

RESIDENTIAL SETTING, ADAPTIVE BEHAVIOR, AND
SATISFACTION AMONG OLDER PERSONS
WITH DEVELOPMENTAL DISABILITIES

By

MICHAEL WAYNE DUNSMORE

Bachelor of Science in Sociology

Oklahoma State University


Stillwater, Oklahoma


1990


Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
July, 1993

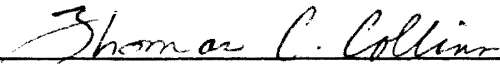
RESIDENTIAL SETTING, ADAPTIVE BEHAVIOR, AND
SATISFACTION AMONG OLDER PERSONS
WITH DEVELOPMENTAL DISABILITIES

Thesis Approved:



Thesis Advisor






Dean of the Graduate College

ACKNOWLEDGMENTS

I would like to express my gratitude to those who have played important and influential roles in my rewarding educational experience as a Master's student in the Department of Sociology at Oklahoma State University.

Dr. Richard Dodder, chairman of my advisory committee, for the guidance, patience, and encouragement he has given to me over the course of my graduate work and especially in completing this thesis.

Dr. George Arquitt, member of my advisory committee, for his advise and insight concerning gerontology and issues associated with aging.

Dr. Lee Maril, member of my advisory committee, for contributing an understanding of the qualitative aspects of social scientific inquiry.

Dr. David Knottnerus, instructor, for the knowledge of social psychology and sociological theory which he has given me.

Finally, I would like to express my deepest thanks to my father and mother, whose support and encouragement have never waned. They have given up much in order for me to realize my dreams, and it is to them that I ultimately owe my success in achieving them.

TABLE OF CONTENTS

Chapter	Page
I.	INTRODUCTION
	Statement of the Problem1
	Objectives3
II.	REVIEW OF LITERATURE
	Theoretical Orientation4
	Ecological Model of Adaptation.7
	Literature on Aging11
	Literature on Developmental Disabilities15
	Literature on the Developmentally Disabled Elderly18
	Research Questions21
III.	METHODOLOGY
	Research Design.23
	Research Subjects.24
	The Interviews28
	Measures30
	Reliability41
	Validity.43
	Generalizability.44
	Limitations.45
IV.	RESULTS AND FINDINGS.47
V.	CONCLUSIONS AND DISCUSSION.63
	Suggestions for Future Research.70
	REFERENCES.72
	APPENDIX - QUESTIONNAIRE.77

LIST OF TABLES

Table

1.	Demographics by Age Category. . . . .	.25
2.	Factor Loadings for the Behavior Development Scale. . . . .	.33
3.	Factor Loadings for the Consumer Satisfaction Scale. . . . .	.37
4.	Pearson Correlation Coefficients Between Dependent and Independent Variables for Ages 20-29 . . . . .	.49
5.	Pearson Correlation Coefficients Between Dependent and Independent Variables for Ages 30-39 . . . . .	.51
6.	Pearson Correlation Coefficients Between Dependent and Independent Variables for Ages 40-49 . . . . .	.53
7.	Pearson Correlation Coefficients Between Dependent and Independent Variables for Ages 50-59 . . . . .	.55
8.	Pearson Correlation Coefficients Between Dependent and Independent Variables for Ages 60+ . . . . .	.57
9.	Means of Adaptive Behavior Across Levels of Competence and Restrictiveness . . . . .	.59
10.	Means of Consumer Satisfaction Across Levels of Competence and Restrictiveness . . . . .	.61

CHAPTER I

INTRODUCTION

Statement of the Problem

The changing demographic age structure in the United States over the past 30 years indicates a steadily increasing number and proportion of elderly people due to declining mortality and fertility rates. It has been projected that one out of every five people will be age 65 or older by the year 2040 (Rice and Feldman, 1983). Because life expectancies and mortality rates in the developmentally disabled population are analogous to those of the general population, similar growth in the numbers of elderly developmentally disabled people can be expected (Jacobson, Sutton, and Janicki, 1985). With prevalence rates for mental retardation in the general population estimated anywhere from 1% to 3%, estimates for the probable size of the elderly developmentally disabled population have ranged from 50,000 to 1.3 million persons (DiGiovani, 1978; Seltzer and Seltzer, 1984). Because their pre-existing disabilities might be compounded by functional impairments that may accompany increasing age, this group is highly vulnerable to placement in institutional or congregate care residential settings (Jacobson et al., 1985). However, the trend in

treatment philosophies over the past two decades has been toward deinstitutionalization and smaller, community based programming and service utilization for the developmentally disabled. This research addresses the understudied issue of appropriate residential placement for elderly persons with developmental disabilities by examining how restrictiveness of residential environments effects adaptive functioning and levels of consumer satisfaction among this group. Lawton and Nahemow's (1973) ecological model of adaptation and theory of environmental press suggests that the relationship between personal competence and environmental demand can be expressed in terms of adaptive behavior and affect for individuals. At lower levels of competence, the range and degree of environmental press with which one is able to cope is narrow and weak. At higher levels of competence, the range and degree of environmental press with which one is able to cope becomes increasingly wider and stronger. Simply put, individuals who are high in competence can handle more pressure from their environment than can individuals who are lower in competence. This model was used as a theoretical basis for examining the relationships between residential restrictiveness, personal competence, adaptive behavior and consumer satisfaction among older persons with developmental disabilities.

This research utilized data on adaptive behavior and consumer satisfaction from 3020 research subjects aged 20 and older who resided in Oklahoma in 1992. These data were

collected by trained research assistants for the Developmental Disabilities Quality Assurance Project at Oklahoma State University.

Objectives

The objective of this research is to understand the multivariate relationship between age, competence, residential type, and adaptive behavior and subjective well-being, and to identify which specific types of residential environments are most conducive to high levels of adaptive behavior and subjective well-being among the developmentally disabled elderly.

The following questions derive from the model of ecological adaptation and theory of environmental press discussed above and will serve as the focus of this research:

1. How does restrictiveness of residence relate to adaptive behavior and consumer satisfaction across age categories?
2. How does competence relate to adaptive behavior and consumer satisfaction across age categories?
3. How well does the theory of environmental press apply to the developmentally disabled population in general? In other words, taking competence and residential restrictiveness into consideration, to what degree do the data on adaptive behavior and consumer satisfaction reflect the patterns hypothesized by Lawton and Nahemow?

CHAPTER II

REVIEW OF LITERATURE

This chapter presents a general theoretical framework and a model of the dynamic interplay between individuals and their environments that will be used to explore the impact of residential settings on the adaptive functioning and subjective well-being of older people with developmental disabilities. Literature and past research on aging, developmental disabilities, and the elderly developmentally disabled as it relates to the issues of residential environment, functional independence, personal satisfaction and subjective well-being will also be reviewed.

Theoretical orientation

The general theoretical framework that will be utilized in this research is symbolic interactionism. Symbolic interactionism is a broad sociological theoretical perspective, the core of which originated from the work of George Herbert Mead (1934/1962), Charles Horton Cooley (1902/1964), and more recently Herbert Blumer (1969). Mead's primary sociological concern was with what he called social behaviorism. In his thought, the primary unit of study was "the act", with his conception of human action

being voluntaristic and of human nature as characterized by thought, imagination, and communication through the use of symbols and language. This position, while maintaining the integrity of Mead's realism and empiricism, took into account what Mead believed to be the most important aspect of human behavior: the covert processes of thought that make up the human mind and influence human action. In Mind, Self, and Society, Mead (1934/1962) laid the basic foundations of symbolic interactionism. The mind, for Mead, was a social process, characterized by the use of symbols through the social medium of language which facilitated understanding of socially situated meanings. The essential condition for the development of the mind was another social process, called reflexiveness, which constitutes the self. The self was a social process which involved responses to itself and others along with the ability to interact, to be aware, and to use language to create and interpret verbal symbols. Society, for Mead, was nothing more than the patterned and organized responses of individuals to one another in which the mind and the self arise (Ritzer, 1988).

Upon this intellectual foundation, contemporary symbolic interactionism has developed through the work of Blumer and others, and includes a wide range of specialties and schools, including ethnomethodology (e.g. Garfinkel, 1967), phenomenology (e.g. Schutz, 1932/1967), and dramaturgy (e.g. Goffman, 1959). However, all of these to a certain degree share an acceptance of some basic

theoretical principles: human beings are endowed with the capacity for thought, which is shaped by social interaction, through which people learn symbols and meanings, with which they exercise their capacity for thought, which allows them to carry out action and interaction, through which they are able to modify meanings and symbols in response to situations, and these patterns of interaction make up groups and societies (Ritzer, 1988).

An important element of this theoretical framework is the recognition of the social contexts in which individuals live and the extent to which individuals both transform and are transformed by their social environment. Indeed, Mead's conception of the self is processual and refers not to something intrinsic to a given actor, but to an interactive relationship between actors and their environment. This social process which constitutes the self involves taking on different behavioral roles as adaptive responses to changing environmental situations and demands. The self is in a constant state of "becoming" as part of a continual process of interaction with the environment (Spence, 1986). The degree to which one is able to recognize, select, or create alternative responses to environmental stimuli is the degree to which one is able to cope successfully with one's environment; the evaluation of different response alternatives is a function of what Mead calls the mind (Chappell & Orbach, 1986). This theoretical framework, therefore, may provide a fruitful conceptual basis for

exploring the ways in which different environmental settings effect individuals of varying levels of personal competence with respect to their ability to adapt to changing situations.

Ecological Model of Adaptation

Of central importance to the understanding of the impact of the environment on adaptive functioning and affect is the concept of person-environment (P-E) transactions.

These entail

the motivation to interact with the environment, cognitive representation of the environment, affective response to the environment, and behavior in relation to the environment (Lawton, 1989).

The consequences of these transactions, according to Lawton, can be viewed in terms of life satisfaction and positive or negative affect in the individual. The relationship between people and their environment is conditioned by the dual personal needs of autonomy and security: changes in the degree to which these needs are met hinge upon changes in "personal development and environmental context" over time (Lawton, 1989).

Lawton and Nahemow (1973) have developed an ecological model of affective and behavioral adaptation and age that incorporates the issues of autonomy and security in the context of the relationship between individual competence and environmental demand (see Figure 1). The model portrays

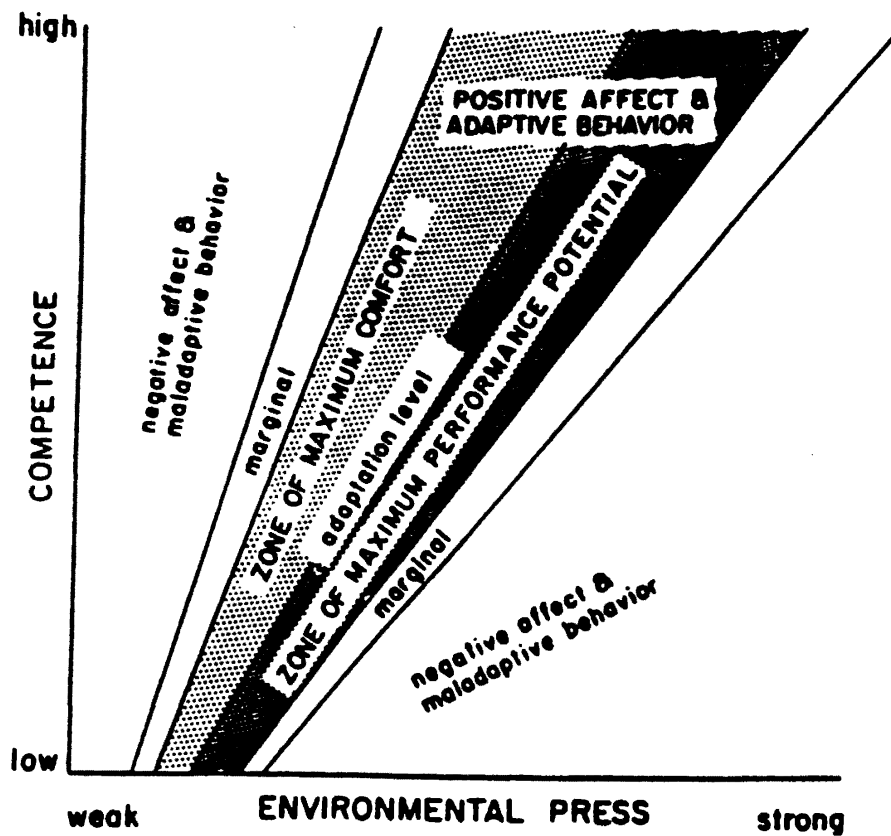


Figure 1. Ecological model of adaptation and aging.
 Source: Lawton, M.P. and Nahemow, L. (1973).
 Ecology and the aging process. In C. Eisdorfer
 and M.P. Lawton (eds.), The Psychology of Adult
 Development and Aging (p. 661), Washington
 D.C.: American Psychological Association.

a graph of possible P-E transactional outcomes based upon a theoretical adaptation level, a line that represents an exact balance between personal competence and environmental "press" (Lawton, 1989). Behavior falling on or very near this line is said to be relatively effortless, and is characteristic of routine, everyday activities. To the right of the adaptation level is the "zone of maximum performance potential", in which behavior resulting from P-E transactions where environmental strain is somewhat greater than the competence of the individual falls. This zone is characterized by situations in which the individual is reasonably challenged by the environment, and where new learning and increased competence are likely to result. To the left of the adaptation level is the "zone of maximum comfort", in which behavior resulting from P-E transactions where personal competence somewhat exceeds the demands of the environment falls. This zone is characterized by situations in which the individual experiences relative relaxation and quiescence. Outcomes falling between the outer limits of the maximum comfort and maximum performance potential zones are said to be positive in terms of adaptive behavior and affect. Outcomes falling outside of these zones, either to the far right (excessive environmental strain) or to the far left (excessive boredom) are said to be negative in terms of adaptive behavior and affect. An important aspect of this model is the non-parallel nature of the zones on either side of the adaptation level. At low

levels of personal competence, the range of environmental pressure to which the individual is capable of adapting successfully is narrow, whereas at higher competence levels the adaptive range becomes increasingly wider (Lawton and Nahemow, 1973; Lawton, 1989).

The differential range of adaptation across levels of competence is expressed in two hypotheses central to the theory of environmental press which underlies this ecological model. The first of these Lawton calls the environmental docility hypothesis: as personal competence declines, the environment should account for an increased proportion of the variance in P-E transactional outcomes. In other words, because persons who are less competent have a lower range of adaptability to stress, a given environmental situation is more likely to exceed the competence level of the acting individual.

Lawton calls the second hypothesis the environmental proactivity hypothesis: as personal competence increases, the environment affords the individual increasing resources relevant to his or her needs. In other words, because the range of adaptability to environmental demand is wider when personal competence is high, more of the variance of P-E transactional outcomes is attributable to the person rather than to the environment. Personal autonomy increases as the adaptation range expands (Lawton, 1989).

Lawton and Nahemow's (1973) ecological model of adaptation and theory of environmental press is a useful

heuristic tool in understanding the need for harmony between social / physical environments and the capacities and needs of the older adults who occupy them. With increasing age, declines in physical health and functional abilities may significantly reduce an individual's level of competence in coping with environmental strain. However, the presence of other physical or mental disabilities may compound the effects of age on competence, leaving the disabled older individual in a state of increased vulnerability to environmental conditions. The congruity of environment to individual competence, especially in terms of overall personal well-being, is a central issue involved in the current emphasis upon deinstitutionalization of people with developmental disabilities.

Literature on Aging

The concept of well-being is one that has received much attention in sociological, psychological, and gerontological research. Generally speaking, well-being refers to the overall quality of life of an individual and includes the subjective aspects of personal satisfaction with life, happiness and morale, as well as objective aspects, such as physical and mental health, location in a social structure and access to differing types of resources (George, 1990). The study of well-being among the elderly is complicated by the fact that, with increasing age, factors such as physical health, psychological functioning and social competence and

autonomy become interrelated in complex ways (Hansson, 1989). Age-related stressful life events, such as retirement, widowhood, and involuntary residential relocation may result in a decreased sense of independence and control and an increase in psychological and physical malaise (Stroebe & Stroebe, 1987). Increases in physical disability and isolation with old age may contribute to increased incidences of depression, decreased social competence, and subsequent complications in rehabilitation (Kemp, 1985).

Although physical health appears to be an important predictor of subjective assessments of well-being in the gerontological literature, a number of other social structural factors have been shown to be closely and consistently related to subjective well-being among the elderly. In addition to factors such as socioeconomic status and position in networks of social support, much attention has been devoted to the physical, psychological, and social aspects of the environment in which aging individuals find themselves and the impact of the environment on perceptions of well-being. Lawton (1982) has described five inter-related components of the human environment: the individual, the physical environment, the interpersonal environment (network of significant others), the suprapersonal environment (spatial clusters of individuals), and the social environment (norms and institutions of one's culture). These dimensions entail

multiple levels of analysis and demonstrate the complexity of the relationships between individual behavior and environmental context (Ward, La Gory & Sherman, 1988). As discussed previously, Lawton and Nahemow's (1973) theory of environmental press hypothesizes that the environment becomes an increasingly significant factor contributing to adaptive behavior and affect as personal competence decreases. With increasing age, then, individuals can be seen as becoming less able to cope with, and increasingly dependent upon, their environment. Increased dependence upon the environment translates into a more localized "home space", as the range of people and places with which the aging individual is comfortably familiar decreases (Stea, 1970). Rowles (1978) has coined the term "prisoners of space" to describe the disadvantaged and restricted position in which older individuals find themselves with regard to their spatial experience. Environmental characteristics, therefore, are more salient to the understanding of well-being among the elderly than they are among the general population.

One environmental characteristic mentioned frequently in the gerontological literature is residential or neighborhood age composition. Age density of residential environments has been shown to directly effect the friendship patterns and levels of social interaction of the elderly and has been indirectly linked with morale (Rosow, 1967). This suggests that age segregation may be beneficial

to older individuals. Indeed, efforts to socially integrate the elderly by placing them in age-heterogeneous settings may inadvertently backfire by reducing the pool of potential friendship alternatives from which they are able to choose (Rowles, 1978). Similarly, given the localized environmental constraints typically faced by older individuals, proximal contact with age-peers may be vital to subjective perceptions of well-being. Settings that are age-integrated could increase feelings of isolation rather than social cohesion among the elderly and have a negative impact on subjective well-being (Ward et al., 1988).

Another environmental characteristic that has received significant attention in the gerontological literature is the presence of social support through immediate or extended network ties. Social support networks consist of people an individual can rely upon to provide on-going assistance, emotional support, information, and personal assistance in times of crisis (Cantor, 1980). In a longitudinal study of personal support networks, Antonucci (1990) found that age differences in size of network and frequency of contact were small which could indicate the overall stability of one's personal network as age increases. Antonucci also found that receiving social support when needed has positive effects on subjective well-being and can possibly reduce the need for institutional care.

The relationships in social support networks can be divided into two types: family ties and friendship ties.

Although a predominance of family in the personal support networks of the elderly has been shown, there is a preference of friends as support providers (Griffith, 1985). Larson, Mannell and Zuzanek (1986) believe this preference exists because family ties usually contain a strong obligatory component, whereas friendships are optional. Additionally, the authors point out that, as age increases, family ties tend to stretch across generational boundaries, whereas friendship ties are usually similar by age, sex, interests, and lifestyles. In a study of the effects of satisfaction with family and friends on subjective perceptions of well-being in a national sample of older adults, Crohan and Antonucci (1989) found that friends can have positive effects on subjective well-being and are much less likely to have negative effects. The opposite was true of family relationships in that study. However, the authors concluded that satisfaction with both types of ties are positively related to subjective well-being.

Literature on Developmental Disabilities

The concept of developmental disability includes, but is not limited to, mental retardation (Janicki and MacEachron, 1984). Estimates for the prevalence of mental retardation in the general population have ranged from 1 to 3 percent (DiGiovani, 1978; Seltzer & Seltzer, 1984); however, no consensus exists on which estimates are more accurate. There is general agreement, however, that the

vast majority of individuals classified as mentally retarded fall under the mildly retarded category. Grossman (1973) has estimated that approximately 86 percent of the mentally retarded population is classified as having a mild level of retardation, 10 percent as having a moderate level of retardation, 3 percent as having a severe level of retardation, and 4 percent as having a profound level of retardation.

A significant degree of the variation in both the incidence and prevalence of mental retardation has been attributed to chronological age (Drew, Logan & Hardman, 1984). Incidence, or the number of new cases identified in a given year, is highest between the ages of 5 and 18; most individuals with mental retardation are identified during the school years when the emphasis of the environment is upon abstract learning. Similarly, prevalence of mental retardation is also thought to be highest among this age group, particularly because some individuals labelled as mentally retarded during the school years are able to adapt better after leaving the school environment and eventually lose the mental retardation label (Drew et al., 1984).

Over the past two decades, the adjustment of adults with mental retardation or other developmental disabilities to their environment has been viewed from the standpoint of normalization (Turnbull, 1988; Drew et al., 1984). Normalization, as originally defined by Nirje (1969), meant "making available to the mentally retarded patterns and

conditions of everyday life which are as close as possible to the norms and patterns of mainstream society," (p. 181). As advocated in the United States by Wolfensberger (1972), the principle of normalization was centered on social and physical integration of people with mental retardation into "culturally normative community settings" (p. 48). This initiated an emphasis on deinstitutionalization, or the transfer of residents of large institutions into smaller, community based residential settings.

Evidence for the success of deinstitutionalization in bringing about positive changes in adaptive behavior, independence, and satisfaction among persons with developmental disabilities, however, is mixed. In a study of satisfaction and activities among deinstitutionalized residents in community settings such as foster care and group homes, Scheerenberger and Felsenthal (1977) found that personal satisfaction among most residents was high, although some reported negative feelings as a result of being separated from life-long friends at their former institutional residences. However, some community care facilities have been viewed as miniature replicas of larger institutions, providing residents the same social isolation and fostering the same dependence and competition for attention as is typical of institutional settings (Butler & Bjaanes, 1978).

Some positive changes in adaptive behavior among deinstitutionalized residents of community placements have

been found in the Pennhurst Longitudinal Study (Conroy & Bradley, 1985). Other studies, however, have found no significant differences in the adaptive behavior of residents with severe or profound levels of retardation in institutional settings compared to those in community settings, and only minor differences among those at mild and moderate levels of retardation (Eyman, Demaine & Lei, 1979). Differences in levels of independence and outside interaction have been shown to exist among different types of community placements (Willer & Intagliata, 1984). These authors suggest that foster homes and parental homes may be too protecting of their residents and foster dependence, while large group homes with eight or more residents can have the same result by becoming too depersonalized. Positive changes in independence and interaction appear to occur in medium-sized group homes of four to six residents (Willer & Intigliata, 1984). Thus, evidence for the impact of environmental factors on adaptive behavior, independence, and satisfaction is varied, and the issue of appropriate residential placement for individuals with developmental disabilities is far from settled.

Literature on the Developmentally Disabled Elderly

In a review of existing research on the elderly developmentally disabled, DiGiovani (1978) found that this group declined in hearing more rapidly than normal or schizophrenic elderly did and were the weakest of all in

physical strength. It was noted that institutionalization has a deteriorating effect on bodies and that the developmentally disabled elderly have typically lived in institutional settings longer than their non-disabled or mentally ill counterparts. However, these elderly were more easily adapted to nursing home environments because of their familiarity with, and subsequent lack of emotional shock in reaction to, institutionalized living. Furthermore, the elderly developmentally disabled were better able to adjust to private or semi-private community residential settings than were younger individuals (DiGiovani, 1978).

Janicki and MacEachron (1984) found that people with developmental disabilities aged 73 and older experienced more problems with mobility, toileting, and health and were more likely to use medications and special diets than were those in age categories 53-62 and 63-72. Those aged 73 and older were found to reside primarily in congregate or group living arrangements, whereas those in younger categories were more likely to live either in small group-home settings or independently. The authors concluded that although congregate care might be appropriate for people with developmental disabilities over age 73, many currently institutionalized persons aged 53 to 72 might not need such restrictive living environments.

In a study comparing elderly with developmental disabilities to non-disabled elderly in institutional settings, Cotten, Sisson, and Starr (1981) found no

significant differences between the two groups on adaptive behavior as rated by the Geriatric rating scale and the Fairview self-help scale. However, non-disabled elderly who resided in community settings scored significantly better on both scales than either of the two institutionalized groups.

In a study of the extent to which elderly people with developmental disabilities utilize or are provided with informal social support, Seltzer (1985) found that because they are typically without spouses or children, they rely primarily on siblings and elderly parents for informal support. Because of the reduced size of the family network for these individuals, Seltzer speculated that non-family informal support may be more important to these elderly. This support could come from friends or benefactors who help them to live more independently than would otherwise be possible. Age homogeneous residential settings were found to be most conducive to friendship among elderly persons with developmental disabilities, and it was noted that social behavior in this group increases with group home size. Seltzer also noted that elderly persons with developmental disabilities in private institutional settings are more likely than those in public institutional settings to have at least "some" contact with parents or adult siblings.

According to the 1982 national survey of residential facilities for mentally retarded persons conducted by the Center for Residential and Community Services at the

University of Minnesota, adults with developmental disabilities aged 63 and older were far less likely than younger cohorts to be found in independent or semi-independent living arrangements, and far more likely than younger cohorts to be found in older, institutional settings. Furthermore, of the 11,952 elderly adults identified in the census, only 603 lived in age homogeneous facilities. Comparisons between institutional and community settings in an earlier sample of elderly individuals revealed that twice as many community dwellers were semi- or completely independent in activities of daily living as were their institutional peers. Elderly residents of community facilities were far more likely to maintain relationships with friends and family than were those who lived in institutional facilities (Hauber, Rotegard & Bruininks, 1985).

Research Questions

The following questions derive from the model of ecological adaptation and theory of environmental press discussed above and will serve as the focus of this research:

1. How does restrictiveness of residence relate to adaptive behavior and consumer satisfaction across age categories?
2. How does competence relate to adaptive behavior and consumer satisfaction across age categories?

3. How well does the theory of environmental press apply to the developmentally disabled population in general? In other words, taking competence and residential restrictiveness into consideration, to what degree do the data on adaptive behavior and consumer satisfaction reflect the patterns hypothesized by Lawton and Nahemow?

The final research question generates some hypotheses about the relationship between individual competence, residential restrictiveness, and adaptive behavior and consumer satisfaction. Specifically, it is hypothesized that, in accordance with the environmental docility hypothesis put forward by Lawton and Nahemow (1973), at lower levels of competence means of adaptive behavior and consumer satisfaction will be higher among those who reside in more restrictive settings and lower among those who reside in less restrictive settings. At higher levels of competence means of adaptive behavior and consumer satisfaction will be higher among a wider range of residential restrictiveness, up to and including the least restrictive residential settings.

CHAPTER III

METHODOLOGY

Research Design

This research was a cross-sectional study of the developmentally disabled residents of Oklahoma from whom data were collected by the Developmental Disabilities Quality Assurance Project at Oklahoma State University in 1992. Subjects were selected for inclusion in this project based upon a list of service recipients provided by the Developmental Disabilities Services Division of the Oklahoma Department of Human Services. The original list was found to be incomplete; many who were not on the original list because they were not receiving services from D.H.S. and these additional subjects were included as they were discovered in the field. Because no exhaustive list of the developmentally disabled population in Oklahoma exists, it was impossible to determine whether the sampling frame for the current research was complete; however, every effort was made to insure that data were collected from all known developmentally disabled consumers. Interviews were conducted with the primary caretakers of residents with developmental disabilities to gather data on residential history, family/advocate contact, adaptive equipment needs,

adaptive behavior, challenging behaviors, medical needs and drug usage, living arrangements and financial information, social interactions, community involvement, and service planning and delivery. Interviews were also conducted with the residents themselves concerning their subjective impressions about overall satisfaction with their lives. Each interview took approximately 45 minutes to complete.

Research Subjects

Subjects were selected from the existing project data set for 1992 and divided into five age categories of 20-29, 30-39, 40-49, 50-59, and 60 or older (see Table 1). The total number of research subjects was 3,020.

The 20-29 age category comprised 32.4% of the total sample. Of these 980 subjects, roughly 60% were male and 40% female. Whites made up 82.2% of this category, Blacks 9.5%, Native Americans 6.5% and other racial groups 1.7%. The 30-39 age category held 29.8% of the total sample with 899 subjects. Of these, roughly 55% were male and 45% female. Whites made up 83.5% of the subjects in this category, Blacks 9.8%, Native Americans 5.9%, and others 0.8%. Approximately 17% of the total sample fell in the 40-49 age category. Of these 509 subjects, 52% were male and 48% female, 87.2% were White, 6.9% were Black, 5.3% Native American, and 0.6% others. Roughly 11% of the sample fell in the 50-59 age category. Of these 332 subjects, 50.5% were male and 49.5%

Table 1

Demographics by Age Category

Demographics	Age Categories				
	20-29	30-39	40-49	50-59	60 +
	<u>N</u> = 980	<u>N</u> = 899	<u>N</u> = 509	<u>N</u> = 332	<u>N</u> = 300
Sex					
Male	59.9	54.7	52.0	50.5	45.7
Female	40.1	44.8	48.0	49.5	54.3
Race					
White	82.2	83.5	87.2	91.3	89.0
Black	9.5	9.8	6.9	6.6	5.3
Native Am.	6.5	5.9	5.3	2.1	4.3
Other	1.7	0.8	0.6	-	1.0
Level of Retardation					
None	0.8	1.3	2.2	4.8	3.0
Mild	29.0	24.1	22.2	14.8	14.3
Moderate	18.0	18.2	19.8	14.5	17.3
Severe	14.0	19.8	18.1	17.8	16.7
Profound	33.4	28.9	12.2	10.5	4.7
Unknown	4.8	7.6	25.5	37.7	44.0
Restrictiveness of Residence					
1	41.2	29.8	9.0	1.2	0.3
2	5.4	32.3	61.3	85.8	93.3

					26
3	12.4	4.0	2.6	0.9	0.3
4	24.5	22.7	22.0	10.2	6.0
5	15.9	10.4	4.1	1.5	-
6	0.6	0.8	1.0	0.3	-

Note. figures indicate % by category. - indicates empty cell.

were female. This category was 91.3% White, 6.6% Black, and 2.1% Native American, with no others present. The final 10% of the subjects made up the 60 and older age category. Of these 300 subjects, 54.3% were female and 45.7% male. Whites comprised 89% of this category, Blacks 5.3%, Native Americans 4.3%, and others 1%.

The proportions of "unknown" responses for level of mental retardation increased drastically with age, as can be seen in table 1. While the percentages of subjects falling in the "unknown" category are extremely low in the 20 to 29 and 30 to 39 age categories, they make up the largest proportions of responses to level of mental retardation in the 40 to 49, 50 to 59, and 60 and older age categories. This may be a reflection of the differences in typologies utilized by different facilities in classifying their developmentally disabled residents. Level of retardation was recorded in the DDQA questionnaire as none, mild, moderate, severe, or profound. Cases where level of retardation was documented differently in the client records, or where caretakers were uncertain of the correct classification, were coded as unknown. Such cases occurred more frequently in intermediate care facilities (ICF) than in other types of residential facilities. As can be seen at the bottom of table 1, the vast majority of subjects in the oldest three age categories fell under the residential restrictiveness ranking of "2", which includes ICF and ICF-MR facilities. The higher proportions of "unknown"

responses to level of retardation among these older subjects can be attributed to the fact that the facilities in which most of these subjects resided did not utilize the same typology for level of mental retardation.

The Interviews

The process of data collection was part of an ongoing study of the deinstitutionalization of residents with developmental disabilities in Oklahoma. This project was funded by a grant from the Oklahoma Department of Human Services for the purposes of assessing the quality of services provided for residents with developmental disabilities and to monitor their progress as they were moved from institutional settings into community placements. The grant was the result of a court order in a legal case against a major state institution in Oklahoma. The institution was ordered to transfer all of its residents over a period of six years into community placements by the court.

My employment with the Developmental Disabilities Quality Assurance project entailed conducting interviews with the primary caretakers of these residents as well as with the residents themselves when possible. A number of problems with the collection of valid and reliable data were encountered in the field and deserve mention. The most common problem was with the nature of the identities of interviewers for this project. Many of the caretakers in

the state schools, nursing homes, and other institutional settings were used to being "inspected" by officials of various state agencies quite regularly and were often under the impression that the interviews being conducted were yet another "inspection" of some kind. Questions about the identity of the interviewers as well as the nature of the interviews and the project itself served as constant reminders of this false and potentially damaging image. Steps were taken to insure that doubts about the identity and qualifications of the interviewers and about the nature of the project itself could be minimized. For example, caretakers were contacted initially by phone, informed briefly of the project, and asked to set up appointments for the interviews. A follow-up letter was sent out a few days before the scheduled appointments to confirm the time and date, and to explain in more detail the nature of the project to the caretakers. However, the general perception of the purpose and intent of the interviewers remained obscure in many cases and often encumbered the process of data collection.

Another problem with the collection of data was the relative inexperience of the interviewers, including myself, in communicating with developmentally disabled residents. While most residents in community settings were able to communicate verbally, many were not, particularly in the institutional settings. In addition, some residents were deaf and communicated through sign language. While some of

the nonverbal residents did use communication devices, many more either did not have them or were not trained to use them at the time the consumer interviews were conducted. Steps were taken to overcome these difficulties as well, such as including basic sign language in the interviewer training sessions and the use of a picture book to accompany the questions in the client interview. However, these met with limited success. As a consequence, many interviews with the consumers were never completed, and the quality of the data obtained from the interviews that were completed remains somewhat problematic.

Measures

The dependent variables of interest in this research are adaptive behavior and subjective well-being. Adaptive behavior has been defined by Grossman (1973) as "the effectiveness or degree with which the individual meets the standards of personal independence and social responsibility expected of his age and cultural group" (pp. 11-12). These standards, according to Grossman, apply to eight general areas of adaptation: sensory motor skills, communication skills, self-help skills, socialization, application of basic academic skills in activities of daily living, application of appropriate reasoning and judgement in mastery of the environment, social skills, and vocational and social responsibilities and performances. Subjective well-being is defined as residents' perceptions of their own

happiness and satisfaction with life in general, and with the social-situational context of their life in the present.

Adaptive behavior was operationalized as the total of the individual's scores on the 32 item Adaptive Development Scale. This scale is an adaptation of the original Adaptive Behavior Scale (Nihiria, Foster, Shellhaas & Leland, 1975) and was used in a different form as the Behavior Development Scale in the Pennhurst Longitudinal Study (Conroy and Bradley, 1985). The Adaptive Behavior Scale is made up of two parts, the first of which is concerned with adaptive functioning and independence, and the second with personal and social maladaptive or challenging behaviors. Similarly, the Adaptive Development Scale used in this research includes 16 items on challenging behaviors in addition to the 32 on adaptive functioning and independence. This research is concerned only with the first 32 items of the Adaptive Development Scale; thus maladaptive or challenging behaviors will not be included in the following discussion.

Past research has suggested that the factorial composition of the first part of the Adaptive Behavior Scale consists of three major dimensions labeled by Nihira (1976) as personal self-sufficiency, community self-sufficiency, and personal-social responsibility. Personal self-sufficiency includes abilities in motor development, dressing and undressing, eating, toilet-use, and cleanliness. Community self-sufficiency includes abilities in general independent functioning, mobility, money handling

and budgeting skills, shopping, expression, comprehension, language development, time and numbers, cleaning, food preparation and other domestic activities. Personal-social responsibility includes abilities in initiative, perseverance, leisure time, responsibility, socialization, vocational activities, and care of clothing. Other authors report somewhat similar factor structures among different sample populations. For example, Sandford and Elzinga (1987) found two major factors within the first part of the Adaptive Behavior Scale among young adults with borderline intelligence and serious behavior disorders. The first factor, labeled functional autonomy, included independent functioning, economic activity, language development, domestic activities, vocational activity, self-direction, responsibility, and socialization. The second factor, labelled education, included economic activity, language development, and time and numbers. In a study of community placements for 175 residents utilizing the Behavior Development Scale, Raynes, Sumpton and Flynn (1987) reported a factorial structure identical to that described by Nihira (1976) of the original Adaptive Behavior Scale.

A factor analysis of the Adaptive Development Scale among the subjects in this research was conducted using the FACTOR procedure of the Statistical Package for the Social Sciences (SPSS-X) to discern its scalar quality (see Table 2). Four factors were extracted in the principal-components analysis based upon a scree test of the plotted eigenvalues

Table 2

Factor loadings for the Adaptive Development Scale

Items	First Unrotated Factor	Rotated Factors			
		1	2	3	4
23. Body balance	.74	.94	-	-	-
24. Use of table utensils	.86	.70	-	-	-
25. Eating in public	.85	-	.49	-	-
26. Drinking	.73	.87	-	-	-
27. Toileting	.77	.79	-	-	-
28. Bathing	.90	.59	-	-	-
29. Dressing	.87	.79	-	-	-
30. Sense of direction	.84	-	-	-	-
31. Money handling	.80	-	.69	-	-
32. Purchasing	.82	-	.60	-	-
33. Writing	.77	-	.91	-	-
34. Sentences	.79	-	.61	-	-
35. Reading	.72	-	.95	-	-
36. Numbers	.82	-	.75	-	-
37. Room cleaning	.81	-	-	.51	-
38. Food Preparation	.75	-	-	-	-
39. Table clearing	.78	-	-	.62	-
40. Job complexity	.55	-	-	.84	-
41. Initiative	.78	-	-	-	.59
42. Attention	.73	-	-	-	.72

					34
43. Personal belongings	.82	-	-	-	.41
44. Interaction with others	.74	-	-	-	.85
45. Participation in groups	.71	-	-	-	.66
46. Walking or running	.75	.84	-	-	-
47. Self care at toilet	.83	.90	-	-	-
48. Washing hands and face	.83	.70	-	-	-
49. Care of clothing	.82	-	-	.42	-
50. Shoes	.85	.79	-	-	-
51. Preverbal expression	.61	-	-	-	.74
52. Complex instructions	.82	-	-	-	-
53. Time	.73	-	.87	-	-
54. Awareness of others	.79	-	-	-	.62

Eigenvalue	19.69
% explained variance	61.50

Note. criteria for rotated factor loadings is twice as strong

as described by Cattell (1978). The scree method of factor extraction was preferred to the popular Kaiser-Guttman rule of stopping when the last eigenvalue falls below one (incorporated as a default in SPSS-X) because of empirical support for the greater accuracy and psychometric validity of the scree (Cattell, 1978). Thus, although the fourth factor generated an eigenvalue lower than one (.93), it was included in the analysis because it fell before an obvious breaking-point in the plotted slope of diminishing eigenvalues from successively extracted factors. Together the four factors explained 76.3% of the item variance, with 61.5% of the variance explained by the first factor alone. All 32 items loaded strongly (above .50) on the first unrotated factor. The highest factor loading was .90 for item 28, "bathing", and the lowest factor loading was .55 for item 40, "job complexity".

The factor matrix was then rotated to clarify item clusters. Loading criteria for the rotated factors was 1) items must load strongly (.40 or greater), and 2) item factor loadings must be twice as strong as those for the same item on any other factor. Both varimax and oblimin rotations revealed four factorial dimensions in the Adaptive Development Scale. The oblimin solution was used to obtain these rotated factors because it revealed the factor structure more clearly. The first factor was defined by items concerning body balance, use of table utensils, drinking, toileting, bathing, dressing, walking or running,

self care at toilet, washing hands and face, and shoes, and labeled physical adaptive skills. This is similar to the personal self-sufficiency dimension identified by Nihira (1976). The second factor was defined by items concerning eating in public, money handling, purchasing, writing, sentences, reading, numbers and time, and labeled cognitive adaptive skills. This factor closely resembles the community self-sufficiency dimension, with the exception of including eating in public, writing and reading, and excluding items on mobility, food preparation and other domestic activities. The third factor was defined by items about room cleaning, table clearing, job complexity and care of clothing, and labeled task skills. The fourth factor included items on awareness of others, preverbal expression, participation in group activities, interaction with others, care of belongings, attention, and initiative, and labeled social adaptive skills. While the fourth factor is similar to the personal-social responsibility dimension identified by Nihira (1976), the third factor appears to be a unique dimension of the Adaptive Development Scale among these research subjects.

A factor analysis was also conducted on the 17 items composing the Consumer Satisfaction Scale (see Table 3). Three factors were extracted in the principal-components analysis. Fifteen of the 17 items loaded strongly (greater than .40) on the first unrotated factor extracted. Two items showed weaker loadings, item 4 "have enough clothes"

Table 3

Factor loadings for Consumer Satisfaction Scale

Items	First Unroated Factor	Rotated Factors		
		1	2	3
1. Feel about living here	.55	.71	-	-
2. Like people work with you	.52	.68	-	-
3. Feel about food here	.61	.79	-	-
4. Have enough clothes	.35	-	-	-
5. Any real good friends	.49	-	-	-
6. People here mean or nice	.49	.62	-	-
7. Like day activities	.54	-	-	-
8. Do you make money	.38	-	-	.73
9. Like food check	.62	.77	-	-
10. Pick what you eat	.58	-	-	.60
11. Pick clothes you buy	.50	-	-	.75
12. Pick clothes you wear	.48	-	-	-
13. Pick free time activities	.58	-	-	-
14. Pick friend for free time	.62	-	.74	-
15. Pick how to spend money	.54	-	-	.71
16. Have friends visit	.56	-	.77	-
17. Friends visit anywhere	.54	-	.72	-

Eigenvalue	4.79
% explained variance	28.20

Note. criteria for rotated factor loadings is twice as strong

and item 8 "do you make money", at .35 and .38 respectively. However, these loadings were considered close enough to be included in the analysis. The strongest factor loadings were .62 each for items 9 "like food check" and 14 "pick friend for free time". The three factors together explained 48.0% of the total item variance, with 28.2% being explained by the first factor alone. The factor matrix was then rotated to clarify item clusters. Both varimax and oblimin rotations revealed three factorial dimensions within the Consumer Satisfaction Scale. The varimax solution was used to obtain these rotated factors because it revealed the factor structure more clearly. Loading criteria for rotated factors remained the same as that for the Adaptive Development Scale, namely 1) items must load strongly, and 2) item factor loadings must be twice as strong as those for the same item on any other factor. The first rotated factor consisted of items on "feel about living here", "like people who work with you", "feel about food here", "people here mean or nice", and "like food check". These items appear to concern the residents' feelings about their immediate surroundings, and is labeled immediate residential environment. The second rotated factor was defined by items on "pick friend for free time", "have friends visit", and "friends visit anywhere". This factor appears to concern the consumers' contacts with friends outside of the immediate residential environment, and is labeled extended

social environment. The third rotated factor consisted of items on "do you make money", "pick clothes you buy", "pick what you eat", and "pick how to spend money". This factor appears to deal with financial autonomy or independence, and is labeled financial autonomy.

Thus, the first dependent variable in this research, adaptive behavior, was operationalized as the residents' scores on the total Adaptive Development Scale and each of the four sub-scales identified as physical adaptive skills, cognitive adaptive skills, task skills, and social adaptive skills. The second dependent variable, subjective well-being, was operationalized as the residents' scores on the total 17 item Consumer Satisfaction Scale and each of the three sub-scales identified as immediate residential environment, extended social environment, and financial autonomy.

The independent variables of interest to this research are competence and restrictiveness of residential type. Competence was measured by reported level of retardation. The measure of competence was ordinal, with level of retardation ranked from lowest to highest: None (0), Mild (1), Moderate (2), Severe (3), and Profound (4).

Type of residence was ranked by the relative degrees of restrictiveness which characterized it. Residential settings such as state schools and mental health facilities, where medical, nursing, and other types of formal social care are provided for the individual, were ranked highest on

restrictiveness. In terms of the theory of environmental press, these settings provide a high degree of security, but afford a low degree of autonomy, to individuals with developmental disabilities (Lawton, 1989). Residential settings such as intermediate care facilities, while also providing formal services, were ranked next highest because it appeared that residents in these settings have a somewhat greater opportunity for interaction with family, friends, and on occasion the outside community. Relative's home or foster care settings were ranked next highest, because it is assumed they allow for a higher degree of personalization and informal forms of social care. Group homes were ranked next highest, because in addition to providing a smaller, more personal setting, they are typically geared toward community integration for the residents. The staff at group homes are usually trained specialists who are present 24 hours a day; they focus on client habilitation and work with the residents on goal directed activities. Supported and semi-independent living arrangements were ranked next, because they allow for a higher degree of personal autonomy than do group homes, and have staff members present much less frequently than do group homes. Finally, independent living arrangements were ranked least restrictive.

According to the principle of normalization (Wolfensberger, 1972), independent living arrangements represent the optimum least restrictive residential alternative for deinstitutionalized residents. They are assumed to afford

residents the highest degree of autonomy and can represent virtually complete integration into community life.

Reliability

Reliability involves the idea of constancy in measurement, or the degree to which a particular measure yields the same result with repeated applications (Babbie, 1979). Inter-rater reliability is the extent to which two different raters record the same data from the same subjects. Inter-rater reliability has been conducted on the 1992 data set and found to be high (Bolin and Dodder, 1993). Duplicate interviews with the same subjects (N = 83) were conducted by different interviewers and frequently with different caregivers responding. The average time between duplicated interviews was three and a half months. The Adaptive Development Scale generated an overall inter-rater correlation coefficient of .93, with the Consumer Satisfaction Scale rating much lower at .65. The authors noted that .70 is a commonly accepted inter-rater reliability correlation. It was concluded that both scales are sufficiently reliable for basic research purposes. Test-retest reliability refers to the degree to which subjects give the same answers to the same questions asked more than once. Two items on the Consumer Satisfaction Scale ask about the quality of the food (good or bad). Test-retest reliability was measured as a correlation between responses to these items for 43 consumer interviews

and found to be significant ($r = .96$), suggesting that reliable data can be gathered from individuals with developmental disabilities (Bolin and Dodder, 1993). A third type of reliability, inter-item consistency, is an estimate of the amount of measurement error present within the instrument itself (Nunnally, 1967). A Chronbach's alpha was calculated on both the Adaptive Development Scale and the Consumer Satisfaction Scale in order to assess this type of reliability. The alpha coefficient for the 32 items composing the Adaptive Development Scale was .98 ($N = 2960$), and for the 17 items composing the Consumer Satisfaction Scale was .82 ($N = 1396$).

Nunnally (1967) has suggested .70 as an acceptable level of inter-item consistency. Thus, both scales exhibit a significant degree of inter-item consistency, and both can be considered sufficiently reliable instruments of measurement for the purposes of this research.

Validity

Validity refers to the degree to which a test or instrument measures what is intended to be measured (Nunnally, 1967). Construct validity refers to the degree to which the instrument of measurement fits the construct of interest to the researcher.

The construct validity of the scales utilized in this research has been assessed through factor analysis. As can be seen in Table 2, all items of the Adaptive Development

Scale loaded strongly on the first unrotated factor extracted in the principal-components analysis, which suggests that these items all measure something with a great deal of common variation and can indeed be considered a scale of adaptive behavior. The Consumer Satisfaction Scale was more problematic, as can be seen in Table 3. While item loadings overall were weaker on the first unrotated factor than those for the Adaptive Development Scale, the three factors together accounted for 48.0% of the variation among the items. It was concluded that the items exhibit enough cohesiveness to be said to measure a common variable, and can be considered a scale of consumer satisfaction.

Additional steps have been taken to insure the validity of the data. The data entry process was debugged by checking for the existence of impossible response categories in the instrument. The accuracy with which the data are entered into the computer was tested by checking the congruence between response codes on three randomly selected questionnaires and matching them to the corresponding codes that had been entered into the computer: no errors were found (Bolin and Dodder, 1993).

Generalizability

The research subjects in this project do not constitute a sample in the sense of having been selected (randomly or otherwise) from a known population for purposes of generalization. Rather, the subjects were selected from a

list of service recipients provided by the Oklahoma State Department of Human Services as previously discussed. New subjects were added to the original list as they were encountered by interviewers in the field, indicating that the original list was incomplete. The subjects of this research are those residents who were on the list for 1992. Thus, while the sample has been described as fully as possible, it is impossible to know how representative it is of the developmentally disabled population, even in Oklahoma. Yet we have tried to gather data from all developmentally disabled residents in Oklahoma who receive services from D.H.S and believe that there are not many we have missed after three years of research. How well these data represent those in other states, however, is unknown, and the results of this research may be taken only as suggestive to other regional populations.

Limitations

The major limitations of this research, beyond the lack of the ability to generalize the results, rest in problems associated with the quality of the data themselves. The grant that funds the collection of this data was the result of a court order in a case against a major institution, and was intended to assess the services provided by the Oklahoma Department of Human Services to the developmentally disabled residents in Oklahoma. Knowledge of the lawsuit is widespread, and it is possible that staff members of

institutions contacted by the interviewers could have given biased or false answers to questions out of fear of losing their jobs.

Another possible limitation is the fact that most of the interviewers, prior to being hired, had little or no experience in communicating with individuals with developmental disabilities. Data from client interviews, therefore, may reflect a tendency on the part of the subjects to acquiesce to the interviewers, answering affirmatively to all items in the consumer interview. It is possible that the high factor loadings and percent of explained variation for the Adaptive Development Scale could reflect acquiescence on behalf of the caretakers as well.

Furthermore, as discussed earlier, because the typology utilized in this instrument to classify level of retardation was not the same as those used in some residential settings (ICF's in particular), responses to level of retardation given by caregivers may be in error. It is possible that many caregivers, not knowing a correct answer, simply guessed at one of the response categories for level of retardation.

Finally, the ranking of different types of residences by degrees of restrictiveness might be in error. It is possible that more variation in terms of restrictiveness exists than has been allowed for in the rankings, or that one or more of the ranks might be simply incorrect.

CHAPTER IV

RESULTS AND FINDINGS

The research questions identified in Chapter 2 are examined here, and results of statistical analyses are presented and summarized. The first two research questions are intended to explore the nature of the relationships between the dependent variables of adaptive functioning and subjective well-being and the independent variables of competence and restrictiveness of residential type as operationalized in the previous chapter. Comparisons of the relationships between these variables are drawn across five age categories of 20-29, 30-39, 40-49, 50-59, and 60+ to discern what differences exist between younger and older cohorts of residents.

The first research question asks how the independent variable restrictiveness of residential type relates to dependent variables of adaptive functioning and subjective well-being across age categories. The second research question asks how the independent variable competence relates to these same dependent variables. Pearson product-moment correlation coefficients were utilized to determine these relationships. Correlation is a measure of the degree of association between two variables, or an index of the

amount of concomitant variation present between two variables, and the Pearson product-moment correlation coefficient is one of the most commonly used measures of correlation (Roscoe, 1975). Although correlation does not necessarily imply causality, it does reveal the strength and direction of a given relationship between two variables and is thus ideally suited to the research purposes at hand.

The dependent variables are both ordinally measured, with competence ranked from 1 (profound mental retardation) to 5 (no mental retardation) and restrictiveness ranked from 1 (state schools and mental health facilities) to 6 (independent living arrangements). Tables 4 through 8 show the correlation coefficients for each bivariate relationship between both independent variables (restrictiveness of residential type and competence) and both dependent variables (adaptive behavior and consumer satisfaction). The four sub-scales of adaptive behavior and three sub-scales of consumer satisfaction as revealed in the factor analysis are also included as measures of the respective dependent variables. Table 4 shows these correlations for the age category 20-29. Both restrictiveness and competence appear to be strongly and significantly related to adaptive behavior. These relationships are positive, indicating that as scores on adaptive behavior increase, competence increases and restrictiveness of residential setting decreases. Competence appears to be more strongly related to adaptive behavior than does restrictiveness, because

Table 4

Pearson correlation coefficients between dependent and independent variables for ages 20-29

Dependent variables	Independent variables	
	Restrictiveness	Competence
Adaptive behavior	.62**	.85**
Physical skills	.55**	.74**
Cognitive skills	.59**	.89**
Task skills	.64**	.75**
Social skills	.60**	.79**
Consumer satisfaction	.22**	-.00
Residential environment	.25**	-.05
Social environment	.10*	-.06
Financial autonomy	.19**	-.04

* $p \leq .05$ ** $p \leq .01$.

the correlation coefficients between competence and each measure of adaptive behavior are higher than are those between restrictiveness and each of the five measures of adaptive behavior for the 20-29 age category. However, all of these relationships are significant at the .01 alpha level. The correlations between restrictiveness and the four measures of consumer satisfaction are significant at the .01 alpha level and positive, with the exception of the sub-scale social environment which is significant at the .05 alpha level. The positive direction of these correlations indicates that higher scores on consumer satisfaction and each of the sub-scales are found among residents of less restrictive residential settings, and lower scores are found among residents of more restrictive residential settings among the residents in this age category. The correlations between competence and the four measures of consumer satisfaction are not significant, indicating no relationship between level of competence and consumer satisfaction among the 20-29 age category.

Table 5 shows the bivariate correlations between the dependent and independent variables for the 30-39 age category. The relationships between restrictiveness and competence and the five measures of adaptive behavior reflect those of the 20-29 age category, though somewhat weaker. Like the previous age category, competence appears to be slightly more strongly related to adaptive behavior than is restrictiveness. These relationships are positive

Table 5

Pearson correlation coefficients between dependent and independent variables for ages 30-39

Dependent variables	Independent variables	
	Restrictiveness	Competence
Adaptive behavior	.56*	.78*
Physical skills	.43*	.64*
Cognitive skills	.58*	.82*
Task skills	.61*	.65*
Social skills	.50*	.73*
Consumer satisfaction	.34*	.06
Residential environment	.28*	.01
Social environment	.19*	.01
Financial autonomy	.39*	.04

* $p \leq .01$

and significant at the .01 alpha level, indicating that higher scores on adaptive behavior are associated with higher levels of competence and lower levels of restrictiveness of residential setting. The correlations between restrictiveness and the four measures of consumer satisfaction are positive and significant at the .01 alpha level, and somewhat stronger among residents in this age category than the correlations between the same variables among the residents of the 20-29 age category. The strongest correlation is .39 between restrictiveness and financial autonomy, indicating that higher levels of financial autonomy are found among less restrictive residential settings. The weakest correlation is .19 between restrictiveness and social environment, but is still significant at the .01 level. The correlations between these same four measures of consumer satisfaction and competence are not significant, indicating no relationship between level of competence and consumer satisfaction.

Among residents in the 40-49 age categories, both restrictiveness and competence are strongly and positively related to all five measures of adaptive behavior, indicating that adaptive behavior increases with increases in level of competence and decreases in restrictiveness of residential setting (see Table 6). Once again, competence appears to be more strongly related to all measures of adaptive behavior than is restrictiveness with the exception of task skills, where the correlation with restrictiveness

Table 6

Pearson correlation coefficients between dependent and independent variables for ages 40-49

Dependent variables	Independent variables	
	Restrictiveness	Competence
Adaptive behavior	.54*	.66*
Physical skills	.43*	.49*
Cognitive skills	.53*	.74*
Task skills	.62*	.50*
Social skills	.41*	.64*
Consumer satisfaction	.30*	-.01
Residential environment	.24*	.12
Social environment	.05	-.06
Financial autonomy	.41*	.03

* $p \leq .01$

appears to be slightly stronger. The correlations between both independent variables and adaptive behavior are somewhat weaker overall than those among residents of the younger two age categories. The correlations between restrictiveness and the four measures of consumer satisfaction are similar to those among residents of the younger two age categories, being significant and positive, with the exception of the relationship between social environment and restrictiveness, which is not significant. The strongest correlation is .41 between restrictiveness and financial autonomy, which indicates that residents of less restrictive residential settings have greater levels of financial autonomy than do residents of more restrictive settings. The correlations between competence and the four measures of consumer satisfaction are not significant, indicating no relationship between competence and consumer satisfaction.

Table 7 shows the correlation coefficients for the bivariate relationships between the dependent and independent variables for the 50-59 age category. Both competence and restrictiveness appear to be significantly and positively related to all five measures of adaptive behavior, and competence appears to be more strongly related to all five measures of adaptive behavior than does restrictiveness with the exception of the sub-scale task skills, which is more strongly correlated with restrictiveness than with competence among residents of this

Table 7

Pearson correlation coefficients between dependent and independent variables for ages 50-59

Dependent variables	Independent variables	
	Restrictiveness	Competence
Adaptive behavior	.45**	.62**
Physical skills	.35**	.49**
Cognitive skills	.39**	.69**
Task skills	.62**	.45**
Social skills	.31**	.63**
Consumer satisfaction	.21**	-.23*
Residential environment	.12	-.15
Social environment	-.01	-.19
Financial autonomy	.35**	-.12

* $p \leq .05$. ** $p \leq .01$.

age category. The significant correlations between restrictiveness and the four measures of consumer satisfaction are with consumer satisfaction (.21) and financial autonomy (.35), which indicates that as restrictiveness decreases, consumer satisfaction and financial autonomy increase among residents in this age category. However, neither residential environment nor social environment are significantly related to restrictiveness among residents in this age category. A significant negative correlation is found between competence and consumer satisfaction, although none of the correlations between competence and the three sub-scales of consumer satisfaction are significant. This negative correlation, significant at the .05 alpha level, indicates that as level of competence decreases in this age category, consumer satisfaction increases slightly.

Finally, Table 8 shows the correlations between the dependent and independent variables for the 60 and older age category. Both restrictiveness and competence are significantly and positively related to all five measures of adaptive behavior among residents in this age category at the .01 alpha level. Like the younger age categories, competence appears to be slightly more strongly related to the five measures of adaptive behavior than does restrictiveness, with the exception of the sub-scale task skills, which is much more strongly correlated with restrictiveness than with competence. The only significant

Table 8

Pearson correlation coefficients between dependent and independent variables for ages 60+

Dependent variables	Independent variables	
	Restrictiveness	Competence
Adaptive Behavior	.33*	.55*
Physical skills	.24*	.47*
Cognitive skills	.31*	.57*
Task skills	.54*	.30*
Social skills	.18*	.54*
Consumer Satisfaction	.09	-.00
Residential environment	.06	-.06
Social environment	.01	-.04
Financial autonomy	.23*	-.02

*p ≤ .01

correlation between restrictiveness and any of the measures of consumer satisfaction is with the sub-scale financial autonomy, which is positive and significant at the .01 alpha level, indicating that higher levels of financial autonomy are found among residents of less restrictive settings in this age category. Competence is not significantly correlated with any of the measures of consumer satisfaction in this age category.

The third research question asks how well the theory of environmental press applies to the developmentally disabled population in general. Taking competence and residential restrictiveness into consideration, to what degree do the data on adaptive behavior and consumer satisfaction reflect the patterns hypothesized by Lawton and Nahemow? It is hypothesized that at lower levels of competence, means of adaptive behavior and consumer satisfaction will be higher among those who reside in more restrictive settings and lower among those who reside in less restrictive settings. At higher levels of competence, means of adaptive behavior and consumer satisfaction will be higher among a wider range of residential restrictiveness, up to and including the least restrictive residential settings. In order to test the first hypothesis, mean scores of adaptive behavior for all research subjects ($N = 2441$) were broken down by level of competence and ranked residential restrictiveness (see Table 9). An inspection of the distribution of means for competence levels 1 and 2 (profound and severe retardation,

Table 9

Means of Adaptive Behavior Across
Levels of Competence and Restrictiveness

Competence	Restrictiveness					Low
	High	2	3	4	5	
None	68.0	53.7	46.9	95.3	96.8	-
Mild	83.2	73.2	88.2	89.3	92.4	95.9
Moderate	72.7	59.2	76.1	82.5	80.4	-
Severe	58.8	39.5	51.3	67.2	65.9	46.0
Profound	23.9	17.8	31.6	65.4	35.8	-

Note. - indicates empty cell. N = 2441. Maximum score = 100.

respectively) across residential restrictiveness reveals that the highest means are among residents of rank 4 (group homes) and the lowest are among residents of rank 2 (intermediate care facilities and ICF-MR's). For both severely and profoundly mentally retarded residents, means on adaptive behavior appear to be highest among the less restrictive settings and lowest among the most restrictive settings, the opposite of what was hypothesized. However, an inspection of the distribution of means for the highest three competence levels (moderate, mild, and no mental retardation) shows that scores on adaptive behavior are higher across a wider range of restrictiveness, especially in the less restrictive categories. Residents with moderate mental retardation scored highest on adaptive behavior in group homes (rank 4), while residents with mild retardation scored highest in independent living arrangements (rank 6) and residents with no mental retardation scored highest in supported and semi-independent living arrangements (rank 5). The lowest scores on adaptive behavior for all levels competence fall under rank 2 (ICF and ICF-MR).

Table 10 shows the mean scores on consumer satisfaction for all research subjects ($N = 1381$) broken down by competence and restrictiveness. For all levels of competence, the highest scores on consumer satisfaction are found in the less restrictive residential settings. Residents of the three least restrictive categories on the whole scored higher on consumer satisfaction than did those

Table 10

Means of Consumer Satisfaction Across
Levels of Competence and Restrictiveness

Competence	Restrictiveness					Low
	High	2	3	4	5	
None	77.8	70.3	77.6	78.9	90.4	-
Mild	69.4	72.4	85.3	83.0	85.8	87.9
Moderate	77.9	75.0	84.2	82.9	82.9	-
Severe	79.4	75.5	85.4	83.9	86.1	-
Profound	79.5	77.2	-	94.8	89.4	-

Note. - indicates empty cell. N = 1381. Maximum score = 100.

in the three most restrictive categories, with the exception of residents with moderate mental retardation, who scored highest in restrictiveness rank 3 (foster care and relative's home). Residents with mild or no mental retardation scored lower on consumer satisfaction in the three most restrictive categories than did their counterparts with moderate, severe, or profound mental retardation. The patterns of the means for residents with severe and profound mental retardation (competence levels 1 and 2) do not support the theory of environmental press, which holds that individuals with lower competence will adapt better in more restrictive settings. However, the scores of residents with moderate, mild, or no mental retardation (competence levels 3, 4, and 5) do show some support for the theory, as these scores are generally higher among a wider range of restrictiveness.

CHAPTER V

CONCLUSIONS AND DISCUSSION

This focus of this research was upon adaptive behavior and consumer satisfaction among older adults with developmental disabilities as they relate to both level of competence and restrictiveness of residential type. The conclusions and discussion of the results of this research will thus be centered on this group.

The first two research questions concerned the bivariate relationships between both independent variables (competence and restrictiveness of residential type) and both dependent variables (adaptive behavior and consumer satisfaction) across age categories. The Pearson product-moment correlation coefficient was utilized to assess the strength and direction of these relationships. The independent variable (restrictiveness) was strongly and positively related to all five measures of the dependent variable (adaptive behavior) for all five age categories. While these correlations were consistently significant at the .01 alpha level, they tended to decrease in strength among residents in older age categories. The independent variable competence was also strongly and positively related to all five measures of the dependent variable adaptive

behavior. A similar pattern of weaker correlations among residents of older age categories emerged, although these correlations remained significant at the .01 alpha level as well.

Correlations between the independent variable restrictiveness and the four measures of the dependent variable, consumer satisfaction, were mixed across the five age categories. Among residents aged 20-29 and 30-39, correlations between restrictiveness and the four measures of consumer satisfaction were positive and significant at the .01 alpha level, with the exception of the social environment sub-scale among residents aged 20-29, which was significant at the .05 alpha level. Among older age categories, these relationships decreased in strength and significance, although the correlation between restrictiveness and the first measure of consumer satisfaction remained positive and significant at the .01 alpha level for all but the 60+ age category, and the relationship between restrictiveness and the sub-scale financial autonomy remained positive and significant for all age categories. Finally, the correlations between the independent variable competence and the four measures of consumer satisfaction were insignificant across all five age categories, with the exception of the correlation between competence and the first measure of consumer satisfaction in the 50-59 age category, which was significant at the .05 alpha level.

The third research question focused upon the ecological model of adaptation and theory of environmental press put forward by Lawton and Nahemow (1973). Although the distribution of mean scores on adaptive behavior and consumer satisfaction did not reflect the patterns hypothesized (see Tables 9 and 10), partial support for the model was indicated among residents with higher levels of competence. Means of adaptive behavior tended to be highest for residents of less restrictive settings and lowest for residents of more restrictive settings across all levels of competence. A similar pattern was found for means on consumer satisfaction. Additionally, means of consumer satisfaction for residents of more restrictive settings were lower for those with high levels of competence than for those in the same settings with lower levels of competence.

Lawton and Nahemow's (1973) theory of environmental press and model of ecological adaptation was originally designed to explain the effects of individual competence and environmental demand on adaptive behavior and affect among aging and elderly adults. Lawton and Nahemow viewed increasing age as yielding a decrease in one's ability to cope successfully with environmental press. The authors attribute this decrease in competence to the onset of declines in a number of physical and cognitive abilities that may accompany increasing age. One of the objectives of this research was to determine to what extent this model could be used to understand the relationship between

competence and residential restrictiveness among individuals with developmental disabilities. Past literature on aging suggests that environmental characteristics play a major role in the physical and emotional well-being of elderly people (cf. Ward et al., 1988; Rowles, 1978; Cantor, 1980; Antonucci, 1990). The significance of environmental factors has also been demonstrated in past research on developmental disabilities (cf. Butler & Bjaanes, 1978; Conroy and Bradley, 1985). The results of this research indicate only partial support for Lawton and Nahemow's (1973) ecological model of adaptation and theory of environmental press. Specifically, the theory appears to hold for individuals with higher levels of personal competence. Means on adaptive behavior and consumer satisfaction for residents with moderate, mild, and no mental retardation were higher across a wide range of residential restrictiveness, including the least restrictive residential settings. However, the theory failed to predict that individuals with lower levels of competence would also have higher levels of adaptive behavior and consumer satisfaction in less restrictive settings.

The results of this research do not necessarily suggest that the theory of environmental press is an inadequate model in understanding well-being among aging and elderly persons with developmental disabilities. To the contrary, the theory offers valuable insights into the dynamics of person-environment interactions and the nature of individual

competence with respect to the environment. This research focused on an unidimensional aspect of competence, level of mental retardation, and found that persons with lower levels of this type of competence scored higher on adaptive behavior and consumer satisfaction in less restrictive settings. The concept of personal competence, however, is clearly more complicated and involves a number of elements other than level of mental retardation among persons with developmental disabilities. It is precisely the multidimensional nature of personal competence that at once makes it a topic of social scientific interest and yet also empirically elusive and difficult to measure. Nonetheless, the diagnosis of level of mental retardation is an important factor in determining residential placement and service provision for persons with developmental disabilities in Oklahoma.

It would seem that, in addition to the theory of environmental press, labelling theory might offer a better understanding of the relationship between personal competence and the environment for persons with developmental disabilities. The labelling of persons with developmental disabilities as profoundly, severely or moderately mentally retarded appears to imply a low level of personal autonomy and consequently a need for an environment that will provide them with a high degree of security. Level of retardation can be viewed as a category or social status to which persons with developmental disabilities are

recognized as belonging (Rosenburg, 1981). These labels carry with them assumptions about these residents' abilities to cope with and adapt to their environments, and may be used as justifications or rationalizations for placement in overly restrictive settings. In short, these labels may function as social identities for the persons to whom they are attached. The findings of this research might suggest that persons who have been labeled as having severe or profound mental retardation are generally as successful at adapting to less restrictive residential settings as persons who have been labeled as having lesser degrees of mental retardation. This may mean that the general relevance of the mental retardation diagnosis to residential placement for persons with developmental disabilities needs to be seriously reconsidered among policy makers, professionals, and caretakers involved in the process of deinstitutionalization.

Overall, it appears that the principle of normalization as articulated by Nirje (1969) and Wolfensberger (1972) is supported by the results of this research. These findings suggest that, among both older and younger adults with developmental disabilities, residents of less restrictive settings consistently reported higher levels of adaptive behavior and consumer satisfaction than did residents of more restrictive settings across all levels of personal competence. The differences between older and younger cohorts of residents were most significant in the

correlations between residential restrictiveness and consumer satisfaction. While restrictiveness was strongly correlated with all four measures of consumer satisfaction among residents in younger age categories (20-29 and 30-39), the strength and significance of these correlations declined among residents in older age categories (40-49, 50-59, and 60+), with the exception of the sub-scale financial autonomy. It appears that, for younger residents, less restrictive settings are conducive to higher degrees of consumer satisfaction in different areas, such as residential environment, social environment, and financial autonomy. Among elderly residents (60+), less restrictive settings cease to be associated with consumer satisfaction or the sub-dimensions of residential environment and social environment, but remain strongly associated with financial autonomy.

These findings may suggest that factors contributing to satisfaction with residential and social environment change with increasing age among people with developmental disabilities, becoming less closely tied to the physical quality of the immediate residential setting. Although younger adults can be seen to be more satisfied in less restrictive settings, the reasons for which older adults report varying levels of satisfaction remain unclear. Perhaps other characteristics of the residential environment, such as age density (Seltzer, 1985), or individual factors such as physical or mental health

(DiGiovani, 1978; Janicki & MacEachron, 1984) play a more central role in understanding satisfaction among older adults. It is possible that, with increasing age, one's subjective perceptions of happiness, satisfaction, and quality of life cease to be predicated so much upon material concerns such as residential restrictiveness and become centered more upon social relationships with family, friends, or significant others that make up one's social support network. Indeed, the nature of such networks may be different for older persons with developmental disabilities than for non-disabled elderly and is a topic worthy of further research.

Suggestions for Future Research

Future research on the relationship between any residential / environmental characteristics and general well-being among older adults with developmental disabilities should take into consideration the extent of variation present in different types of residential settings. This study utilized an ordinal level of measurement to approximate differences in restrictiveness of different types of residences. However, as discussed in Chapter 3, ranking types of residences may not adequately capture the full range of restrictiveness, or any other environmental characteristic, in sufficient detail. A typology of restrictiveness created from a more qualitative inspection of residential settings, including more

subjective impressions of the residents themselves, may serve as a more meaningful measurement of this variable.

Another suggestion for future research in this area is a broader conceptualization of competence. This study utilized level of retardation as a sole indicator of personal competence. However, factors such as physical and mental health may also contribute to one's ability to cope with environmental demands. Validity may be enhanced by including these and other factors in the conceptualization of competence for people with developmental disabilities.

Finally, this research focused upon adaptive behavior and consumer satisfaction as they relate to restrictiveness and competence. Future research should incorporate additional variables into the analysis, such as maladaptive behaviors, physical or mental health, medications, and income. Well-being among people with developmental disabilities should probably be measured in many different ways, in order to provide a more complete and accurate picture of this unique population.

REFERENCES

- Antonucci, T.C. (1990). Social support and social relationships. In R.H. Binstock & L.K. George (eds.), Handbook of Aging and the Social Sciences (3rd ed.). (pp. 205-226). San Diego: Academic Press Inc.
- Babbie, E.R. (1979). The Practice of Social Research (2nd ed.). Wadsworth Publishing Company, Inc.
- Bolin, B.L., & Dodder, R. (1993). Developmental Disabilities Quality Assurance: A Study of Deinstitutionalization in Oklahoma. Manuscript submitted for publication.
- Blumer, H. (1969). Symbolic Interaction: Perspective and Method. Prentice Hall.
- Butler, E., & Bjaanes, A. (1978). Activities and the use of time by retarded persons in community care facilities. In G.P. Sackett (ed.), Observing Behavior: Vol. 1, Theory and Applications in Mental Retardation (pp. 379-399). Baltimore: University Park Press.
- Cantor, M.H. (1979). Neighbors and friends: An overlooked resource in the informal support system. Research on Aging, 1, 434-463.
- Cattell, R.B. (1978). The Scientific Use of Factor Analysis in Behavioral and Life Sciences. New York: Plenum Press.
- Chappell, N.L. (1990). Aging and social care. In R.H. Binstock & L.K. George (eds.), Handbook of Aging and the Social Sciences (3rd ed.). (pp. 438-454). San Diego: Academic Press Inc.
- Chappell, N.L., & Orbach, H.L. (1986). Socialization in old age: a Meadian perspective. In V.W. Marshall (ed.), Later Life: The Social Psychology of Aging. Beverly Hills: Sage Publications.
- Cobb, S. (1979). Social support and health through the life course. In M. Riley (ed.), Aging from Birth to Death: Interdisciplinary Perspectives. Boulder: Westview Press.

- Conroy, J., & Bradley, V. (1985). The Pennhurst longitudinal study: Combined report of five years of research and analysis -- Executive summary. Philadelphia: Temple University Press.
- Cooley, C.H. (1902/1964). Human Nature and the Social Order. New York: Scribner's.
- Cotten, P., Sisson, G., & Starr, S. (1981). Comparing elderly mentally retarded and non-mentally retarded individuals: who are they? what are their needs? The Gerontologist, 21(4), 359-364.
- Crohan, S.E., & T.C. Antonucci. (1989). Friends as a source of social support in old age. In R. Adams & R. Blieszner (eds.), Older Adult Friendship: Structure and Process (pp. 129-146). Beverly Hills: Sage Publications.
- DiGiovanni, L. (1978). The elderly retarded: a little known group. The Gerontologist, 18(3), 262-266.
- Drew, C.J., Logan, D.R., & Hardman, M.L. (1984). Mental Retardation: A Life Cycle Approach (3rd ed.). St. Louis: Times Mirror / Mosby College Publishing.
- Eyman, R., Demaine, G., & Lei, T. (1979). Relationship between community and resident changes in adaptive behavior. American Journal of Mental Deficiency, 83, 330-338.
- George, L.K. (1990). Social structure, social processes, and social-psychological states. In R.H. Binstock & L.K. George (eds.), Handbook of Aging and the Social Sciences (3rd ed.). (pp. 186-204). San Diego: Academic Press Inc.
- Griffith, J. (1985). Social support providers: Who are they? Where are they met? And the relationship of network characteristics to psychological distress. Basic and Applied Social Psychology, 6(1), 41-60.
- Grossman, H.J. (1973). Manual on terminology and classification in mental retardation. American Association on Mental Deficiency, Washington D.C.
- Hansson, R.O. (1989). Old age: testing the parameters of social psychological assumptions. In S. Spacapan & S. Oskamp (eds.), The Social Psychology of Aging. The Claremont Symposium on Applied Social Psychology. (pp. 25-51). Newbury Park: Sage Publications.

- Hauber, F., Rotegard, L., & Bruininks, R. (1985). Characteristics of residential services for older/elderly mentally retarded persons. In M.P. Janicki & H.M. Wisniewski (eds.), Aging and Developmental Disabilities: Issues and Approaches. (pp. 327-350). Paul H. Brookes Publishing Co., Inc.
- Hogg, J., Moss, S., & Cooke, D. (1988). Ageing and Mental Handicap. Routledge Chapman and Hall Inc.
- Jacobson, J.W., Sutton, M.S., & Janicki, M.P. (1985). Demography and characteristics of aging and aged mentally retarded persons. In M.P. Janicki & H.M. Wisniewski (eds.), Aging and Developmental Disabilities: Issues and Approaches. (pp. 115-142). Paul H. Brookes Publishing Co., Inc.
- Janicki, M.P., & MacEachron, A.E. (1984). Residential, health, and social service needs of elderly developmentally disabled persons. The Gerontologist, 24(2), 128-136.
- Kemp, B. (1985). Rehabilitation and the older adult. In J.E. Birren & K.W. Schaie (eds.), Handbook of the Psychology of Aging (2nd ed.). (pp 647-663). New York: Van Nostrand Reinhold.
- Larson, R., R. Mannell, & J. Zuzanek. (1986). Daily well-being of older adults with friends and family. Psychology and Aging, 1, 117-126.
- Lawton, M.P. (1982). Competence, environmental press, and the adaptation of older people. In M.P. Lawton, P. Windley, & T.O. Byerts (eds.), Aging and the Environment. New York: Springer.
- Lawton, M.P. (1989). Environmental proactivity and affect in older people. In S. Spacapan & S. Oskamp (eds.), The Social Psychology of Aging. The Claremont Symposium on Applied Social Psychology. (pp. 135-163). Newbury Park: Sage Publications.
- Lawton, M.P. and Nahemow, L. (1973). Ecology and the aging process. In C. Eisdorfer & M.P. Lawton (eds.), The Psychology of Adult Development and Aging (pp. 619-674). Washington D.C.: American Psychological Association.
- Mead, G.H. (1934/1962). Mind, Self, and Society: From the Standpoint of a Social Behaviorist. Chicago: University of Chicago Press.

- Nihira, K. (1976). Dimensions of adaptive behavior in institutionalized mentally retarded children and adults: Developmental perspective. American Journal of Mental Deficiency, 81(3), 215-226.
- Nihira, K., Foster, R., Shellhaas, M., & Leland, H. (1975). A.A.M.D. Adaptive Behavior Scale. American Association on Mental Deficiency, Washington D.C. (revised).
- Nirje, B. (1969). The normalization principle and its human management implications. In R. Kugal & W. Wolfensberger (eds.), Changing Patterns in Residential Services for the Mentally Retarded. (pp. 181-194). Washington D.C.: President's Committee on Mental Retardation.
- Nunnally, J.C. (1967). Psychometric Theory. McGraw-Hill.
- Raynes, N., Sumpton, R. & Flynn, M. (1987). Homes for Mentally Handicapped People. Tavistock Publications.
- Rice, D.P. and Feldman, J.J. (1983). Living longer in the United States: demographic changes and health needs of the elderly. Milbank Memorial Fund Quarterly, 16(3), 362-396.
- Ritzer, G. (1988). Sociological Theory (2nd ed.). New York: Alfred A. Knopf, Inc.
- Roscoe, J.T. (1975). Fundamental Research Statistics for the Behavioral Sciences (2nd ed.). New York: Holt, Rinehart and Winston, Inc.
- Rosenberg, M. (1981). The self-concept: Social product and social force. In M. Rosenberg & R.H. Turner (eds.), Social Psychology: Sociological Perspectives. New York: Basic Books.
- Rosow, I. (1967). Social Integration of the Aged. New York: Free Press.
- Rowles, G. (1978). Prisoners of Space? Exploring the Geographical Experience of Older People. Boulder: Westview Press.
- Sanford, D., & Elzinga, R. (1987). Dimensions of adaptive behaviour of young adults with behaviour disorders. Australia and New Zealand Journal of Developmental Disabilities, 13(4), 195-199.
- Scheerenberger, R., & Felsenthal, D. (1977). Community settings for MR persons: Satisfaction and activities. Mental Retardation, 15(4), 3-7.

- Seltzer, M.M. (1985). Informal supports for aging mentally retarded persons. American Journal of Mental Deficiency, 90(3), 259-265.
- Seltzer, M.M., & Seltzer, G.B. (1984). The elderly mentally retarded: a group in need of service. In G. Getzel & J. Mellor (eds.), Gerontological Social Work Practice in the Community. New York: Haworth Press.
- Singh, T.H., Balasabramaniam, S.S. (1989). Hospital to community: a pilot rehabilitation project for elderly mentally retarded. Journal of Mental Deficiency Research, 33, 25-29.
- Spence, D.L. (1986). Some contributions of symbolic interaction to the study of growing old. In V.W. Marshall (ed.), Later Life: The Social Psychology of Aging. Beverly Hills: Sage Publications.
- Stea, D. (1970). Home range and use of space. In L. Pastalan & D. Carson (eds.), Spatial Behavior of Older People. Ann Arbor: University of Michigan - Wayne State University Institute of Gerontology.
- Stroebe, W. and Stroebe, M.S. (1987). Bereavement and Health: The Psychological and Physical Consequences of Partner Loss. Cambridge University Press.
- Turnbull, R.H. (1988). Ideological, political, and legal principles in the community living movement. In M.P. Janicki, M.W. Krauss & M.M. Seltzer (eds.), Community Residences for Persons with Developmental Disabilities: Here to Stay. Baltimore: Paul H. Brookes Publishing Co.
- Ward, R.A., La Gory, M., & Sherman, S. (1988). The Environment for Aging: Interpersonal, Social, and Spatial Contexts. Tuscaloosa: The University of Alabama Press.
- Willer, B., & Intagliata, J. (1984). Promises and Realities for Mentally Retarded Citizens: Life in the Community. Baltimore: University Park Press.
- Wolfensberger, W. (1972). The Principle of Normalization in Human Services. Toronto: National Institute on Mental Retardation.

APPENDIX

QUESTIONNAIRE

OKLAHOMA STATE UNIVERSITY
 DEPARTMENT OF SOCIOLOGY
 STILLWATER, OKLAHOMA

DEVELOPMENTAL DISABILITIES QUALITY
 ASSURANCE QUESTIONNAIRE

This document and attachments are confidential and are available only to participants in the assessment project. Contents are not to be read or duplicated without authorization by Developmental Disabilities Services Division or the individual/guardian.

Interviewer		Site Code	ID Number	D.O.B.
[] []		[] [] [] [] [] [] [] []	[] [] [] [] [] [] [] []	M M D D Y Y [] [] [] [] [] []
Interview Date				
M []	[]			
M []	[]			
D []	[]			
D []	[]			
Y []	[]			
Y []	[]			
Type of Facility			Class Status	
<input type="checkbox"/>]ESS = Enid State School <input type="checkbox"/>]FC = Foster Care <input type="checkbox"/>]GH2 = Group Home with 4, 5, or 6 Residents <input type="checkbox"/>]GH3 = Group Home with 7 or More Residents <input type="checkbox"/>]HMC = Hissom Memorial Center <input type="checkbox"/>]ICF = ICF <input type="checkbox"/>]IL = Independent Living <input type="checkbox"/>]INC = Incarcerated: (JAIL OR PRISON) <input type="checkbox"/>]MHF = Mental Health Facility <input type="checkbox"/>]MR = ICF/MR Placement <input type="checkbox"/>]OS = Out of State <input type="checkbox"/>]OSD = Oklahoma School for the Deaf <input type="checkbox"/>]PVS = Pauls Valley School <input type="checkbox"/>]RH = Relative's Home or Their Own Home <input type="checkbox"/>]SIL = Semi-Independent Living <input type="checkbox"/>]SUP = Supported Living <input type="checkbox"/>]UN = Unknown <input type="checkbox"/>]OT = Other			<input type="checkbox"/>]Focus <input type="checkbox"/>]Balance <input type="checkbox"/>]Non Member <input type="checkbox"/>]Don't Know <input type="checkbox"/>]OBRA member	
			Race	
			<input type="checkbox"/>]White <input type="checkbox"/>]Black <input type="checkbox"/>]Oriental <input type="checkbox"/>]Asian <input type="checkbox"/>]Hispanic <input type="checkbox"/>]American Indian <input type="checkbox"/>]Alaskan Native <input type="checkbox"/>]Other	
Sex		Level of Retardation	Other Disabilities	
<input type="checkbox"/>]Male <input type="checkbox"/>]Female		<input type="checkbox"/>]Not MR <input type="checkbox"/>]Mild <input type="checkbox"/>]Moderate <input type="checkbox"/>]Severe <input type="checkbox"/>]Profound <input type="checkbox"/>]Unknown	Visually Impaired Hearing Impaired Autism Other: _____ Cerebral palsy Physical disabilities Mental illness Feeding Tube Tracheostomy	

SECTION 1: RESIDENTIAL HISTORY/FAMILY AND ADVOCATE CONTACT.

1. What is your relationship to him/her? (principal respondent:)		2. When did s/he move here?	
<input type="checkbox"/> A family member		M <input type="checkbox"/>	
<input type="checkbox"/> A non-relative guardian		M <input type="checkbox"/>	unknown
<input type="checkbox"/> A friend		D <input type="checkbox"/>	life-long resident
<input type="checkbox"/> A direct contact staff person (paraprofessional)		D <input type="checkbox"/>	
<input type="checkbox"/> Case Manager/Social Worker/GMRP		Y <input type="checkbox"/>	
<input type="checkbox"/> Other professional or administrator		Y <input type="checkbox"/>	
<input type="checkbox"/> Other (Define) _____			
		3. How many times has s/he changed home addresses in the past year?	
		<input type="checkbox"/>	unknown
		<input type="checkbox"/>	
		5. Is the residence private or public?	
		<input type="checkbox"/>	Private nonprofit
		<input type="checkbox"/>	Private proprietary
		<input type="checkbox"/>	Public
		<input type="checkbox"/>	Private home
		<input type="checkbox"/>	Other: _____
		<input type="checkbox"/>	
		<input type="checkbox"/>	
4. Where did s/he live immediately before coming here?		6. Has s/he ever lived in an institution? (Mark all that apply.) NO If no, skip to #7.	
<input type="checkbox"/>]ESS = Enid State School		<input type="checkbox"/>	State school
<input type="checkbox"/>]FC = Foster Care		<input type="checkbox"/>	Private ICF-MR
<input type="checkbox"/>]GH1 = Group Home with 2 or 3 Residents		<input type="checkbox"/>	Nursing home
<input type="checkbox"/>]GH2 = Group Home with 4, 5, or 6 Residents		<input type="checkbox"/>	Mental health
<input type="checkbox"/>]GH3 = Group Home with 7 or More Residents		6A. What year did s/he leave her/his last institutional placement?	
<input type="checkbox"/>]HMC = Hissom Memorial Center		<input type="checkbox"/>	Currently in institution
<input type="checkbox"/>]ICF = ICF		Y <input type="checkbox"/>	
<input type="checkbox"/>]IL = Independent Living		Y <input type="checkbox"/>	
<input type="checkbox"/>]INC = Incarcerated: (JAIL OR PRISON)			
<input type="checkbox"/>]MHF = Mental Health Facility			
<input type="checkbox"/>]MR = ICF/MR Placement			
<input type="checkbox"/>]OS = Out of State			
<input type="checkbox"/>]OSD = Oklahoma School for the Deaf			
<input type="checkbox"/>]PVS = Pauls Valley School			
<input type="checkbox"/>]RH = Relative's Home or Their Own Home			
<input type="checkbox"/>]SIL = Semi-Independent Living			
<input type="checkbox"/>]SUP = Supported Living			
<input type="checkbox"/>]UN = Unknown			
<input type="checkbox"/>]OT = Other			
<input type="checkbox"/>]Life long Resident			

Lives with family	
	About once a week or more
	About once a month
	About every 3 months
	Twice a year or less
	Never in the past year
	No family, or No DDS case manager or No Advocate
<p>7. In the past year, how often has the family contacted him/her or the staff by phone?</p> <p>8. How often did family member(s) (biological/adoptive) visit him/her in the client's home in the past year?</p> <p>9. How often did s/he visit in the family's biological/adoptive home or on outings in the past year?</p> <p>10. How often did the DDS case manager make contact with client by phone in the last year?</p> <p>11. How often did the DDS case manager make contact with client by visit in the past year?</p>	
12. How many DDS case managers in the last year?	13. Is the name and phone number of his/her DDS case manager readily available to the client and people with whom they live?
<input type="checkbox"/> Never had one (Skip to #14) <input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable
14. What other advocates made contact with him/her? List all that apply. (IF ANSWER is No Advocate, MOVE TO QUESTION 17).	
<input type="checkbox"/> Guardian ad litem (Represents Hissom Class members in Homeward bound lawsuit) <input type="checkbox"/> Office of Client Advocacy (Ombudsman) <input type="checkbox"/> Volunteer <input type="checkbox"/> Other (e.g., Protection and Advocacy, short term special guardian) <input type="checkbox"/> OBRA case manager/team member <input type="checkbox"/> No advocate (SKIP TO #17)	
<p>About once a week or more</p> <p> About once a month</p> <p> About every three months</p> <p> Twice a year or less</p> <p> Never in the past year</p>	
<p>15. How often did other advocates or staff contact him/her or family by phone in the past year? (INCLUDE ALL NON-DDS ADVOCATES).</p> <p>16. How often did other advocate(s) visit him/her and family in the past year? (Include all non-DDS advocates).</p>	

SECTION III: ADAPTIVE EQUIPMENT NEEDS

Does not need NEEDS but does not have HAS	What adaptive equipment does s/he have or need?
Has but needs REPAIR	
<input type="checkbox"/>	17. Glasses
<input type="checkbox"/>	18. Hearing Aid
<input type="checkbox"/>	19. Wheelchair, walker, braces, cane
<input type="checkbox"/>	20. Helmet
<input type="checkbox"/>	21. Communication Device
<input type="checkbox"/>	21A. Dentures
<input type="checkbox"/>	21B. Oxygen Machine
<input type="checkbox"/>	21C. Suction Machine
<input type="checkbox"/>	21D. Feeding Pump
<input type="checkbox"/>	22. Other: _____ <input type="checkbox"/>
	_____ <input type="checkbox"/>

SECTION IV: ADAPTIVE SKILLS (BEHAVIOR DEVELOPMENT SURVEY)

This section covers adaptive behavior skills. Please answer yes only to those things that s/he actually does, not for what s/he "might be able to do." Verbal prompts are ok (unless otherwise noted), but do not give credit for behaviors performed with physical prompts (unless otherwise noted). [Give credit for a behavior if it is performed at least 75% (3/4) of the time. Enter zero (0) if the item is not applicable, or if the person is too young or unable, or if there is no opportunity. LEAVE NO BLANKS]

23. How is his/her body balance? (MARK HIGHEST NUMBER THAT APPLIES).
- Stand on "tiptoe" for ten seconds if asked
 - Stand on one foot for two seconds if asked
 - Stand without support
 - Stand with support
 - Sit without support
 - Can do none of the above
24. Can s/he use silverware? (MARK HIGHEST NUMBER THAT APPLIES)
- Use knife and fork correctly and neatly
 - Use table knife for cutting or spreading
 - Feed self with spoon and fork - neatly
 - Feed self with spoon and fork - considerable spilling
 - Feed self with spoon - neatly
 - Feed self with spoon - considerable spilling
 - Feed self with fingers or must be fed
25. Can s/he: (VISUAL AIDES ARE ACCEPTABLE) (MARK HIGHEST NUMBER THAT APPLIES)
- Order complete meals in restaurants
 - Order simple meals like hamburgers or hot dogs
 - Order soft drinks at soda fountain or canteen
 - Does not order food at public eating places
26. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES)
- Drink without spilling, holds glass in one hand
 - Drink from cup or glass unassisted - neatly
 - Drink from cup or glass - considerable spilling
 - Does not drink from cup or glass

27. Does s/he ever have toilet accidents? (MARK HIGHEST NUMBER THAT APPLIES).
-]Never has toilet accidents during day or night time
 -]Never has toilet accidents during the day time (but may have problems at night)
 -]Occasionally has toilet accidents during the day time
 -]Frequently has toilet accidents during the day time
 -]Is not toilet trained at all
28. Can s/he: (MARK HIGHEST NUMBER THAT APPLIES).
-]Prepare and completely bathe unaided
 -]Wash and dry self completely
 -]Wash and dry reasonably well with prompting
 -]Wash and dry self with help
 -]Attempt to soap and wash self
 -]Actively cooperate when being washed and dried by others
 -]Makes no attempt to wash or dry self
29. Can s/he: (MARK HIGHEST NUMBER THAT APPLIES).
-]Completely dress self
 -]Completely dress self with verbal prompting only
 -]Dress self by pulling or putting on all clothes with verbal prompting and by fastening (zipping, buttoning, snapping) them with help
 -]Dress self with help in pulling or putting on most clothes and fastening them
 -]Cooperate when dressed, e.g., by extending arms or legs
 -]Must be dressed completely
30. How is his/her sense of direction? Can s/he: (MARK HIGHEST NUMBER THAT APPLIES).
-]Go several blocks from grounds, or from home, without getting lost
 -]Go around grounds or a couple of blocks from home without getting lost
 -]Go around cottage, ward, yard, or home without getting lost
 -]Demonstrates no sense of direction
31. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
-]Use money with little or no assistance (e.g., assistance with budgeting is OK)
 -]Use money with minor assistance (e.g., checking for correct change, etc.)
 -]Use money with some assistance (e.g., being told the correct bills or coins)
 -]Use money with complete assistance of staff
 -]Does not use money
32. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
-]Choose and buy all own clothing without help
 -]Choose and buy some clothing without help
 -]Make minor purchases without help (e.g., snacks, drinks)
 -]Do some shopping with slight supervision
 -]Do some shopping with close supervision
 -]Does no shopping
33. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
-]Write complete lists, memos or letters
 -]Write short sentences
 -]Write or print more than ten words without copying or tracing
 -]Write or print own name or other words without copying or tracing
 -]Trace or copy own name or other words
 -]Does not write, print, copy, or trace any words

34. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
 Sometimes use complex sentences containing "because," "but," etc.
 Ask questions using words such as "why," "how," "what," etc.
 Speak in simple sentences
 Is nonverbal or nearly nonverbal
35. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
 Read books or other materials suitable for children nine years old or older
 Read books or other materials suitable for children seven years old
 Read simple stories or comics suitable for children at a kindergarten or first grade level
 Recognize 10 or more words
 Recognize various signs, such as "EXIT" or "STOP" or "WOMEN" or "MEN" or Street Signs.
 Recognize no words or signs.
36. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
 Do simple addition and/or subtraction
 Count 10 or more objects
 Mechanically count aloud from one to ten
 Count two objects by saying "one, two"
 Discriminate between "one" and "many"
 Has no understanding of numbers
37. Does s/he clean his/her room? (MARK HIGHEST NUMBER THAT APPLIES).
 Cleans room well, e.g., sweeping vacuuming, tidying
 Cleans room but not thoroughly
 Does not clean room at all
38. Can s/he: (MARK HIGHEST NUMBER THAT APPLIES).
 Prepare an adequate complete meal
 Mix and cook simple foods
 Prepare simple foods requiring no mixing or cooking
 Does not prepare food at all
39. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
 Clear table of breakable dishes and glassware
 Clear table of unbreakable dishes and silverware
 Does not clear table at all
40. Does s/he go to: (MARK HIGHEST NUMBER THAT APPLIES)
 Competitive employment or workshop
 Pre-vocational training, school, or retired
 Performs no outside work
41. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
 Initiate most of own activities
 Initiate some of own activities
 Will engage in activities only if assigned or directed
 Will not engage in assigned activities

42. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
-]Pay attention to purposeful activities for more than 20 minutes
 -]Pay attention to purposeful activities for about 15 minutes
 -]Pay attention to purposeful activities for about 10 minutes
 -]Pay attention to purposeful activities for about 5 minutes
 -]Will not pay attention to purposeful activities for as long as 5 minutes
43. How is s/he at taking care of his/her personal belongings (MARK HIGHEST NUMBER THAT APPLIES).
-]Very dependable, always takes care of belongings
 -]Usually dependable, usually takes care of belongings
 -]Unreliable, seldom takes care of belongings
 -]Not responsible at all, does not take care of belongings
44. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES).
-]Interact with others for more than five minutes
 -]Interact with others for up to five minutes
 -]Interact with others in limited ways, e.g., eye contact, handshakes, responsive to touch
 -]Does not interact with others
45. Does s/he: (MARK HIGHEST NUMBER THAT APPLIES)
-]Initiate group activities at least some of the time (leader and/or organizer)
 -]Participate in group activities spontaneously and eagerly (active participant)
 -]Participate in group activities if encouraged to do so (passive participant)
 -]Does not participate in group activities (unless physically guided)

=====

=====

46. Can s/he: (With cane, crutches, brace, or walker, if used). (MARK ALL THAT APPLY)
-]Walk alone
 -]Walk up and down stairs alone
 -]Walk down stairs by alternating feet
 -]Run without falling often
 -]Hop, skip or jump
 -]None of the above
47. At the toilet, does s/he: (MARK ALL THAT APPLY)
-]Lower pants at the toilet without help
 -]Sit on toilet seat without help
 -]Use toilet tissue appropriately
 -]Flush toilet after use
 -]Put on clothes without help
 -]Wash hands without help
 -]None of the above
48. Does s/he: (MARK ALL THAT APPLY).
-]Wash hands with soap
 -]Wash face with soap
 -]Wash hands and face with water
 -]Dry hands and face
 -]None of the above

49. Does s/he: (MARK ALL THAT APPLY).
- Clean shoes when needed
 - Put clothes in drawer or chest neatly
 - Put soiled clothes in proper place for laundering/washing, without being reminded
 - Hang up clothes without being reminded
 - None of the above
50. Does s/he: (MARK ALL THAT APPLY).
- Put on shoes correctly without assistance
 - Tie shoe laces without assistance (Velcro is ok)
 - Untie shoe laces without assistance (Velcro is ok)
 - Remove shoes without assistance
 - None of the above
51. Is s/he able to: (MARK ALL THAT APPLY)
- Say (sign) at least a few words
 - Nod head or smile to express happiness
 - Indicate hunger
 - Indicate wants by pointing or vocal noises
 - Express pleasure or anger by vocal noises
 - Chuckle or laugh when happy
 - None of the above
52. Does s/he: (MARK ALL THAT APPLY).
- Understand instructions containing prepositions, e.g., "on," "in," "behind"
 - Understand instructions referring to the order in which things must be done, e.g., "first do this, and afterward, do that"
 - Understand instructions requiring a decision, e.g., "If there's any ham, make a sandwich; but if there's none, open some soup"
 - None of the above
53. Can s/he: (MARK ALL THAT APPLY).
- Tell time by clock or watch correctly
 - Understand time intervals, e.g., there is one hour between 3:30 and 4:30
 - Understand time equivalents, e.g., "9:15" is the same as "quarter past nine."
 - Associate time on clock with various actions and events, e.g., 6:00 means dinner time
 - None of the above
54. Does s/he: (MARK ALL THAT APPLY).
- Recognize own family
 - Recognize people other than family
 - Have information about others, e.g., relation to self, job, address, name
 - Know the names of people close to him/her, e.g., in neighborhood, at home or day program
 - Know the names of people not regularly encountered
 - None of the above

FREQUENCY CODING

Not observed in the past month, but <u>has</u> occurred in the past year		----- The next questions cover problematic behaviors. Does s/he ever: -----
Less than (=) five times/week in past four weeks	More than five times/week in past four weeks	
SEVERITY CODING		
No problem	Minor problem	No challenging behaviors
	Major problem	Extremely urgent problem, (completely or nearly intolerable)

- 55. Threaten or do physical violence to others (Malicious Intent)
Describe: _____ []
- 56. Damage own or others' property (Malicious Intent)
- 57. Disrupt others' activities
- 58. Use profane or hostile language
- 59. Is rebellious, e.g., ignore regulations, resist following instructions
- 60. Run away or attempt to run away
- 61. Is untrustworthy, e.g., take others' property, lie, or cheat
- 62. Display stereotyped behavior, e.g., rock body, hands constantly moving in repetitive pattern
- 63. Remove or tear off own clothing inappropriately
- 64. Injure self
- 65. Is hyperactive, e.g., will not sit still for any length of time
- 66. Inappropriate sexual behavior inside the home
Describe _____ []
- 67. Inappropriate sexual behavior outside the home
Describe _____ []
- 68. Listless, sluggish, inactive, unresponsive to activities
- 69. Scream, yell, or cry inappropriately
- 70. Repeat a word or phrase over and over

71. Did s/he display any other challenging behavior?
 Yes Describe _____ []
 No _____ []

SECTION V: MEDICAL NEEDS

72. In general, how urgent is his/her need for medical care? (MARK ONLY ONE)
- Generally has no serious medical needs
 - Needs visiting nurse and/or regular visits to the doctor
 - Has life-threatening condition that requires very rapid access to medical care
 - Would not survive without 24 hours medical personnel

73. How often does s/he see a doctor or a nurse (OTHER THAN MEDS ADMINISTRATION)?
-]Not in last year
 -]Once a year
 -]Twice a year
 -]Three to six times a year
 -]Once a month
 -]Once a week
 -]Once a day
 -]More than once a day
74. To your knowledge, has s/he ever had difficulty receiving medical services?
-]No problem
 -]One to three times
 -]Four to six times
 -]Seven to nine times
 -]Over nine
75. Are immunizations up to date?
-]Yes
 -]No
 -]Don't know
76. What was the date of the last dental examination?
- | | | |
|---|--------------------------|---------|
| M | <input type="checkbox"/> | never |
| M | <input type="checkbox"/> | unknown |
| Y | <input type="checkbox"/> | |
| Y | <input type="checkbox"/> | |
77. What was the date of the last eye exam?
- | | | |
|---|--------------------------|---------|
| M | <input type="checkbox"/> | never |
| M | <input type="checkbox"/> | unknown |
| Y | <input type="checkbox"/> | |
| Y | <input type="checkbox"/> | |
78. Has a doctor ever indicated a history of seizure activity?
-]Yes
 -]No
 -]Don't know
79. How often does s/he experience seizures (INCLUDE ALL TYPES AND OCCURRENCES)? (MARK ONLY ONE)
-]Continuous intermittent seizures during the past year
 -]More than five per day during the past year
 -]More than one but less than five per day during the past year
 -]About one per week during the past year
 -]About one per month during the past year
 -]Seven to 11 per year during the past year
 -]One to six per year during the past year
 -]Has documented history of seizures but no seizures in past year
 -]No seizures in past five years
 -]No seizures
- 79A. Does this represent a change from the previous year?
-]Same
 -]More
 -]Less
 -]Don't know

DRUG USAGE (QUESTIONS 80-85)

DRUG Compare medications received to the Drug Table. If medication appears on the table, insert the numerical code for the drug. (OTHERWISE LEAVE BLANK)

FREQUENCY OF ADMINISTRATION

TD or total daily dosage if they take several different doses of the same drug in one day

PRN or when needed

QID or four times daily

TID or three times daily

BID or two times daily

HS or one time daily

AVG or average daily dosage if they take medication less than one time daily

<p>Drug: _____</p> <p>Frequency drug [] <input type="checkbox"/> TD code [] <input type="checkbox"/> PRN Dosage <input type="checkbox"/> QID [] <input type="checkbox"/> TID [] <input type="checkbox"/> BID [] <input type="checkbox"/> HS [] <input type="checkbox"/> AVG <input type="checkbox"/> Other</p> <p>Purpose <input type="checkbox"/> behavioral control <input type="checkbox"/> seizure control <input type="checkbox"/> other/unknown</p> <p style="text-align: right;">Units Milligram Gram Milliliters CC's</p>	<p>Drug: _____</p> <p>Frequency drug [] <input type="checkbox"/> TD code [] <input type="checkbox"/> PRN Dosage <input type="checkbox"/> QID [] <input type="checkbox"/> TID [] <input type="checkbox"/> BID [] <input type="checkbox"/> HS [] <input type="checkbox"/> AVG <input type="checkbox"/> Other</p> <p>Purpose <input type="checkbox"/> behavioral control <input type="checkbox"/> seizure control <input type="checkbox"/> other/unknown</p> <p style="text-align: right;">Units Milligram Gram Milliliter CC's</p>
--	---

<p>Drug: _____</p> <p>Frequency drug [] <input type="checkbox"/> TD code [] <input type="checkbox"/> PRN Dosage <input type="checkbox"/> QID [] <input type="checkbox"/> TID [] <input type="checkbox"/> BID [] <input type="checkbox"/> HS [] <input type="checkbox"/> AVG <input type="checkbox"/> Other</p> <p>Purpose <input type="checkbox"/> behavioral control <input type="checkbox"/> seizure control <input type="checkbox"/> other/unknown</p> <p style="text-align: right;">Units Milligram Gram Milliliters CC's</p>	<p>Drug: _____</p> <p>Frequency drug [] <input type="checkbox"/> TD code [] <input type="checkbox"/> PRN Dosage <input type="checkbox"/> QID [] <input type="checkbox"/> TID [] <input type="checkbox"/> BID [] <input type="checkbox"/> HS [] <input type="checkbox"/> AVG <input type="checkbox"/> Other</p> <p>Purpose <input type="checkbox"/> behavioral control <input type="checkbox"/> seizure control <input type="checkbox"/> other/unknown</p> <p style="text-align: right;">Units Milligram Gram Milliliter CC's</p>
--	---

<p>Drug: _____</p> <p>Frequency drug [] <input type="checkbox"/> TD code [] <input type="checkbox"/> PRN Dosage <input type="checkbox"/> QID [] <input type="checkbox"/> TID [] <input type="checkbox"/> BID [] <input type="checkbox"/> HS [] <input type="checkbox"/> AVG <input type="checkbox"/> Other</p> <p>Purpose <input type="checkbox"/> behavioral control <input type="checkbox"/> seizure control <input type="checkbox"/> other/unknown</p> <p style="text-align: right;">Units Milligram Gram Milliliters CC's</p>	<p>Drug: _____</p> <p>Frequency drug [] <input type="checkbox"/> TD code [] <input type="checkbox"/> PRN Dosage <input type="checkbox"/> QID [] <input type="checkbox"/> TID [] <input type="checkbox"/> BID [] <input type="checkbox"/> HS [] <input type="checkbox"/> AVG <input type="checkbox"/> Other</p> <p>Purpose <input type="checkbox"/> behavioral control <input type="checkbox"/> seizure control <input type="checkbox"/> other/unknown</p> <p style="text-align: right;">Units Milligram Gram Milliliters CC's</p>
--	--

MEDICATIONS TABLE

01 Acetophenazine	20 doxepin	33 Miltown(R)	85 Sparine(R)
20 Adapin(R)	04 Elavil(R)	38 *Moban(R)	56 *Stelazine(R)
02 alprazolam	97 Endep(R)	38 *molindone	58 Surmontil(R)
03 amantidine	33 Equanil(R)	(hydrochloride)	03 Symmetrel(R)
04 amitriptyline	29 eskalith	72 mysoline	81 Taractan(R)
06 amoxapine	79 ethosuximide	63 nadolol	60 Tegretol(R)
07 amphetamine sulfate	74 ethotoin	39 naloxone	50 temazepam
90 Anafranil(R)	43 etrafon	39 naltrexone	51 *thioridazine
06 Asendin(R)	21 fenfluramine	39 Narcan(R)	52 *thiothixene
26 Atarax(R)	22 fluoxetine	44 Nardil(R)	12 *thorazine(R)
30 Ativan(R)	23 *fluphenazine	52 *Navane(R)	(hydrochloride)
40 Aventyl(R)	24 flurazepam	78 Neuramate(R)	01 tindal(R)
33 benactyzine	68 gemonil	10 Noctec(R)	27 tofranil(R)
07 Benzedrine(R)	55 Halcion(R)	17 Norpramin(R)	84 Trancopal(R)
91 bupropion	25 *Haldol(R)	40 nortriptyline	53 tranlypromine
09 Buspirone	25 *haloperidol	45 *Orap(R)	15 Traxene(R)
60 carbamazepine	26 hydroxyzine	41 oxazepam	54 trazodone
14 Catapres(R)	27 iamimine	40 Pamelor(R)	39 Trexan(R)
65 celontin	27 imipramine	53 Parnate(R)	43 Triavil(R)
47 Centrax(R)	63 Inderal(R)	73 paramethadione	55 triazolam
10 chloral hydrate	63 inderide	74 peganone	77 tridione
11 chlordiazepoxide	28 isocarboxazid	42 pemoline	56 *trifluoperazine
92 chlormezanone	13 Klonopin(R)	23 permitil	86 trifluopromazine
12 *chlorpromazine	11 Librium(R)	43 *perphenazine	87 trihexiphenidyl
81 chlorprothixene	98 Limbitrol DS(R)	17 Pertofrane(R)	43 *Trilafon(R)
29 cibalith-S	29 lithane	75 phenacemide	77 trimethadione
94 clomipramine	29 lithium	44 phenelzine sulphate	58 trimipramine
13 clonazepam	29 lithobid	66 phenobarbital	62 Valium(R)
14 clonidine	30 lorazepam	71 phensuximide	64 valproic acid
15 clorazepate	31 *loxapine	75 phenurone	62 valrelease
16 *Cloxapen(R)	31 *Loxitane(R)	67 phenytoin	59 verapamil
16 cloxacillin	32 Ludiomil(R)	45 *pimozide	89 Vesprin(R)
95 Clozaril(R)	32 maprotiline	21 Pondimin(R)	26 Vistaril(R)
48 *Compazine(R)	28 Marplan(R)	47 prazepam	49 Vivactil(R)
63 Corgard	69 mebaral	72 primidone	88 Wellbutrin(R)
42 Cylert(R)	51 *Mellaril(R)	48 prochlorperazine	02 Xanax(R)
24 Dalmane(R)	70 mephenytoin	23 Prolixin	79 zartontin
64 Depakene(R)	69 mephobarbital	82 promazine	
80 Depakote(R)	33 meprobamate	63 propranolol	
17 desipramine	99 Meprospan(R)	49 protriptyline	
36 Desoxyn(R)	70 mesantoin	22 Prozac(R)	
54 Desyrel(R)	34 *mesoridazine	35 *Reglan(R)	
18 Dexerdrine(R)	35 *metuclopramide	50 Restoril(R)	
18 dextroamphetamine	36 methamphetamine	37 Ritalin(R)	
62 diazepam	68 metharbital	41 Serax(R)	
67 dilantin	65 methsuximide	34 *Serentil(R)	
96 diphenhydramine	36 methylphenidate	83 sertraline	
80 divalproex sodium	71 milontin	20 Sinequan(R)	

=====

SECTION VI: HOME LIVING ARRANGEMENTS/FINANCIAL
INFORMATION/SOCIAL INTERACTIONS

- [] 92. How many individuals served (non-relatives) reside in
[] the home (if multiple living units, indicate the number
of individuals residing in the person's living unit).
- [] 92A. How many direct care staff are on the living unit at
[] any given time during waking hours?
[] don't know
- 92B. Does the staff:
work shifts, reside at facility, some of both
- [] 93A. What is his/her average weekly income from employment?
[] (ENTER 0-999)
[]
- [] 93. What is his/her average monthly income from SSI, Social
[] Security or any other source? (ENTER 0-9999)
[]
[]
- [] 94. How much does the client pay per month for residential
[] services? (ENTER 0-999)
[]

=====

More than twice a week	Twice a week	Once a week	2-3 times a month	Once a month	Less than once a month	Not sure or refused	Never	About how often did this person leave the facility to do each of the following in the past year?

95. Go out to visit with friends, relatives, or neighbors.
96. Go out to visit a supermarket or food store.
97. Go out to a restaurant.
98. Go out to church or synagogue.
99. Go out to a shopping center, mall or other retail store to shop.
- 99A. Go out to movies, arcades, bars, etc.
- 99B. Go out to the bank.

CIVIL INVOLVEMENT AND CITIZENSHIP ACTIVITIES

100. Is s/he an adult who has a guardian (not conservatorship) appointed by a court?
 Person is an adult with a guardian
 Person has had a guardian recommended but not yet appointed (SKIP TO #102)
 Person is an adult who does not have a guardian (SKIP TO #102)
 Person is under 18 years of age (SKIP TO #102)
 Don't know (SKIP TO #102)

101. What kind of guardianship has been ordered? (MARK ALL THAT APPLY).

- General guardian of property
 Limited guardian of property
 General guardian of person
 Limited guardian of person
 Don't know

102. Has s/he participated, during the past year, in an organization which supports or promotes self-advocacy by persons with disabilities? (Has attended or sponsored meetings or events of such organizations as People First, or other local self advocacy group).

- Yes
 No (Skip to #104)
 Don't Know (Skip to #104)

103. How often does s/he typically participate in organized self-advocacy activities? (CHOOSE ONE).

- Daily
 Weekly
 Every other week
 Monthly
 Quarterly
 Semi-Annually
 Annually

104. Does s/he participate (at least four times a year) in a civic organization (Lions Club, Kiwanis, Zonta, Scouts) or Social Club (Garden Club, church group, etc.)?

- Yes Specify: _____
 No
 Don't Know

Yes

No
 Don't Know

105. Is s/he registered to vote?
 106. Has s/he voted in the past two years?
 107. Does s/he have a drivers license?
 108. Does s/he drive?
 109. Has s/he required or sought legal assistance, from a lawyer, in the past year? (IF ANSWER IS NO OR DON'T KNOW, SKIP TO #112).
 110. Has s/he received legal assistance from a lawyer in the past year?
 111. Was legal assistance sought/received to assist with: (MARK ALL THAT APPLY)
 Civil rights, entitlements, services
 Other civil matters
 Criminal matters
 Other (Describe) _____

112. Do you think s/he has ever experienced discrimination because of his/her disabilities? (IF ANSWER IS NO OR DON'T KNOW, SKIP TO #114)

- Yes
 No
 Don't Know

113. In what areas: (MARK ALL THAT APPLY)

- Physical access to building
 Access to employment services
 Access to educational services
 Access to other human services
 Access to transportation
 Interaction with non-handicapped neighbors and friends
 Participation in civic events (with non-handicapped individuals)
 Participation in recreation/leisure
 Other
Describe _____

=====

SECTION VII: SERVICE PLANNING/DELIVERY

=====

114. Does s/he have an individual habilitation plan (IHP) or individual program plan (IPP) or (IEP) or (IDP) or plan of care?

- Yes, and it is under one year old
 Yes, but over 1 year old
 No written plan (SKIP TO QUESTION #127)

115. When was the last team meeting for the individual habilitation plan?

- M (GET THIS FROM IHP OR IPP)
M
Y date unknown
Y

=====

Number of goals (0-9)	For the following, what is the total number of goals in IHP/IPP for him/her:
<input type="checkbox"/> _____	116. In work skill areas (get, keep, perform job).
<input type="checkbox"/> _____	117. In recreational activities planning and use (i.e. games, hobbies, sports, arts, and crafts).
<input type="checkbox"/> _____	118. In use of self-care skills.
<input type="checkbox"/> _____	119. In use of domestic skills (including food preparation).
<input type="checkbox"/> _____	120. In use of community living skills? Use of money; telling time; learning name and address or using ID; basic safety skills; handling emergencies; how to obtain generic community services; travel; health care; use of telephone; decision making about daily living activities.
<input type="checkbox"/> _____	121. In sensory, motor skills? (ambulation; arm use and hand-eye coordination; sensory awareness).

=====

Number of goals (0-9)	For the following, what is the total number of goals in IHP/IPP for him/her:	
[]	122. In communication skills (vision, hearing, use of verbal language; use of nonverbal communication; use of written language; use of numbers and numeric concepts).	
[]	123. In reduction of challenging behavior? (See Questions 55-70).	
[]	124. In development of social skills?	
[]	125. In citizenship instruction?	
[]	126. In other goal directed activities?	
Number of Hours per Month	For the following, what is the total number of hours spent per MONTH for him/her by:	Prescribed but not received. Why not received?
[] [] []	127. Habilitation Training Specialist: Paraprofessional services spent on habilitation objectives identified in the IHP.	Reason: _____ []
[] []	128. Homemaker Services by certified homemaker.	Reason: _____ []
[] [] []	129. Occupational Therapy Services:	Reason: _____ []
[] [] []	130. Physical Therapy Services:	Reason: _____ []
[] [] []	131. Psychotherapy Services by licensed psychologist or psychological assistant:	Reason: _____ []
[] [] []	132. Psychiatric Services:	Reason: _____ []
[] [] []	133. Speech and Communication Therapy:	Reason: _____ []
[] [] []	134. Audiology Services:	Reason: _____ []

Number of Hours per Month	For the following, what is the total number of hours spent per MONTH for him/her by:	Prescribed but not received. Why not received?
[] [] []	135. Nursing Services by RN or LPN:	Reason: _____ []
[] [] []	136. Pre-Vocational Services: (non paid employment)	Reason: _____ []
[] [] []	138. Sheltered Employment/ Sheltered Workshop (provided by workshop but receive less than minimum wage).	Reason: _____ []
[] [] []	139. Supported Employment: (Paid & supervised by job coach, mobile work crews, job enclave)	Reason: _____ []
[] [] []	140. Competitive Employment:	Reason: _____ []
[] [] []	141. Public School (regular classes):	Reason: _____ []
[] [] []	142. Public School (special classes):	Reason: _____ []
[] [] []	143. Special School:	Reason: _____ []
[] [] []	144. Private School: (Paid for by school system)	Reason: _____ []
[] [] []	145. Private School: (other than above)	Reason: _____ []
[] [] []	146. Formal infant stimulation or preschool development training program outside of home:	Reason: _____ []
[] [] []	147. Homebound Education:	Reason: _____ []

Number of Hours per Month	For the following, what is the total number of hours spent per MONTH for him/her by:	Prescribed but not received. Why not received?
[] [] []	148. Respite Services:	Reason: _____
[] [] []	149. Any other services prescribed:	Reason: _____
[] [] []	150. Any other services prescribed:	Reason: _____

PART 11: CONSUMER INTERVIEW (COPYRIGHT CFA 1986)

These questions should be answered in private by the client. Attempt to interview all clients, even if there is doubt about their ability to respond.

Family _____ Guardian _____ Advocate _____ Favorite thing _____

Hi! My name is _____. Are you _____ (name) _____. How are you today? Can I ask you a few questions? Is your favorite (food/toy/hobby) _____? I'm going to ask you some silly questions now. Just tell me yes or no, even though they are silly, OK? Do cats fly? Do dogs bark? Which person is happy? _____ Which person is standing? _____ Now I've got some questions that aren't so silly. Everything you tell me will be kept private.

- [] Willing.
- [] Not willing (SKIP TO #25)
- [] Unable (SKIP TO #25)
- [] Not here (SKIP TO #25)
- [] Other (SKIP TO #25) _____

[]
[]

Yes (nice, like, good, always, frequently)
 | Unsure (sometimes, occasionally)
 | No (mean, bad, never, don't like)
 | Did not answer

Interviewer: Did you use assistive communication devices? Yes No

1. Do you like living here or not like living here?
2. Do you like the people who work with you or not like them?
3. Do you think the food here is good or bad?
4. Do you have enough clothes to wear or not enough?
5. Do you have any really good friends?
- 5A. Do you have more than one really good friend?
6. Are the people who work with you mean or nice?
7. Do you like the things you do in the day or not like them?
8. Do you work and earn money?
9. Please let me check - do you think the food here is bad or good?

OBSERVATIONS

26. Is s/he dressed appropriately?
 Yes Explain: _____
 No _____
27. Is s/he clean and groomed appropriately?
 Yes Explain: _____
 No _____
28. Is s/he free of visible bruises, rashes, sores, cuts, or other signs of ill health?
 Yes Explain: _____
 No _____

PART III: PHYSICAL QUALITY
 ADAPTED FROM SELTZER, 1982, MEAP RATING SCALE
 MODIFIED BY TEMPLE UNIVERSITY, 1983

COMPLETE THIS SCALE FOR THE SMALLEST LIVING UNIT FOR EACH FACILITY.
 SECTION 1: EXTERNAL

1. As a neighborhood, how does the area around this site look?
 Very pleasant and attractive
 Mildly pleasant and attractive
 Ordinary, perhaps even slightly unattractive
 Unattractive, slum-like
2. How attractive are the site grounds?
 Very attractive - landscaping or very attractive natural growth; well maintained; no litter or weeds, clean paths, neatly trimmed
 Somewhat attractive - shows signs of care and frequent maintenance
 Ordinary - somewhat attractive, but poorly maintained or ordinary looking; little landscaping, some weeds or litter
 Unattractive - no grounds, sidewalks only; show little or no maintenance
3. How attractive is the building in which the client lives?
 Very attractive - unique and attractive design, excellent maintenance
 Somewhat attractive - may show some deterioration on close inspection, or design is adequate but not unusually attractive
 Ordinary - buildings are somewhat attractive but poorly maintained, or are not notable in either design or maintenance
 Unattractive - buildings are deteriorated or unattractive

SECTION 2: ROOM BY ROOM (Rate each room)
 (DO NOT RATE IF LIVES WITH FAMILY AND RATING QUESTIONS ARE INTRUSIVE.)

LIVING ROOM
 DINING ROOM
 BEDROOMS
 KITCHEN
 BATHROOM

4. Orderliness/Clutter

- No such room
 Neat - living spaces are very orderly; there seems to be a "place for everything and everything is in its place"
 Some disarray - looks "lived in"; some furniture moved around, magazines lying around, etc.
 Cluttered - living spaces are somewhat disorganized and messy; some objects lying about; area seems crowded
 Very cluttered - furniture and other objects are in disarray; floor



5. Cleanliness of Walls and Floors (or Rugs)

No such room

Very Clean - both walls and floors are kept very clean, spotless; floors are polished

Clean - both walls and floors are cleaned regularly; some dust in corners, fingerprints on walls

Somewhat dirty - either walls or floors needed cleaning; considerable dust, fingerprints or stains

Very dirty - both walls and floors need a major cleaning; surfaces stained, scuff marks, surfaces dirty to touch

6. Condition of furniture

No such room

Excellent condition - like new; well-kept, spotless, highly polished or without stains

Good condition - not new, but in good condition; slightly worn, small scratches, dusty, a few stains, some dirt in creases

Fair condition - older, but still structurally sound; moderately clean

Deteriorated - old and in poor repair; some tears, stains, dirt or dust; may be structurally unsound or dangerous

7. Window areas

No such room

Many windows - living space has large window areas which give an open feeling

Adequate windows - windows are sufficient to allow good light; there is no closed feeling

Few windows - room tends to be dark, even on sunny days; there is a feeling of being closed in

No windows - there are no windows, or the windows are non-functional

8. Odors

No such room

Fresh - living spaces have pleasantly fresh odor

No odors - nothing noticeable about the air; "normal"

Slightly objectionable - air is slightly tainted in some way; stale, musty, medicinal

Distinctly objectionable - unpleasant odors are apparent

9. Variation in design of residents' rooms (apts.).

- Distinct variation - as if effort was made to vary style and decor from room to room
- Moderate variation - rooms (apartments) are distinct, but there is a general decor throughout
- Nearly identical - some variation in size, shape or furniture arrangement; variation is not noticeable unless looked for
- Identical - no variation except for decorative detail such as paint or rug color

10. Personalization of residents' rooms (apts.).

- Much personalization - most of the furnishings and objects in the rooms belong to the individual; time and energy have been spent in personalization
- Some personalization - residents have added personal objects such as rugs, pictures, chairs, favorite objects
- Little personalization - some family pictures or personal articles, but room does not seem to "belong to the individual."
- No personalization is evident

11. Overall physical pleasantness of the facility?

- Quite pleasant
- Pleasant
- Somewhat unpleasant
- Distinctly unpleasant

=====

Poor	Fair	Excellent
- ----- ----- -----		

12. Overall, how would you rate this site?

13. How would you rate the quality of food in the refrigerator and cupboards?

14. How would you rate the quantity of food in the refrigerator and cupboards?

Cold, impersonal	Neutral	Warm, personal
- ----- ----- -----		

15. How do you perceive staff-consumer/
consumer-staff interactions?

Unfriendly	Tolerant	Friendly
- ----- ----- -----		

16. How do you perceive consumer-consumer interactions?

Pessimistic	Neutral	Enthusiastic
- ----- ----- -----		

17. What are staff's expectations of consumers regarding growth?

Not at all	In minor ways	As much as I've ever seen
- ----- ----- -----		

18. To what extent is the setting handicapped accessible?

No not happy	Neutral	Yes very happy
- ----- ----- -----		

19. Are clients happy here?

VITA

Michael Wayne Dunsmore

Candidate for the degree of

Master of Science

Thesis: RESIDENTIAL SETTING, ADAPTIVE BEHAVIOR, AND
SATISFACTION AMONG OLDER PERSONS WITH DEVELOPMENTAL
DISABILITIES

Major Field: Sociology

Biographical:

Personal Data: Born in Stillwater, Oklahoma September
4, 1968, the son of Mr. and Mrs. Leon Dunsmore.

Education: Received the Bachelor of Science degree in
Sociology from Oklahoma State University in May,
1990. Completed requirements for Master of
Science degree in Sociology from Oklahoma State
University in July, 1993.

Professional Experience: Research Assistantship,
Developmental Disabilities Quality Assurance
Project, Department of Sociology, Oklahoma State
University, August 1991 - December, 1992.