

Mixed Methods Research of Adult Family Care Home Residents and Informal Caregivers

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This article describes a mixed methods approach used to explore the experiences of adult family care home (AFCH) residents and informal caregivers (IC). A rationale is presented for using a mixed methods approach employing the sequential exploratory design with this poorly researched population. The unique challenges attendant to the sampling strategy with this population, and an iterative approach of data collection and data analysis are discussed. A summary of the data integration process and outcome is presented. Key Words: Adult Family Care Home, Sequential Explanatory, Sequential Exploratory, Mixed Methods Paradigm, Exclusion Criteria, Inclusion Criteria, and Grounded Theory

Robbins (2001), a noted ethnographer, argued that “rigorous qualitative research can provide the ‘why’ behind statistically significant differences” (p. 27). Noted quantitative researchers, Crawley et al., (2000) stated that “qualitative research is needed to clarify and improve the knowledge of health care professionals of the demographic, socioeconomic, psychosocial, and medical factors that influence decisions regarding end-of-life care” (pp. 2522-2523).

In gerontology, although quantitative methods have been used most widely, numerous studies provide a rationale for the use of qualitative research in gerontology (Easton, 1999; Ekblad, Marttila, & Emilson, 2000; La Veist, 1996; Mays & Pope, 2000; Nuwaha, Faxelid, Neema, Erikson, & Hojer, 2000; Sofaer, 1999; Williams, 1994; Yin, 1999). Keith (1994) suggested that aging research, with its emphasis on meaning and perspective of research subjects, most clearly calls for qualitative methods. However, mixed qualitative and quantitative research methodologies can provide the best of their respective traditions, the naturalistic and positivist paradigms.

Mixing quantitative and qualitative methods can enhance a study that is suitable to both paradigms (Tashakkori & Teddlie, 1998). Johnson and Onwuegbuzie (2004) aptly state, “A tenet of mixed methods research is that researchers should mindfully create designs that effectively answer their research questions” (p. 20). In this research, a qualitative method was the central approach used to explore meanings associated with living in, or supporting someone who lives in, an adult family care home (AFCH). A quantitative approach was also employed to elaborate on these meanings and to assess the effects of living in an AFCH on both residents and their relatives (or informal caregivers).

Mixed Qualitative and Quantitative Methods

Research questions or hypotheses have historically dictated whether a qualitative or quantitative method would be best to answer the central questions of a study. For example, according to Morse and Field (1995), sound research requires two important components; using the most appropriate method at the appropriate time and applying the appropriate method, according to the type of research questions that are being explored.

Qualitative research has been increasingly used as a methodology due largely to its ability to generate rich descriptions of complex phenomena (Chenail & Maione, 1997; Crabtree & Miller, 1992; Golander, 1992; Kaufman, 1994). Qualitative research also helps to illuminate the experience and interpretation of events by research participants (Gubrium & Sankar, 1994). Sofaer (1999) argued that qualitative inquiry allows for “initial explorations to develop theories and to generate and even test hypotheses while moving towards explanations” (p. 1101). As Denzin and Lincoln (1994) put it, qualitative researchers “seek answers to questions that stress how social experience is created and given meaning. In contrast, the quantitative approach emphasizes the measurement and analysis of causal relationships between variables, not processes” (p. 4).

In recent years mixed method approaches have arisen, due in part to recognizing some inherent limitations and strengths of both qualitative and quantitative approaches (Teddlie & Tashakkori, 2003). Quantitative research has been regarded by some as the standard of “quality” research (Ayer, 1959; Maxwell & Delaney, 2004; Schrag, 1992). Quantitative purists have argued that “social observations should be treated as entities in much the same way that physical sciences treat physical phenomenon” (Johnson & Onwuegbuzie, 2004, p. 14). A number of limitations of the quantitative paradigm have been acknowledged, primarily centering on the awareness that the researcher cannot be assumed to be separate from the object of observation (Creswell, Plano-Clark, Gutman, & Hanson, 2003; Miles & Huberman, 1994). That said, the quantitative paradigm has several strengths: “testing and validating already constructed theories; generalize a research finding when it has been replicated on many different populations and subpopulations; research results are relatively independent of the researcher” (Johnson & Onwuegbuzie, p. 19). Qualitative research is limited in its ability to generate predictive models or to create findings that generalize to larger populations, though it benefits from its ability to bring forward meaning and accounts of lived experience that typically do not arise from quantitative research. The unique strengths of both qualitative and quantitative paradigms can be effectively combined to minimize their respective limitations while accentuating their strengths in a mixed method design.

Mixed Method Paradigm

The primary objective of mixed methods is to obtain a more complete understanding of human behavior and experience by using more than one method within a research study (Morse, 1991). Although mixed methods research is being employed across several disciplines, it is still evolving conceptually as a research method (Johnson & Onwuegbuzie, 2004).

Creswell et al. (2003) define a “beginning point” of mixed methods study:

A *mixed methods study* involves the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research. (p. 212)

Johnson and Onwuegbuzie (2004) suggest that the definition of mixed methods study will continue to evolve as the philosophical underpinnings of this method emerge.

Philosophical Underpinnings

The mixed methods paradigm has risen, in part, from the distinctions drawn between the “*positivist/empiricist* approach and the *constructivist/phenomenological* orientation” (Tashakkori & Teddlie, 1998, p. 3). The positivist view is the basis for quantitative methods, and the constructivist philosophy underlies qualitative methods (Johnson & Onwuegbuzie, 2004). While these philosophical distinctions have, in the past, led researchers to view the two paradigms as fundamentally incompatible, other researchers have taken a more moderate stance and argued that quantitative and qualitative methods are in fact compatible (Howe, 1988; Reichardt & Rallis, 1994). This paradigm shift has been dubbed “pragmatism” (Johnson & Onwuegbuzie, 2004).

Tashakkori and Teddlie (1998) identified several key points regarding pragmatism and mixed methods:

- (a) Pragmatism supports the use of both qualitative and quantitative research methods in the same research study and within multistage research programs. Pragmatism rejects the either/or dichotomy.
- (b) Pragmatist researchers consider the research question to be more important than either the method they use or the paradigm that underlies the method. The research question predominates.
- (c) Decisions about the use of mixed methods, qualitative methods, or quantitative methods depend on the research question and the stage of the research process.
- (d) Pragmatism avoids the use of metaphysical concepts such as “truth” and “reality” that have caused much debate and at times divisions. (pp. 22-30)

In regard to pragmatism, Johnson and Onwuegbuzie (2004) state that “the bottom line is that research approaches should be mixed in ways that offer the best opportunities for answering important research questions” (p. 16). Similarly, Johnson and Turner (2003) argue that a fundamental principle of mixed method research is that “methods should be mixed in a way that has complementary strengths and nonoverlapping weaknesses” (p. 297). This principle heightens a researcher’s awareness of the inherent limitations of both qualitative and quantitative methods.

The use of mixed methods serves at least three objectives: “(a) to obtain convergence or corroboration of findings, (b) to eliminate or minimize key plausible

alternative explanations for conclusions drawn from the research data, and (c) to elucidate the divergent aspects of a phenomenon” (Johnson & Onwuegbuzie, 2004, p. 299). As such, utilizing mixed methods provides the researcher with multiple perspectives from which to analyze a topic, and represents an effective method for triangulating data (Creswell, 1994; Creswell et al., 2003; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2003).

In this study a qualitative design was used to obtain residents’ views of everyday life in an AFCH and the views of informal caregivers (IC). In addition, quantitative methods provided a means of assessing the emotional states of AFCH residents and ICs using previously validated instruments (Johnson & Onwuegbuzie, 2004) in order to elaborate on the qualitative data.

Mixed Method Designs

Morse (1991), a nursing researcher, created a notation system that has gained broad acceptance by researchers conducting mixed method studies. As shown in Table 1, Morse’s system presents four kinds of mixed method approaches. A plus (+) sign, indicates simultaneous collection of quantitative and qualitative data. An arrow (→) is used to denote that one form of data collection follows another. Uppercase letters (e.g., QUAN, QUAL) indicate major emphasis on the form of data collection, and lowercase letters (e.g., quan, qual) suggest less emphasis. Additionally, Morse describes two types of designs, simultaneous and sequential. Simultaneous designs are implemented at the same time. In the sequential design, one form of data, either the qualitative or quantitative, is collected before the other.

Table 1. *Mixed Method Approaches*¹

<u>Approach</u>	<u>Type</u>
QUAL + quan	Simultaneous
QUAL → quan	Sequential
QUAN + qual	Simultaneous
QUAN → qual	Sequential

Creswell et al. (2003) identified six different types of mixed method designs that a researcher might employ. The designs are Sequential Explanatory; Sequential Exploratory; Sequential Transformative; Concurrent Triangulation; Concurrent Nested, and Concurrent Transformative. There are four criteria—implementation, priority, integration, and theoretical perspective—that can be used to assist the researcher in using these designs effectively. Relevant to the study presented here, overviews of two of the designs, Sequential Explanatory Design and Sequential Exploratory Design, are illustrated in Table 2 and Table 3. The major characteristics of each design are presented as well as the strengths and weaknesses of each.

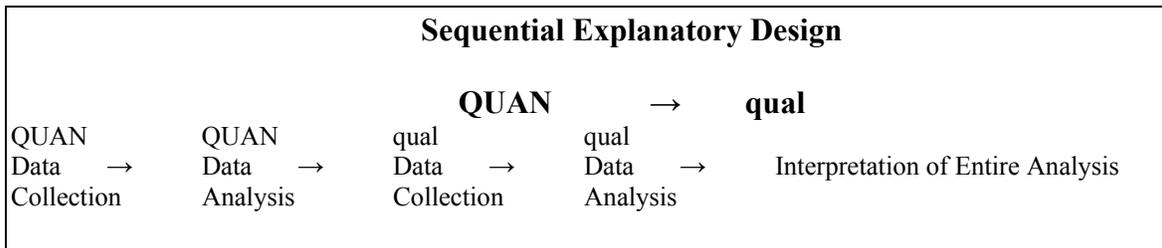
¹ Types of Designs Using Morse’s (1991) Notation System

Sequential Explanatory Design

According to Creswell et al. (2003), the sequential explanatory design is “characterized by the collection and analysis of quantitative data followed by the collection and analysis of qualitative data” (p. 223). The steps in this design are illustrated in Table 2. In this design, priority is generally given to the quantitative data, and then the two methods are integrated during the interpretation phase of the study.

The objective of the sequential explanatory design is “typically to use qualitative results to assist in explaining and interpreting the findings of a primarily quantitative study” (Creswell et al., 2003, p. 227). Morse (1991) stated that this method can be particularly useful when unexpected results arise in a quantitative study. The qualitative data are useful in examining unexpected results in greater detail. The simplicity of this design is one of its main strengths (Creswell et al.).

Table 2. *Sequential Explanatory Design*²



Sequential Exploratory Design

The sequential exploratory design has several features that are similar to the sequential explanatory design. The sequential exploratory design is also conducted in two phases. However, this design is characterized by an initial phase of qualitative data collection and analysis followed by quantitative data collection and analysis (Creswell et al., 2003). Priority is given to the qualitative aspect of the study, and the findings of the two phases are then integrated in the interpretation phase.

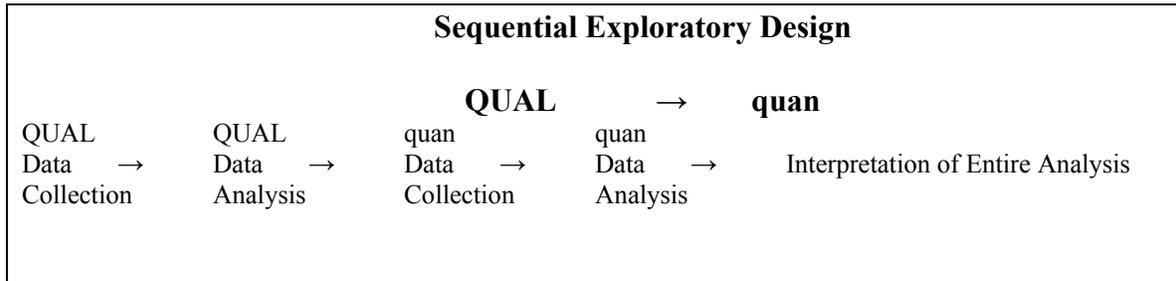
Creswell et al. (2003), state that “the purpose of this design is to use quantitative data and results to assist in the interpretation of qualitative findings” (p. 227). In contrast to the “sequential exploratory design, which is better suited to explaining and interpreting relationships, the primary focus of this design is to explore a phenomenon” (p. 227). The sequential exploratory design is appropriate to use when testing elements of an emergent theory, and it can also be used to generalize qualitative findings to different populations (Creswell et al.; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 1998).

The Sequential Exploratory Design was used in this study. The exploratory emphasis of this design was a good fit in this study because of its congruency with the qualitative aspect of this study. The goal of capturing the lived experiences of AFCH residents and informal caregivers was tremendously enhanced as a consequence of thickening the qualitative reports with the quantitative data through this design.

² Creswell et al. (2003) Major Designs

Additionally, the exploratory design allowed for a gradual and recursive emergence of overarching theories about the lived experiences of residents and informal caregivers. Hence, the decision to make the qualitative elements of the mixed methods design the major emphasis of this study proved to be a sound decision.

Table 3. *Sequential Exploratory Design*³



Methodology of the Study

Qualitative Methodology

The qualitative part of this research was guided by the grounded theory method, developed by Glaser and Strauss (1967) to generate explanatory theories of human behavior. According to Strauss and Corbin (1990),

Grounded theory is one that is inductively derived from the study of the phenomenon it represents. That is, it is discovered and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore the data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory and then prove it. Rather, one begins with an area of study and what is relevant to that area allowed to emerge. (p. 23)

Thus, grounded theory provides a research methodology that is creative, dynamic, and flexible yet rigorous within a set of procedures. It is especially useful for developing theories where little is known about the phenomenon. Hence, it was appropriate for this study because there has been little exploration of AFCHs (Spencer, Hersch, Aldridge, Anderson, & Ulbrich, 2001). The methods employed within grounded theory included interviews, participant observation, and document analysis which contributed to the development of theories about the experiences of AFCH residents and informal caregivers (Strauss & Corbin, 1990).

³ Creswell et al. (2003) Major Designs

Quantitative Methodology

Measurement is central to quantitative research because it provides the essential connection between empirical observation and mathematical expression of quantitative relationships (Tashakkori & Teddlie, 2003). However, Williams (1992) aptly stated, “Just because a study has used statistics is no guarantee of its worth. In fact, statistics can be misused either intentionally or unwittingly, and it is not difficult to locate quantitative studies where statistics were not really needed at all” (p. 3). Quantitative research methods are no better or worse than its qualitative counterparts (Creswell, 1994; Tashakkori & Teddlie, 2003). However, when used appropriately quantitative techniques can be very valuable (Williams, 1992). In this study, standardized quantitative tests were used to obtain measurements in particular categories to obtain relevant descriptions of each participant’s perspective and experiences.

Greene, Caracelli, and Graham (1989) identified several general objectives of mixed methods studies: “(a) triangulation (i.e., seeking convergence and corroboration of findings from different methods that study the same phenomenon); (b) complementarity (i.e., seeking elaboration, illustration, enhancement, and clarification of the results from one method with results from the other method)” (as cited in Onwuegbuzie & Leech, 2006, p. 480). In this study the purpose of using quantitative data was to thicken (i.e., augment, enrich, and enhance) the findings of the qualitative data. Since the quantitative data added depth to more fully understand the experiences of AFCH residents and ICs than would be possible using either qualitative or quantitative methods alone, quantitative techniques were a valuable complement in this study.

Sampling Strategies

Rationale

Kemper and Teddlie (2000) provide guidelines in choosing a sample. First, the sampling technique should stem logically from the conceptual framework and the research questions. Second, the sample should generate sufficient data on the phenomena being studied. Third, the sample should reasonably lead to the possibility of making clear inferences or credible explanations from the data.

Sampling techniques can be divided into two types: probability sampling and purposive sampling. Quantitative studies generally use “larger samples selected through probability techniques, while qualitative studies typically use smaller samples selected through purposive techniques” (Kemper & Teddlie, 2000, p. 277). These sampling techniques are often blended in mixed method studies (Creswell et al., 2003; Tashakkori & Teddlie, 1998), and this is the approach used in this study.

In this study the probability sampling technique, *simple random sampling*, was employed in selecting participants from a pool of forty (40) AFCHs in Broward County, Florida. In this technique each person in a clearly defined population had an equal chance of being included in the sample (Kemper & Teddlie, 2000). The advantage of the *simple random sampling* method is that the research data can be generalized to other populations (Tashakkori & Teddlie, 1998).

The sample size for this particular study ($N=14$), to the quantitative purist, may be considered insufficient for generalizability, but proponents of mixed methods research argue that adding a quantitative component that surveys a randomly selected sample is likely to lead to generalizability (Johnson & Christensen, 2004; Johnson & Onwuegbuzie, 2004; Johnson & Turner, 2003). Onwuegbuzie and Collins (2007) argue:

Virtually all researchers (whether qualitative, quantitative, or mixed methods researchers) make some form of generalization when interpreting data. Typically, they make statistical generalizations, analytical generalizations, and/or generalizations that involve case-to-case transfer ... Specifically, because all findings are context-bound; (a) any interpretations stemming from these findings should be made only after being appropriately aware of the context under which these results were constructed, (b) generalizations of any interpretations to another context should be made only after being adequately cognizant of the new context and how this new context differs from the context from which the interpretations were generated; and (c) generalizations should occur only after the researcher has reflected carefully on the consequences that such a generalization may have. (pp. 307-308)

The objective of using quantitative data in this inquiry was to gain additional insights about research participants but not for the purpose of generalization to the larger population of AFCH residents. The quantitative data were, however, expected to be useful in assessing the emotional state of AFCH residents and informal caregivers. Once participants were identified, qualitative techniques such as semi-structured questions and direct observation were implemented. In the qualitative phase of this study, the purposive sampling technique was used. This technique “involves taking opportunities as they come along and following up on leads as they arise within fieldwork” (Kemper, Stringfield, & Teddlie, 2003, p. 283).

Participants

The participant residents were older adults of diverse backgrounds with a variety of medical problems. Adult family care homes in multi-ethnic neighborhoods were contacted to insure varied socio-economic, gender, age, and ethnic participation. The AFCH residents required assistance with at least three activities of daily living (ADL). The ICs of these residents lived in the state of Florida.

Adult family care home residents lived in the primary residence of an AFCH provider and the provider’s family members. The AFCHs were for-profit entities. Those with two or fewer residents are permitted by the State of Florida to provide care for the frail elderly without a license, but unlicensed AFCH providers had to comply with the state laws governing the operation of AFCHs. Providers with three to five residents were licensed by the State of Florida. Local governments had additional requirements such as an occupational license.

The gatekeepers in AFCHs were the AFCH providers. As such they determined who gained access to both residents and ICs. Contact information about AFCH providers

was obtained from the State of Florida's website. My professional experience in hospice care resulted in contact with several AFCH providers. The relationship that I developed with those providers was valuable in gaining access to residents and ICs. The initial contact with the providers was by telephone.

Once access was granted to enter the setting, AFCH providers, residents, and ICs were provided written requests for participation in this study.

Inclusion or Exclusion Criteria

In the sampling process some individuals were not appropriate candidates for this particular study. Inclusion or exclusion of individuals in the target population was based upon the ability of the potential participant to meaningfully participate in the study. Table 4 delineates the inclusion or exclusion criteria.

Table 4. *Inclusion or Exclusion Criteria*

Inclusion Criteria	
<i>Item</i>	<i>Description</i>
General Cognition	Cognitively normal, based on an absence of significant impairment in cognitive functions or activities of daily living.
Age of AFCH Resident	Age 65 plus.
Informal Caregiver	Informal caregiver is biologically related to resident or designated as the caregiver of the AFCH resident.
Visual and Auditory Acuity	Adequate visual or auditory ability to complete assessment and participate in interviews.
General Health	Good general health with no additional diseases expected to interfere with the study.
Exclusion Criteria	
<i>Item</i>	<i>Description</i>
Memory Complaints	Persistent memory complaints and memory difficulties that are verified by an informal caregiver and or adult family care home (AFCH) provider.
Significant Neurological Disease	Any significant neurological disease such as Alzheimer's, Stroke victims, or history of significant head trauma etc.
Psychiatric Disorders with psychotic features	History of schizophrenia with psychotic features, agitation, or behavioral problems within the last 3 months which could lead to difficulty complying with the protocol.
Significant Medical Illness	Any significant illness or unstable medical condition which could lead to difficulty complying with the protocol.

The sample population consisted of fourteen (14) individuals, residents, and informal caregivers (ICs), drawn from forty (40) adult family care homes (AFCHs) in Broward County, Florida. The criteria for selecting participants from the sample pool were as follows: (a) Each participant who met criteria was assigned a number; (b) the number was written on a slip of paper; (c) the slip of paper was placed into a box and mixed; (d) then the numbers were drawn from the box.

Residents who had the capacity to give consent were asked for consent to participate in the study. When it was appropriate, ICs of residents were asked to give consent. Once signed consents were obtained, faced-to-face interviews were scheduled. A subsequent interview was scheduled to ensure the accuracy of the data.

Sites

There are slightly over forty (40) AFCHs in Broward County, Florida. The criteria for site selection were as follows: an AFCH licensed by the State of Florida, a well-established AFCH, that is, no major infraction had been issued by the Agency for Health Care Administration, and the AFCH had at least two residents.

Interviews were conducted in the AFCH where each resident lived. Interviews of ICs were conducted in a variety of settings. All testing materials, such as pens and tests, were provided by the researcher. Each resident, IC, and AFCH provider were sent an introductory letter, explaining the nature of the study during and after the study.

Ethics

The researcher followed ethical standards to ensure that the research did not harm participants or abuse the privilege of access to participants or ICs (Gubrium & Sankar, 1994; Kayser-Jones & Koenig, 1994; Lyman, 1994; Reaves, 1992). The research was approved by the Nova Southeastern University Institutional Review Board on June 18, 2008. Elements included in the protocol were assessment of the risk to participants, informed consent, and the right to privacy or confidentiality (Kayser-Jones & Koenig).

In order to protect the informants' rights and to provide participants with a description of these procedures: (a) the research objectives were explained verbally and in writing, (b) each informant was informed of all data collection devices and activities, (c) written permission to proceed with the study as described was received from each participant, (d) test results, verbatim transcriptions, written interpretations, and reports were stored in a locked cabinet and available to each informant upon request, (e) the informants' rights and preferences were the researcher's chief consideration, and (f) each informant was assigned a code and all other identifiable data was changed to protect the identity of each participant.

Qualitative Data Collection Strategies

In the qualitative paradigm, data collection is not typically separate from data evaluation; data collection and theory development in qualitative research often occur simultaneously. In Lincoln and Guba's (1985) view, the naturalistic method which maintains that "truth" is context-bound, functions best when theory emerges from data

that reflect the participants' perspective. In this part of the study, data collection and theory development evolved simultaneously. As theoretical constructs emerged during this process, conceptual categories were recorded and refined during the course of the study.

Data collection occurred in stages. Two semi-structured interviews were conducted with each resident at the AFCH where the resident lived. The interview involved techniques such as participant-observation, open-ended questions, and collaboration between the researcher and informants (Kaufman, 1994; Rowles & Reinharz, 1988). Interviews were recorded using a tape recorder, and detailed field notes were taken. The length of interviews varied depending on each resident's physical ability and desire.

In the first interview, the areas of inquiry included the views of each AFCH resident and IC. The central question of this study was "What constitutes a meaningful life for an AFCH resident?" Several related questions were asked. The interviews of residents and ICs were conducted separately. Time was reserved at the end of the first interview to administer one quantitative measure. The second interview provided an opportunity for participants to review the major themes in the first interview.

Qualitative Data Analysis Strategies

Qualitative data collection and analysis are distinct but related processes. According to Marshall and Rossman (1995), the two procedures "go hand in hand to promote the emergence of substantive theory grounded in empirical data" (p. 112). Participant interviews were transcribed verbatim as interviews were completed. In Patton's (1990) view, "The first decision to be made in analyzing interviews is whether to begin with case analysis or cross case analysis" (p. 376). The process began with case analysis of transcribed audio taped interviews, leading to intimate familiarity with the words, descriptions, meanings, and personal narrative of participants (Miles & Huberman, 1994).

Following individual analysis of the cases, cross-case analysis was conducted by developing descriptive meta-matrices of the cases and using the constant comparison method (Miles & Huberman, 1994). The constant comparison method allowed categories to emerge directly from the data by coding, categorizing, and comparing bits of data within individual cases as well as among different cases (Glaser & Strauss, 1967). Each participant's transcript was coded by gender, marital status, race, ethnicity, education, age, religion, and employment.

Through the process of sifting the data, a series of themes and patterns emerged embodying both personal and social aspects of each individual's experience (Gubrium & Sankar, 1994). Grouping the data required organizing it by developing a set of categories so that each category expressed a criterion (or a set of criteria) for distinguishing some observation from others (Dey, 1993).

Since the principal researcher is primarily a visual learner, a method that accentuated his strength was employed. First, similar bits of data and themes were highlighted by color-coding each data bit. Second, preliminary rules of inclusion were written, and preliminary category names were established. Category refinement was an ongoing process. Some of the tentative categories that appeared similar were combined;

sub-categories were created and the rules of inclusion were revised. Third, each color-coded data bit was read several times, paying attention to the various themes. Each category was then coded with its own symbol and corresponding descriptive phrase.

Quantitative Data Collection Strategy

Geriatric Depression Scale. There are several quantitative data collection techniques, and among them are questionnaires, interviews, focus groups, tests, and observation (Tashakkori & Teddlie, 1998). According to Johnson and Turner (2003), “Tests are commonly used in quantitative research to measure attitudes, personality, self-perceptions, and performance of research participants” (p. 310).

The AFCH residents in this study were administered the Geriatric Depression Scale (GDS). The GDS has been used successfully with older adults who are physically healthy or ill (Corcoran & Fischer, 2000). Geriatric Depression Scale was used to measure depression in residents. This test was useful in this study for several reasons. First, it has excellent reliability; its internal consistency is 0.94. Second, “The GDS also has good known-groups validity in distinguishing significantly among respondents classified as normal, mildly depressed, and severely depressed” (Corcoran & Fischer, p. 315). Third, the GDS is effective and easy to administer. It is a 30-item instrument written in simple language and can be administered in oral or written format (Corcoran & Fischer). Assessing for depression was important because depression level may have influenced how some AFCH residents viewed themselves and described their experiences in the AFCH. The GDS was administered during the initial interview.

Zarit Burden Interview. The IC participants in this study were administered the Zarit Burden Interview (Zarit, 1990). Karlikaya, Yukse, Varlibas, and Tireli (2005) stated, “Different questionnaires have been developed to quantify the largely subjective domain of caregiver burden, but the Zarit Caregiver Burden Scale is one of the most widely used scales” (p. 2). This test was particularly valuable in this study because it is designed to measure the physical, emotional, and financial strain of being a caregiver. Additionally, the ZBI measures the strain experienced by caregivers of physically ill and functionally impaired older adults. The internal reliability for the ZBI has been estimated at 0.91. The test-retest reliability is reported at 0.71. Validity has been estimated by correlating the total score with a single global rating of burden ($r = .71$; Zarit, 1990).

The ZBI can be completed by caregivers themselves or as part of an interview. In this study the ZBI was administered by asking caregivers to complete the questionnaire. Caregivers were asked to respond to 22 questions about the impact of the patient’s disabilities on their on their life (Zarit, 1990).

The GDS and ZBI substantially augmented the descriptions of the qualitative data. Using these two instruments revealed important characteristics that are common among research participants. These instruments made it possible to thicken understandings of the ways the AFCH residents found meaning living in an AFCH. The tests yielded alternative ways of analyzing the qualitative data and understanding the experiences of AFCH residents and ICs.

Quantitative Data Analysis Strategy

Onwuegbuzie and Teddlie (2003), state that mixed methods data analysis includes the use of quantitative (and qualitative) analytical techniques, either concurrently or sequentially, followed by data interpretation in either a parallel, an integrated, or in iterative manner.

As mentioned above, the sequential qualitative-quantitative data analysis design was employed in this study. According to Tashakkori and Teddlie (1998),

One of the main data analytic strategies in mixed methods is to convert the data that are collected in one of the traditions into the other tradition such that alternative techniques can be used with analyzing the same data. Two aspects of this type of transformation are (a) converting qualitative information into numerical codes that can be statistically analyze and (b) converting quantitative data into narratives that can be analyzed qualitatively. (pp. 125-126)

In this study the initial qualitative data analysis was followed by quantitative data analysis.

The quantitative data analysis process consisted of the following stages: data reduction (Stage 1), data display (Stage 2), and data integration (Stage 3; Onwuegbuzie & Teddlie, 2003). Stage 1, data reduction, involved reduction of the data gathered in the collection phase. For quantitative data, data reduction includes computation of descriptive statistics (e.g., measures of central tendency measures of dispersion and variability). Stage 2, data display, involved reducing the information into appropriate and simplified tables and graphs which are the two most common ways of displaying quantitative data. Stage 3, data integration, was the last link in the data analysis process. In this stage, all data were integrated into a coherent whole or two separate sets of coherent wholes (Onwuegbuzie & Teddlie). Upon completion of the three stages, the data were interpreted and conclusions were presented.

Integration of Qualitative and Quantitative Methods

According to Creswell et al. (2003), integration can be defined as “the combination of quantitative and qualitative research within a given a stage of inquiry” (p 220). Integration is a fluid process that might occur

... within the research questions (e.g., both quantitative and qualitative questions are presented), within data collection (e.g., open-ended questions on a structured instrument), within data analysis (e.g., transforming qualitative themes into quantitative items or scales), or in interpretation (e.g., examining the quantitative and qualitative results for convergence of findings). (Creswell et al., p. 220)

Similarly Onwuegbuzie and Johnson (2006) suggest that data integration “occurs via techniques such as quantizing data ... or qualizing data” (p. 53). Quantizing and

qualitizing data involve a process “wherein quantitative data are converted into narrative data that can be analyzed qualitatively ... and/or qualitative data are converted into numerical codes that can be represented statistically” (Onwuegbuzie & Leech, 2006, p. 491).

Tashakkori and Teddlie (1998) emphasize the importance of identifying the stage(s) of integrating qualitative and quantitative data. Onwuegbuzie and Leech (2006) state that “data integration is the final stage, whereby both quantitative and qualitative data are integrated into either a coherent whole or two separate sets (i.e., qualitative and quantitative) of coherent wholes” (p. 491). In this study integration of the two methods occurred during data analysis and data interpretation.

Integration occurred on many levels. First, the research questions contained both qualitative and quantitative questions aimed at exploring the lived experiences of AFCH residents and informal caregivers. Second, integration occurred during the data collection process, data analysis, and interpretation of the data. These three dynamic processes unfolded in a reciprocal manner; each influencing and enriching the data. Third, integration also occurred by quantizing portions of the qualitative data. For example, a thematic analysis of critical incidents involving residents revealed that frequency of falls was a factor that influenced informal caregivers’ preference for AFCHs. Additionally, qualitative themes such as family conflicts (e.g., between siblings and caregiving spouses), employment stress, and the risks of informal caregivers become ill or injured were also quantitized.

Integration also revealed some key findings between male and female informal caregivers. Consistent with previous studies (Brody, Hoffman, Kleban, & Schoonhover, 1989; Chappell & Reid, 2002; Cox, 2005) six out of eight informal caregivers in this study were female. However, the males in this study reported higher levels of emotional strain. Possession of the qualitative and quantitative data was valuable for interpreting the higher level of emotional strain reported by the male informal caregivers. Integration of the data was modestly successful.

Evaluation in a Mixed Design

It is imperative that researchers make every effort to be methodologically sound in data collection, analysis, and interpretation, and most quantitative and qualitative researchers agree that rigor is needed in research (Creswell et al., 2003; Lincoln & Guba, 1985; Miles & Huberman, 1994; Tashakkori & Teddlie, 1998). Onwuegbuzie and Teddlie (2003) noted that accountability implies that researchers strive to assess and document the legitimacy (e.g., credibility, trustworthiness, and dependability) of their findings.

Credibility in naturalistic research is based upon the rigor of the process and particularly the trustworthiness of the findings (Denzin & Lincoln, 1994). Trustworthiness provides credibility that one’s findings are worthy of attention and provides clear procedures for researchers who may want to replicate a study (Denzin & Lincoln).

Credibility and Trustworthiness

Credibility of the data is particularly important in this study because of the idiosyncratic nature of participants' experiences, the meanings attributed to living in an AFCH, and the journey that lead to the selection of an AFCH as a long term care setting. Most previous studies of older adults have employed a quantitative perspective (Burrs, 1995; Garret, Harris, Norburn, Patrick, & Danis, 1993; Gordon, 1995, 1996; La Veist, 1994; Neubauer & Hamilton, 1990). While the quantitative approach has confirmed a number of hypotheses about the placement of older adults in institutional settings, it has not produced a deeper understanding of the meaning of aging in these settings. One way of obtaining a deeper understanding is by mixing the qualitative and quantitative paradigms.

To insure quality control and trustworthiness of the study, several methods were employed. Results were presented in such a way that anyone, whether or not he or she has had the experience, can recognize the phenomenon described. The principal researcher recorded and transcribed the participants' in-depth interviews. A log was kept in the form of an audit trail, which described the chronology of the primary investigator's impressions, and perceptions.

In order to establish trustworthiness, both data sources, qualitative and quantitative, were triangulated. As Denzin (1978) noted, "Bias inherent in any particular data source, investigators, and particular methods will be canceled out when used in conjunction with other data sources, investigators, and methods" (p. 14). The goal of triangulating different methods and data sources in this study was to test for consistency in the data.

The qualitative data revealed several notable factors among the research participants. There were striking similarities in their narratives about life before and after a moving into an AFCH. Residents uniformly stated a preference for living a private home rather than an institution. Informal caregivers reported feeling more tranquil with a family member living in the AFCH.

The quantitative data enriched the qualitative data in that the quantitative data reflected the emotional state of the participants. For example, the resident whose level of depression according to the GDS was in the severe range was consistent with the qualitative data collected on that resident. Similarly, the ZBI scores of informal caregivers reflected their narratives about numerous events that caused them a great deal of emotional strain.

The researchers also reviewed the emerging themes separately then discussed their impressions. This process was essential in refining the themes further, and additional insights were considered and incorporated. After this, we proceeded with the more comprehensive data analysis.

In addition, the researcher's prolonged engagement in the informants' setting is "relevant to the quality of information and the quality of the investigators inferences and conclusions that are based on such information" (Tashakkori & Teddlie, 1998, p. 90). In order to accomplish this, in addition to interviewing participants, the principal researcher made subsequent visits to the AFCHs and made additions to the field notes about participants' interactions in their AFCH. In order to provide peer debriefing, during this

study several experienced colleagues, including those in the field of gerontology, provided constructive feedback.

Member Checking

To utilize member checking as a means of determining credibility and trustworthiness, all participants were given the opportunity to review their transcriptions to ensure accuracy; however, only the AFCH residents agreed to do so. Of the eight informal caregivers, two agreed to read the transcript. Informal caregiver two stated simply, "I like it, and I hope more people learn about adult family care homes because it made a big difference in my life." The informal caregivers' feedback confirmed the interpretation of their respective views.

Summary of the Findings

This study explored the experiences of AFCH residents and informal caregivers using mixed methods approach. Through the use of a sequential exploratory design, emphasizing the qualitative method, insights about the experiences of AFCH residents and informal caregivers were gained. The findings revealed important insights about residents' preference for AFCHs and informal caregivers' emotional state after a family member became a resident of an AFCH.

Residents in this study reported a preference to live in an AFCH rather than nursing homes or large adult facilities. Their preference was primarily associated with their perception of greater opportunities for meaningful social interaction in a household (e.g., being around children and participating/observing the routine events of daily life). Residents also perceived a greater ability to influence the social environment of the AFCH because of their immediate and frequent access to AFCH providers, in contrast to a nursing home where they might have little or no access to an administrator.

Informal caregivers reported less emotional strain after a relative moved into an AFCH. They also reported a greater sense of "trust" of AFCH providers and perceived the providers as a surrogate family.

Strengths of the Study

The mixed methods design was effective in our quest to capture the views and experiences of AFCH residents and informal caregivers. The works of many researchers provided excellent examples of mixed methods research as well as inspiration (Crawley et al., 2000; Creswell, 1994; Johnson & Christensen, 2004; Onwuegbuzie & Teddlie, 2003; Reichardt & Rallis, 1994; Teddlie & Tashakkori, 2003). The works of Creswell et al. (2003), Johnson and Onwuegbuzie (2004), and Tashakkori and Teddlie (2003) were especially helpful in determining which mixed methods design would be best for this study.

The sequential exploratory design provided a clear sequence of the necessary steps in data collection and data analysis. As aforementioned, priority was given to the qualitative aspect of the study. As such, the quantitative data was used to enrich the

findings of the qualitative data by adding depth to more fully understand the experiences of AFCH residents and informal caregivers.

The Geriatric Depression Scale and the Zarit Burden Interview substantially enriched the descriptions of the qualitative data. The instruments revealed important characteristics among research participants (such as the differences in burden strain among male and female informal caregivers). These instruments were useful in demonstrating the ways that AFCH residents found meaning living in an AFCH. The tests both supported the qualitative data and added an additional element from which to view the experience of AFCH residents and informal caregivers.

By and large, the mixed methodology employed in this study was an appropriate fit given the objectives of the study. While the prospect of using mixed methods was at times intimidating and time consuming, this approach did in fact provide the best elements of the qualitative and quantitative traditions.

Limitations of the Study

The limitations of this study include methodological limits, sample size, and investigator bias. While the methodology was effective in identifying and describing crucial experiences of research participants, it is possible that the questions asked did not identify all the important aspects of these residents and informal caregivers' experience. Additionally, the qualitative questions were kept to a minimum for the benefit of AFCH residents in order to minimize possible physical and or emotional distress.

Also, conducting multiple interviews (longitudinal study) could have achieved greater depth and breadth of understanding. The disadvantage of multiple interviews, however, is finding participants who are willing to commit to multiple meetings as well as completing pre and post tests. Those options were beyond the scope of this study. However, future investigators might do well to explore these possibilities.

The study was restricted to the investigation of AFCH residents in Broward County, Florida. Exploring the experiences of AFCH residents in northern Florida and other states might be worthwhile because South Florida is distinct in numerous ways, including cultural diversity. Additionally, the sample size was very modest; a larger pool of participants might yield results that could be generalized to other groups. The sample was also limited to one sexual orientation (i.e., heterosexual). These limitations may provide opportunity for other researchers to study more stratified samples.

Each investigator brings a preconceived set of ideas and beliefs to the research process. Throughout this investigation, we tried to limit the degree to which our assumptions and beliefs influenced the findings. We are aware that it is quite possible that through the questions we asked, or not asked, we swayed the data. To counter this possibility, quantitative measures were used to evaluate the views and experience of participants.

Recommendations for Future Investigators

Caution should be taken in interpreting the results of this study. Because this study had a limited focus, a number of issues remain for future researchers. While there are similarities between AFCHs, nursing homes, and assisted living facilities, there are

important distinctions. The acuity level between nursing home and AFCH residents and cost of delivering care are significantly different. Additionally, each AFCH is unique and should be evaluated individually. Therefore, we wish to offer three recommendations for future researchers.

The first recommendation is for the replication and expansion of this study. Replication might yield new insights about aging in an AFCH, the meaning of family, the reasons that AFCH providers choose to open their homes to older adults who are not related to them. The use of a larger sample size might reveal additional common and uncommon experiences of participants.

The second recommendation is to redirect the research question to include specific aspects of the experience of specific subpopulations such as Asians, non-Hispanic people of Caribbean descent, and gay, lesbian, and transgender individuals. Such inquiries into the experiences of this subset of the population might reveal richer data and findings. It is quite possible that there is variation in the experiences of different subpopulations. Redirecting the research questions to older adult gay, lesbian and transgender groups that are rarely represented might be particularly enlightening.

A final recommendation is to explore the characteristics of AFCH providers. Although the focus of this inquiry was not about AFCH providers, our observation was that all of the providers were female. Additionally, three of the five providers were Black women; two were from the Caribbean, and the other an African-American. Similarly, Hedrick, Sullivan, Sales, and Gray, (2009) noted that in their study most of the providers were born outside of the United States. The characteristics of AFCH providers merit further inquiry.

We are thankful for the contributions of the participants. The insights gained from this study were possible because of the AFCH providers who were willing to open their homes to an almost perfect stranger. The AFCH residents and informal caregivers were very generous with their time; they were all altruistic in sharing their stories about the chain of events that brought them to an AFCH.

References

- Ayer, A. J. (1959). *Logical positivism*. New York, NY: The Free Press.
- Brody, E., Hoffman, C., Kleban, M., & Schoonhover, C. (1989). Caregiving daughters and their local siblings: Perceptions, strains, and interactions. *Gerontologist*, 29(3), 529-538.
- Burrs, F. A. (1995). The African-American experience: Breaking the barriers to hospices. *The Hospice Journal*, 10(3), 15-18.
- Chappell, N. L., & Reid, R. C. (2002). Burden and wellbeing among caregivers: Examining the distinction. *The Gerontologist*, (42)6, 772-780.
- Chenail, R. J., & Maione, P. (1997). Sensemaking in clinical qualitative research. *The Qualitative Report*, 3(2), 1-9.
- Corcoran, K., & Fischer, J. (2000). *Measures for clinical practice* (3rd ed., Vol. 2). New York, NY: The Free Press.
- Cox, C. B. (2005). *Community care for an aging society: Issues, policies, and services*. New York, NY: Springer Publishing Company, Inc.

- Crabtree, B. F., & Miller, W. L. (Eds.). (1992). *Doing qualitative research*. Newbury Park, CA: Sage.
- Crawley, L., Payne, R., Bolden, J., Payne, T., Washington, P., & Williams, S. (2000). Palliative and end-of-life care in the African-American community. *The Journal of the American Medical Association*, 284(19), 2518-2529.
- Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Creswell, J. W., Plano-Clark, V. L., Gutman, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 209-240). Thousand Oaks, CA: Sage.
- Denzin, N. K. (1978). The logic of naturalistic inquiry. In N. K. Denzin (Ed.), *Sociological methods: A sourcebook* (pp. 1-32). New York, NY: McGraw Hill.
- Denzin, N. K., & Lincoln, Y. S. (1994). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (p. 17). Thousand Oaks, CA: Sage.
- Dey, I. (1993). *Qualitative data analysis*. London: Routledge.
- Easton, K. L. (1999). Using focus groups in rehabilitation nursing. *Rehabilitation Nursing*, 24(6), 212-215.
- Ekblad, S., Marttila, A., & Emilson, M. (2000). Cultural challenges in end-of-life care: Reflections from focus groups' interviews with hospice staff in Stockholm. *Journal of Advanced Nursing*, 31(4), 623-630.
- Garrett, J. M., Harris, R., Norburn, J., Patrick, D., & Danis, M. (1993). Life sustaining treatments during terminal illness: Who wants what? *Journal of General Internal Medicine*, 8(3), 361-368.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Hawthorne, NY: Aldine.
- Golander, H. (1992). Under the guise of passivity: We can communicate warmth, caring, and respect. In J. M. Morse (Ed.), *Quantitative health research* (pp. 192-201). Newbury Park, CA: Sage.
- Gordon, A. K. (1995). Deterrents to access and service for Blacks and Hispanics: The medicare hospice benefits, healthcare utilization, and cultural barriers. *The Hospice Journal*, 10(2), 65-83.
- Gordon, A. K. (1996). Hospice and minorities: A national study of organizational access and practice. *The Hospice Journal*, 11(4), 49-70.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274.
- Gubrium, J. F., & Sankar, A. (Eds.). (1994). *Qualitative methods in aging research*. Thousand Oaks, CA: Sage.
- Hedrick, S. C., Sullivan, J. H., Sales, A. & Gray, S. L. (2009). Mom and pop versus the big boys: Adult family homes as providers of Medicaid-funded residential care. *Journal of Aging and Social Policy*, 21(1), 31-51.
- Howe, K. R. (1988). Against the quantitative-qualitative incompatibility thesis or dogmas die hard. *Educational Research*, 17(3), 10-16.

- Johnson, R. B., & Christensen, L. B. (2004). *Educational research: Quantitative, qualitative, and mixed approaches*. Boston, MA: Allyn and Bacon.
- Johnson R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(3), 14-26.
- Johnson, R. B., & Turner, L. A. (2003). Data collection strategies in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 297-319). Thousand Oaks, CA: Sage.
- Karlikaya, G., Yukse, G., Varlibas, F., & Tireli, H. (2005). Caregiver burden in dementia: A study in the Turkish population. *The Internet Journal of Neurology*, 4(2), 12-26.
- Kaufman, S. (1994). In-depth interviewing. In J. F. Gubrium & A. Sankar (Eds.), *Qualitative methods in aging research* (pp. 123-136). Thousand Oaks, CA: Sage.
- Kayser-Jones, J., & Koenig, B. A. (1994). Ethical issues. In J. G. Gubrium & A. Sankar (Eds.), *Qualitative methods in aging research* (pp. 15-32). Thousand Oaks, CA: Sage.
- Keith, J. (1994). Consequences for research procedure. In J. F. Gubrium & A. Sankar (Eds.), *Qualitative methods in aging research* (pp. 105-119). Thousand Oaks, CA: Sage.
- Kemper, E. A., Stringfield, S. & Teddlie, C. (2003). Mixed methods sampling strategies in social science research. In A. Tashakkori and C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 273-296). Thousand Oaks, CA: Sage.
- Kemper, E. A., & Teddlie, C. (2000). Mandated site-based management in Texas: Exploring implementation in urban high schools. *Teaching and Change*, 7(2), 172-200.
- La Veist, T. A. (1994). Beyond dummy variables and sample selection: What health services researchers ought to know about race as a variable. *HSR: Health Services Research*, 29(2), 1-16.
- La Veist, T. A. (1996). Why we should continue to study race ... but do a better job: An essay on race, racism and health. *Ethnicity & Disease*, 6(4), 21-29.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- Lyman, K. A. (1994). Fieldwork in groups and institutions. In J. G. Gubrium & A. Sankar (Eds.), *Qualitative methods in aging research* (pp. 155-170). Thousand Oaks, CA: Sage.
- Marshall, C., & Rossman, G. B. (1995). *Designing qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Maxwell, S. E., & Delaney, H. D. (2004). *Designing experiments and analyzing data*. Mahwah, NJ: Lawrence Erlbaum.
- Mays, N., & Pope, C. (2000). Qualitative research in health care: Assessing quality in qualitative research. *British Medical Journal*, 320(7), 7226-7250.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A source book of new methods*. Beverly Hills, CA: Sage.
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research*, 40(3), 120-123.

- Morse, J. M., & Field, P. A. (1995). *Qualitative research methods for health professions* (2nd ed.). Thousand Oaks, CA: Sage.
- Neubauer, B. J., & Hamilton, C. L. (1990). Racial differences in attitudes toward hospice care. *The Hospice Journal*, 6(2), 37-48.
- Nuwaha, F., Faxelid, E., Neema, S., Erikson, C., & Hojer, B. (2000). Psychosocial determinants for sexual partner referral in Uganda: Qualitative results. *International Journal of STD & AIDS*, 11(2), 156-161.
- Onwuegbuzie, A. J., & Collins, M. T. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12(2), 281-316.
- Onwuegbuzie, A. J., & Johnson, R. B. (2006). The validity issue in mixed research. *Research in the Schools*, 13(1), 48-63.
- Onwuegbuzie, A. J., & Leech, N. L. (2006). Linking research questions to mixed methods data analysis procedures. *The Qualitative Report*, 11(3), 474-498.
- Onwuegbuzie, A. J., & Teddlie, C. (2003). A framework for analyzing data in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 351-383). Thousand Oaks, CA: Sage.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Reaves, C. C. (1992). *Quantitative research for the behavioral sciences*. New York, NY: John Wiley & Sons.
- Reichardt, C. S., & Rallis, S. F. (1994). Qualitative and quantitative inquiries are not incompatible: A call for a new partnership. In C. S. Reichardt & S. F. Rallis (Eds.), *The quantitative-qualitative debate: New perspectives* (pp. 85-92). San Francisco, CA: Josey-Bass.
- Robbins, M. (2001). MFT researchers gain crucial skills, feedback, support. *Family Therapy News*, 32(4), 1-27.
- Rowles, G. D., & Reinharz, S. (1988). Qualitative gerontology: Themes and challenges. In S. Reinharz & G. D. Rowles (Eds.), *Qualitative gerontology* (pp. 3-33). New York, NY: Springer.
- Schrag, F. (1992). In defense of positivist research paradigms, *Educational Researcher*, 21(5), 5-8.
- Sofaer, S. (1999). Qualitative methods: What are they and why use them. *HSR: Health Services Research*, 34(2), 1101-1118.
- Spencer, J., Hersch, G., Aldridge, J., Anderson, L., & Ulbrich, A. (2001). Daily life and forms of "communitas" in a personal care home for elders. *Research on Aging*, 23(6), 611-632.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research-grounded theory procedures and techniques*. Newbury Park, CA: Sage.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Tashakkori, A., & Teddlie, C. (Eds.). (2003). *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: Sage.
- Teddlie, C., & Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In A. Tashakkori & C. Teddlie

- (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 3-50). Thousand Oaks, CA: Sage.
- Williams, D. R. (1994). The concept of race in health services research: 1966 to 1990. *HSR: Health Services Research, 29*(2), 261-274.
- Williams, F. (1992). *Reasoning with statistics: How to read quantitative research*. New York, NY: Harcourt Brace Jovanovich College Publishers.
- Yin, R. K. (1999). Enhancing the quality of case studies in health services research. *HSR: Health Services Research, 34*(3), 1211-1224.
- Zarit, S. H. (1990). Interventions with frail elders and their families: Are they effective and why? In M. A. P. Stephens, J. H. Crowther, S. E. Hobfoll, & D. L. Tennenbaum (Eds.), *Stress in coping in later life families* (pp. 3-27). Washington, DC: Hemisphere.

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