décor, and private space in this center affect your clients here (e.g., Is it suggested that your clients do things or use things because of the regulations or the setting arrangements? What things they have to do or to use?)?
   3) How do your clients influence the interactions with staff and with each other (e.g., How do your clients’ actions and emotions affect you and how you react? How do your clients’ actions and emotions affect other clients and how they react?)
   4) How do the interactions among clients and staff in the center affect the clients (e.g., How do your actions and emotions or other clients’ actions and emotions affect your clients?)?
6. What suggestions do you have for this ADS in general (e.g., what changes would you like to see)?

1) Do you have any suggestions about the physical space in this ADS?
   A. IF YES, what changes would you like to see?
   B. IF NO, why not (Because things are great or because it would not be feasible to make the changes?)?

2) Do you have any suggestions about the social aspects of this ADS (e.g., interactions among clients and staff)?
   A. IF YES, what are they?
   B. IF NO, why not? (Because things are great or because it would not be feasible to make the changes?)

3) Do you have any suggestions about the activities or services in ADS
   A. IF YES, what changes would you like to see and how should they be provided?
   B. IF NO, why not? (Because things are great or because it would not be feasible to make the changes?)

4) Do you have any suggestions about the role of the staff in this ADS?
   A. IF YES, what would you like to see?
   B. IF NO, why not? (Because things are great or because it would not be feasible to make the changes?)

5) Do you have any other suggestions for this ADS?
   A. IF YES, what are they?
   B. IF NO, why not? (Because things are great or because it would not be feasible to make the changes?)

*Items in italics are prompts to be used if the response does not address the content of the prompt.
您好，我是劉芷綾，想跟我（你）聊聊在貴中心的工作經驗。
如果你（你）中途不想繼續，請隨時告知我，對於我所提出的問題，不需全都回答。
再次謝謝妳（你）的參與。

1. 可以跟我分享妳（你）在老人長照工作上的學經歷
   1) 最高學歷？
   2) 畢業後的教育訓練？
   3) 在中心工作的年間？
   4) 您是否有其他相關老人長照的經驗?

2. 可以跟我分享您在中心的生活點滴？
   1) 什麼是您到中心所做的第一件事？
   2) 那在早上、中午，以及下午的時光，您在中心的生活是？

3. 您如何看待您的工作？
   1) 您描述您在工作上所遇到的困難。
   2) 您描述您在工作上所得到的支持。

4. 您如何看待中心的長者？
   1) 您覺得他們所受到的限制有？
   2) 您覺得他們仍擁有的能力是？

5. 請您試想中心長者與環境中心的相互影響
   1) 中心長者如何影響中心的環境？
       比方說，中心有對長者所設計的保護措施？
       有針對長者興趣所設計的裝潢？空間設計有針對失智長者？
       長者對中心的活動與食物有決定影響力？
   2) 中心的設計擺設、裝飾和獨立空間是如何影響中心長者？
       比方說，長者做某些事情或是使用某些器材是因為空間所是法規規定？
       什麼是他們必須使用或是要做的事情？
   3) 中心長者如何影響與其他長者與工作人員的相處？
       比方說，長者的行为和情緒如何影響您的反應？或是其他者長者的反應？
   4) 中心工作人員與長者的相處如何影響中心長者？
       比方說，您或是其他中心長者的行为與情緒反應如何影響中心長者？
7. 您對中心有什麼建議（或是您熱意見到的改變是）？

1) 請問您對中心的環境有什麼建議？
   A. 如果有，您最想見到的改變是？
   B. 如果沒有，為什麼沒有？
       是因為沒有什麼要改變，或是沒有什麼可行的改變方式？

2) 請問您對中心的活動或服務有什麼建議？
   A. 如果有，您最想見到的改變是或是他們需要提供的服務？
   B. 如果沒有，為什麼沒有，是因為沒有什麼要改變，
       或是沒有什麼可行的改變方式？

3) 請問您對中心的工作人員有什麼建議？
   A. 如果有，您最想見到的改變是？
   B. 如果沒有，為什麼沒有，
       是因為沒有什麼要改變，或是沒有什麼可行的改變方式？

4) 請問您對中心還有其他建議？
   A. 如果有，您最想見到的改變是？
   B. 如果沒有，為什麼沒有，
   C. 是因為沒有什麼要改變，或是沒有什麼可行的改變方式？
Appendix D: Informed Consent Forms

English Version of Informed Consent Form

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Informed Consent for Participants in Research Projects Involving Human Subjects

Title of Project: What is Going on in Adult Day Service (ADS)? An Examination of the Physical and Social Environment within Two ADS Centers in Taiwan

Investigators: Shannon Jarrott (Principal Investigator)
Chih-Ling Liou (Co-Investigator)

I. Purpose of this Research
Taiwan, like other developed countries, faces the demographic transitions of an aging population. With a higher proportion of the population reaching advanced ages, the number of older people needing assistance with personal care and daily activities will increase. Recently, the Taiwanese government promoted community services focusing on daily activities, and the ADS programs are popular promoted community-based services. The purpose of this study is to explore the experiences of ADS clients within the physical and social environments of two different types of ADS centers in Taiwan in order to understand the ADS environments and clients’ experiences there.

II. Procedures
After reading this consent form, you will have the opportunity to ask questions about this research study. Once your questions are answered, please sign this informed consent form. One copy of this form will be for the researcher and one copy will be for your records. After signing this informed consent form, the face to face interview will be conducted. The interview should take about 30 minutes to complete. We would like to audio record your responses and ask that you initial in the space below indicating that you agree to be audio recorded.

Please Initial here

When you finish, your participation in the study is complete. Once your responses have been transcribed, you will be contacted do that you can review your responses to check for any errors or inconsistencies according to your recollection.

III. Risks
The risks of participating in this study are small. However, by answering some of the questions, you might experience some uncomfortable feelings such as sadness or anger. In order to protect you from these risks, you can choose not to answer any questions that make you feel uncomfortable and stop at any time if you need to. If, after being in the study, you feel that you cannot handle your feelings on your own or you would like to talk about your feelings with a trained professional, the researcher will give you a referral to a local therapist or support group.
IV. Benefits
While there is no guarantee that you will benefit from being in this research project, you might experience some personal benefits. You may feel a sense of personal satisfaction from knowing that you are helping us and others interested in ADS research learn more about life in ADS centers. Comparing the risks of being in this study to the benefits of being in this study suggests that the benefits are much greater than the risks. You may contact the researcher to get a summary of the research results once the study has been completed.

V. Extent of Anonymity and Confidentiality
Your participation in this research study is confidential. No one, except the PI and co-investigator, will see or hear your answers to the questions. During the interview, you will not be asked to give any uniquely identifying information. After you answer the questions, your answers will be separated from this informed consent form (which includes your signature).

All information collected during this research study will be stored in a locked cabinet in the co-investigator’s locked bedroom. Only the PI and co-investigator will have access to this file cabinet. A database containing your answers (but no identifying information) will be kept for future use, but only the research team will have access to this information. We will protect your confidentiality at all times unless we receive information about child abuse, elder abuse, concerns of neglect, or suicidal or homicidal thoughts. This information will be given to the appropriate authorities. These are the only times when your confidentiality would not be protected.

VI. Compensation
No compensation will be given for participation in this study.

VII. Withdrawal Procedures
You do not have to be a part of this research study. Even if you agree to participate, you can stop at any time. You may choose to withdraw without penalty or negative consequences; that is, no bad things will happen if you choose to stop.

VIII. IRB Contact Information
If you have any questions about this research project, please contact one or both of the following:

Shannon Jarrott (Co-Investigator) sjarrott@vt.edu
Chih-Ling Liou (Co-Investigator) cliou@vt.edu
What is Going on in Adult Day Service (ADS)? An Examination of the Physical and Social Environment within Two ADS Centers in Taiwan

計畫主持人: Shannon Jarrott
Chih-Ling Liou

I. 研究目的
台灣如同其他已發展國家，也面臨人口結構改變的社會老化現象。當戰後嬰兒潮出生的一代逐漸進入老年階段，將會有更多年邁長者需要日間協助，而增加家庭在照顧上的負擔。目前，台灣政府正大力推廣社區照顧服務讓年長者能在地老化，而日照中心則為推動在地老化政策的重要執行機構。本研究計畫主要探討在台灣日照中心的長者對其所屬環境與社會互動的經驗分享。

II. 訪談過程
在閱讀完此同意書後，您可以對將要進行的訪談提出任何問題。若是您沒有問題，請您此同意書最後簽名。我會保留並保密此原稿並給您一份覆本。訪談時間約三十分鐘，我將會以錄音的方式紀錄您的回答，如果您同意我錄音，請在下方方框中簽名。

在訪談結束後，我會將您的回答打成逐字稿，並請您過目以保證逐字稿的正確性。

III. 參與研究的風險
參加本研究的風險甚微，若要嚴格來說，您可能會因回答某些問題而有情感上的觸動或情緒起伏。因此，若是問題有讓您覺得不舒服，您可以拒絕回答。或是在訪談的過程中，您覺得不舒服不願意再進行，您可以隨時向我表明停止參加此研究。若是訪談結束後，您的情緒還是受影響，請務必告知我，我將會為您介紹本地專業心理諮商服務。

IV. 參與研究的好處
本研究雖然無法為您帶來物質上利益，不過您或許可得到精神上的成就感。您的參與將幫助此研究及其他對日照中心有興趣的計畫，對日照中心有更進一步的了解。唯有透過您的分享，此研究計畫才得以順利進行。若您對本研究有興趣，歡迎您向我連絡，我將十分熱意與您分享此研究結果的摘要。
V. 訪談過程的匿名與保密性
所有的訪談內容將會被視為極機密，除了我以及我在美國的指導教授外，沒有人能
能接觸到訪談的內容。在我訪談的過程中，我不會要求您提供任何與人名相關的資訊，一但
訪談結束後，您的訪談內容檔案將與此同意書分開存放。
此研究所蒐集的資料，將會被鎖入只有我以及美國指導教授能打開的資料櫃中，除
了這份同意書外，其他沒有記錄身分相關資訊的資料，將會被保留做為我日後研究用。您
的所有資訊將會被全程保密，除非內容涉及被虐或自殺，才會告知相關單位介入處理。

VI. 報酬
此研究不提供任何金錢酬勞給受訪者

VII. 退出參與研究
即使您現在答應參與受訪，並不代表您一定非全程參與訪問，您可以隨時退出參與
訪問，請不用擔心您退出後會有任何的負面效果或不好的結果，所已請放寬心告知我您的
意念。

VIII. 聯絡資訊
如果您對此研究有任何問題，請聯絡我或我的指導教授:
Shannon Jarrott (Principal Investigator) sjarrott@vt.edu
劉芷綾 Chih-Ling Liou (Co-Investigator) cliou@vt.edu
（台灣聯絡電話：02-2265-2325）
若是您對研究上在人權對待有疑問，請聯絡：
David Moore (IRB) moored@vt.edu

我已經閱讀完畢此同意書並有被給予機會詢問此研究的相關問題，我了解我將會被詢問一
些問題並同意參與次訪談。

受訪者簽名: _____________________________ _____________________________ 日期

受訪者姓名: ___________________________

訪問者簽名: _____________________________ 日期

日期
Appendix E: IRB Approval Letter

MEMORANDUM

DATE: November 12, 2010

TO: Shannon E. Jarrott, Chih-Ling Liou

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires June 13, 2011)

PROTOCOL TITLE: What is Going on in Adult Day Service (ADS)? An Examination of the Physical and Social Environment within Two ADS Centers in Taiwan

IRB NUMBER: 10-906

Effective November 12, 2010, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the new protocol for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/pages/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:
Approved as: Expedited, under 45 CFR 46.110 category(ies) 6, 7
Protocol Approval Date: 11/12/2010
Protocol Expiration Date: 11/11/2011
Continuing Review Due Date*: 10/28/2011

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:
Per federally regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.