AN ABSTRACT OF THE THESIS OF

Jan Lamp Gehler for the degree of Doctor of Education in Vocational Education presented on April 22, 1993. Title: An Analysis of the Competencies Required for Selected Home-Based Care Occupations

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This research evaluated the importance of select competencies in the area of human behavior, important to home-based caregivers employed independently and/or within a service agency in the State of Alaska. Data were gathered from respondents working in home-based care (N=76), and from those working in a related field (N=38). Data were collected on a forty-three (43) item instrument, using a five-point Likert type scale. The instrument was validated by a consensus of panelists using the Delphi technique. The reliability of the instrument was determined to be +0.893, using the Hoyt-Stunkard method.

Analysis of variance tests were completed for each of the forty-three (43) competencies and for two work status characteristics to determine differences between responses of those working in home-based care and those working in a related field. Factor analysis, using the R-mode, provided for clustering of competencies and constituted the major analysis procedure for the
The purpose of the study was to provide curriculum planning direction for postsecondary training in human behavior-related competencies for home-based caregivers.

The results of the study indicated the presence of five (5) clusters of content considered basic to training curriculum for all home-based caregivers. The clusters included: One - Family systems (8 competencies); Two - Nutrition and food management (6 competencies); Three - Human development (13 competencies); Four - Home safety and accessibility (9 competencies); and Five - Organization and interpersonal skills (8 competencies).

Overall competency means ranged from 2.986 to 4.522. Significance tests showed thirteen (13) rejected hypotheses for the forty-three (43) competencies. The mean scores for twelve (12) of those rejected were slightly higher for those working in home-based care than for those working in a related field.

The results of the study present direction for postsecondary vocational curriculum development in human behavior-related competencies important to home-based caregivers.
AN ANALYSIS OF THE COMPETENCIES REQUIRED FOR
SELECTED HOME-BASED CARE OCCUPATIONS

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Director, School of Education

Redacted for Privacy

Dean of Graduate School

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TABLE OF CONTENTS

CHAPTER ONE
INTRODUCTION 1
  Purpose of the Study 3
  Importance of the Study 4
  Definition of Terms 6

CHAPTER TWO
LITERATURE REVIEW 11
  Work Environment and Specific Work-related Competencies Required of the Home-based Caregiver 11
  Caregiver Training Issues and Strategies 19
  Clustering Work-related Information 25

CHAPTER THREE
METHODOLOGY 34
  Design of the Study 34
  Dependent Variable 34
  Independent Variable 35
  Instrument 35
  Delphi Technique 36
  Reliability of the Instrument 37
  Selection of the Sample 39
  Collection of the Data 39
  Experimental Design 40

CHAPTER FOUR
RESULTS AND DISCUSSIONS 43
  Reliability of the Instrument 43
  Results of Homogeneity of Variance Testing 44
  Results of Hypothesis Testing 45
  Results of Factor Analysis 55
  Common Factor Variance 58
CHAPTER FIVE
SUMMARY AND CONCLUSIONS 60
Restatement of the Problem 60
Dependent Variable 60
Reliability 61
Hypothesis Testing 61
Factor Analysis 64
Implications 64
Suggestions for Further Study 66

BIBLIOGRAPHY 69

APPENDICES 79
APPENDIX A 79
APPENDIX B 83
APPENDIX C 94


**LIST OF TABLES**

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>44</td>
</tr>
<tr>
<td>II</td>
<td>45</td>
</tr>
<tr>
<td>III</td>
<td>47</td>
</tr>
<tr>
<td>IV</td>
<td>51</td>
</tr>
<tr>
<td>V</td>
<td>53</td>
</tr>
<tr>
<td>VI</td>
<td>57</td>
</tr>
<tr>
<td>VII</td>
<td>59</td>
</tr>
</tbody>
</table>

I  Reliability Coefficient of the Instrument  
II Bartlett Values of Homogeneity  
III Results of Analysis of Variance Testing for Differences Between Group Means (Working and Working-Related)  
IV Competencies Ranked by Importance According to Overall Means  
V Competencies Ranked by Importance According to Means for Working Groups $\bar{X}_1$ and $\bar{X}_2$  
VI Results of Factor Analysis  
VII Percentage of Common Variance for the R-Mode
AN ANALYSIS OF THE COMPETENCIES REQUIRED FOR SELECTED HOME-BASED CARE OCCUPATIONS

CHAPTER ONE

INTRODUCTION

Representatives of Alaskan public and private agencies providing services to home-based clients cite a statewide need for well trained persons prepared with skills, knowledge and attitudes to effectively care for dependent persons of all ages, developmental stages, and disabling conditions (Older Alaskans Commission, 1990). Employed caregivers providing such services hold jobs classified as home health aide, homemaker, personal care attendant, and resident assistant. For such services to be reimbursed under federal Medicare or Alaska Medicaid, persons working in any of these job classifications must be certified based upon a minimum of 75 hours of training (Omnibus Budget Reconciliation Act, 1987). The Department of Commerce, Division of Occupational Licensing is the certifying agency for these workers in the State of Alaska. The division has approved training curricula based upon the National Homecaring Council's prescribed standards for the Homemaker-Home Health Aide. These standards are consistent with Omnibus Budget Reconciliation Act of 1987 (OBRA)
regulations and reflect a generic body of knowledge necessary to provide a general range of caregiver services.

About two-thirds of the curriculum includes training in essential nursing concepts and skills of personal care. The remaining one-third focuses on skills related to effective communications, human development and family life cycles, and home, food and nutrition management (National Homecaring Council, 1989). For purposes of this study the latter was described by the term "areas of human behavior". This study answered the question of need for more in-depth training in areas of human behavior for improved performance of home-based caregivers.

The need for training in these human behavior areas arises from two trends. First, recent changes in Medicare regulations permit federal and other third party funding or reimbursement for personal care and family support, respite and shared respite care services in residential settings, as different from congregate living centers or health care institutions (Older Alaskans Commission, 1990; Schwartzberg & Stein-Hulin, 1991). Second, the expansion of client-centered, home care systems reflects the predominant philosophy that persons should be in the least restrictive [care] environment that is safe for them (Zimmer, Groth-Juncker & McCusker, 1985).
This change in the financing mechanism and the preference for home-based care will translate into a) increased numbers of caregivers providing specialized care to non-family members in private homes and residential care facilities, as well as b) persons caring for frail or dependent family members in their own homes (Scharlach & Boyd, 1989).

Purpose of the Study

The purpose of this study was to establish curriculum content for postsecondary vocational instruction by examining selected competencies required by home-based caregivers employed independently and/or within a service agency in the State of Alaska.

The study focused on specific competencies essential to the home-based caregiver role found in jobs in public and private human services agencies and in the care of individuals in private residential settings. Job or position titles used to describe persons currently employed and delivering some or all of these services include home health aide, personal care attendant, homemaker, and others.

This study sought to determine, for these job classifications, the importance of specific skills, knowledge and attitudes (competencies) related to caregiver communication, human growth and development, food management and nutrition, and home and
human resource management. The results of this study may be used to form the basis for writing instructional objectives that will supplement the basic personal care skills training currently required of the home-based caregiver in Alaska.

The objectives of the study were to:
1. determine competencies related to selected areas of human behavior, common to and required by home-based caregivers, employed under the job titles of home health aide and personal care attendant;

2. determine the importance of selected competencies as ranked by a representative sample of certified caregivers currently employed in Alaska; and

3. describe areas of competence for grouping into logical instructional or curricular units.

Importance of the Study

The need by home-based caregivers for additional training in selected human behavior skills is evident in professional journals related to studies of gerontology, family issues, child care, and developmentally and physically disabled populations. Expanded training, continuing education and job redesign (Smyer, Brannon, & Cohn, 1992) are emerging as efficient and effective strategies to

Further, such training helps caregivers better manage not only their work tasks, but the personal stress closely associated with these occupations. "Much of the difficulty of caregiving is emotional stress and strain which needs special attention" (Bould, Sanborn & Reif, 1989 by Olson in Family Information Services, 1992. p. 13). Additional benefit accrues to employers experiencing losses in productivity from employees whose jobs are interrupted by demands from roles as primary family caregivers (Scharlach & Boyd, 1989).

And finally, the focus on human behavior in the caregiver-client dyad and within the family environment reflects a trend in curriculum development toward the aim of critical consciousness, especially in those who as chronically or fatally ill and their caregivers, view themselves as helpless, functionally impaired, physically and emotionally dependent, vulnerable and with little personal self-esteem or value (Walker & Soltis, 1992; Harrison & Cole, 1991).
Definition of Terms

Selected terms used in this study are defined below. Other terms or phrases are considered to be self-explanatory.

**Caregiver:** a job classification describing one who provides care services or takes care of others; those being cared for are generally dependent upon the caregiver to some degree for healthful and safe existence. Caregivers are most often formally untrained or minimally trained. Their duties span a wide range of activities including household management, personal care, working with elderly, disabled, very young children, and very ill persons (National Homecaring Council, 1989).

**Cluster:** a matrix of research tasks whose intercorrelations are high, with factor loadings of + or -.50 or higher. A cluster is referred to as a factor (Fruchter, 1954).

**Cluster analysis:** identifies groupings of cases of some class (such as job) that have somewhat similar patterns or profiles across several or many variables (McCormick, 1980).

**Common factor:** statistical representations of some task or trait which tends to occur across two (2) or more jobs (McCormick, 1980).
Common variance: the sharing of variance by two or more elements. In such a sharing, the elements are correlated and therefore have some traits in common (Fruchter, 1954).

Competency: the capacity to function or develop in a particular way; requisite or adequate ability or qualities (Webster's, 1986).

Delphi Technique: a forecasting method developed by the Rand Corporation to circumvent problems associated with committees reaching consensus; includes a series (at least three, usually four) of interrogations by samples of experts using a series of mailed questionnaires. The technique is based on the idea that experts can make conjectures about the future, based upon rational judgement and shared information. Anonymity, as is utilized with the Delphi method, promotes objectivity and creativity (Soukup, 1983).

Factor analysis: consists of a collection of procedures for analyzing the relations among a set of random variables observed, counted, or measured for each individual of a group. The purpose of factor analysis is to account for the intercorrelations among variables by postulating a set of common factors. It can be defined as a method for extracting common factor variances from sets of measures (Fruchter, 1954).
Factor loading: correlation of any particular competency with the other competencies being extracted in the same factor (Cattell, 1952).

Home-based care: a generic term to describe health, home, and human service related care provided to clients in a private home and/or in a residential care facility.

Homemaker-home health aide: a generic classification, developed by the National Homecaring Council, to describe work performed by caregivers with a limited amount of training in the skills needed for adequate patient/client care; formal training of at least 75 hours is requisite to achieving Medicare certification which qualifies the service to be federally reimbursed (Omnibus Budget Reconciliation Act, 1987).

Job: work that a person does and for which he or she gets paid. It is a production term (Fryklund, in Allen, 1919). Groups of positions doing similar work in an organization.

Knowledge: fact or condition of knowing something with familiarity gained through experience or association; facts or ideas acquired by study, investigation, observation or experience (Webster, 1986).
Overlapping Tasks: one variable with a minimal factor loading (+0.5 or greater) assigned to more than one factor during the factor analysis process.

Performance objectives: quantitative statements describing desired, observable behaviors that when demonstrated, reflect competency in a specific skill and/or area of knowledge (Finch & Crunkilton, 1989).

Proficiency: well advanced in an art, occupation or branch of knowledge; denotes thorough competence derived from training and practice (Webster, 1986).

R-Mode: a factor analytic method which examines the relationship of every research task with every other research task and provides for a clustering of common tasks. In the R-mode, items are intercorrelated and factored according to respondents (Cattell, 1978).

Skill: ability to use one's knowledge effectively and readily in execution or performance; a learned power of doing something competently; a developed aptitude or ability (Webster, 1986).

Spurious Tasks: in factor analysis process, a task or item with a factor loading of less than 0.5.
Varimax Rotation: a technique which redefines factors in order to make sharper distinctions in their meanings by increasing high factor loadings and reducing small loadings to zero. Varimax rotation maximizes variance of the loadings for each factor (Kachigan, 1982).

In summary, this study was conducted to provide direction for curriculum development and instructional improvement in preparing more effective home-based caregivers. The need for education and skills upgrading by workers in this field is driven by a growing volume of requests for such caregivers, and by caregiving professionals' recognition of the requirement for more highly skilled home-based workers as part of the caregiving team. The results of this study present a justifiable pattern for altering the curricular focus and for the development of instructional objectives as part of the postsecondary home-based caregiver training program.
CHAPTER TWO

LITERATURE REVIEW

The three major bodies of knowledge included in this study are a) work environment and work-related competencies required of the home-based caregiver; b) identified caregiver training issues and strategies; and c) methods for clustering work-related information.

Work Environment and Specific Work-related Competencies Required of the Home-based Caregiver

The work environment of the home-based caregiver is characterized by three major issues: federal regulations aimed at improving caregiver performance standards and client accessibility to needed services; demographic trends influencing the volume of and resources available to meet the growing demand for services; and recognition of qualitative aspects of the caregiver's job and the environment within which she or he works.

The Omnibus Budget Reconciliation Act of 1987 established minimum federal standards for training and certification of persons employed as homemaker-home health aides. These standards were
developed as a means to assure a level of quality sufficient for Medicare and/or state Medicaid cost reimbursement for care delivered in a home-based setting (Schwartzberg & Stein-Hulin, 1991). The trend toward home-based care is evident in health, social and human services as professionals recognize the value to the client, if not some cost savings to the third party payor or client, in service delivery at the least restrictive level of care possible (Zimmer, Groth-Juncker, & McCusker, 1985).

The intent of Omnibus Budget Reconciliation Act (OBRA) regulations is to enhance both the quality of and access to home-based care by those in need. However, professionals continue to question national and organizational policies and actual practices which constrain the evolution of a continuum of affordable, high quality home-based care, accessible by those in need and delivered by competent and caring practitioners (Kane, 1989).

Demographic trends of lower birth rates and increasing lifespans yield an aging national population creating greater demands for home-based services (Pratt & Kethly, 1988; McAuley & Arling, 1984). By 1996 7.5 million Americans will be over eighty years old. Many elderly are outliving younger family members and are without an informal support system of caregivers. The "sandwhich generation" composed predominantly of women in their 40's, is balancing the demands of children, job and caring for aging parents, often at a distance (Kane, 1989). Client preference, quality
of life for client and family, and prognosis for recovery or improved condition all increase the focus on family-centered caregiving and home-based care.

The care industry focus on training and personnel performance reflects agency concern for productivity and client care, but is not yet reflected in better pay, better benefits, enriched job description or significant measures to increase job satisfaction for the paid caregiver. As Berger (1984) states, agencies "...have failed to look at home care from the point of view of the in-home worker" (p. 456). And while OBRA has influenced the preparation and competency of the home-based caregiver, Kane (1989) raises a critical policy question.

The costs of both community-based and institutional long term care are predicated on a poorly-paid, poorly-benefitted, and poorly-trained labor force.... Still a dependable labor force is needed for the central tasks of tending and socializing children, tending and nurturing the sick, tending and empowering the old and functionally impaired, and tending and protecting the vulnerable. Who is to do this time-consuming, sometimes physically difficult often emotionally taxing care work, and how can we assure its quality? How can quality standards be developed when work formerly freely exchanged among untrained family members must be done by nonrelatives? What can we afford for this work, and what are we willing to pay? (Kane, 1989, p. 291).
The critical challenges for the home-based caregiver are first, the need for a sound understanding of human development and family systems, and for effective communications and interpersonal skills (Berger & Anderson, 1984); and second, the need for skills in managing one's own stress to prevent or minimize "caregiver burden" (Dwyer & Miller, 1990).

Federal regulations and service agency policies and practices have begun to support the home-based caregiver by recognizing the importance of initial skills training and continuing education opportunities to be better prepared to meet client needs. However, research findings indicate that the home-based caregiver job is more complex than reflected in those regulations and practices (Malonebeach & Zarit, 1991), and the demand for such care exceeds what current resources can support (Kane, 1989).

There appears ample evidence of need for more than the OBRA-mandated seventy-five hours of patient care skills training for effective service as a home-based caregiver. Supportive research recognizes four major themes discussed below.

1. The dynamics of family or home-based settings are unlike those of institutional care. Family configurations, roles, communication styles, habits, standards of living, cultural differences related to food, cleanliness, organization and a variety of personal habits create a different and more diverse care
environment for the home-based caregiver than exist for the nurses aide or LPN working in an institution. Home-based caregivers must recognize and understand the breadth and dynamics of normal family systems. They must also distinguish signs and symptoms of dysfunctional relationships, attitudes and behaviors (Berger & Anderson, 1984) potentially harmful to the client or other family members (Farran, Keane-Hagerty, Salloway, Kupferer, & Wilken, 1991; Fletcher, Dickinson, & Philp, 1992; Grieco, 1991; Hasselkus, 1988; Linsk, Keigher, & Osterbusch, 1988).

Smyer et al. (1985) provide extensive rationale for redesigning aide work in long term care facilities to improve quality and cost-effectiveness of care. Job characteristics of skill variety, task identity, task significance, autonomy, and feedback were examined in relation to worker motivation potential and consequent improved productivity. Others extend the job redesign and training strategies to the home-based setting as well (Hasselkus, 1988; Kane, 1989; Linsk, Keiger, & Osterbusch, 1988). However, home-based job restructuring focuses more on the expansion of the role of the family in the care program (Linsk et al., 1988), building meaningful work partnerships between formal and informal caregivers (Hasselkus, 1988), extending the concept of care to reflect awareness of family and home care systems or "cardinal tasks" (Grieco, 1991), and applying general systems theory as an approach to improvement.
2. The paid home-based caregiver not only attends to the client or patient, but must also recognize, address and often assist with other family members' issues or needs (Applegate & Kaye, 1989; Berger & Anderson, 1984; Blieszner & Alley, 1990; Brubaker, 1990; Cattanack & Tebes, 1991; Hasselkus & Ray, 1988; Tennstedt, McKinley, & Sullivan, 1989).

The primary caregiver - the person at home or in close proximity and most responsible for the client's direct care - also needs skills and knowledge about the client's condition and comfort as well as the variables affecting client care and recovery.

The paid caregiver can influence the quality of life of the client and his or her family. By understanding what Farran et al. (1991) suggest as antecedents to improved quality of life, the caregiver can help client and family acknowledge the need for refocusing their personal choices about life, value positive aspects of caregiving, and search for new life meaning through the caregiver experience.

Further skill and understanding is required of primary (family) caregivers to relieve themselves of the physical, emotional and psychological strain from the continuous demands of caregiving. This well-documented phenomena of caregiver stress and caregiver burden (Dwyer & Miller, 1990) highlights the need for greater understanding, observation, support and teaching skills on the part
of the paid caregiver. As Harrison (1991) states, "...health care providers may often unwittingly stress the importance of the sick family member without honoring the unique needs of the entire family care system" (p. 820).

3. The nature of the caregiving job itself, which is physically, emotionally, and psychologically demanding, plus the added pressures implied through the themes discussed above, also place home-based caregivers at risk of "caregiver burden" (Horne & Blazer, 1992; Hoyert & Seltzer, 1992). The needs documented by Harrison and Cole (1991) for family caregivers, mirror those for paid caregivers, specifically time management skills, interpersonal communication skills, feedback and support as well as understanding of the components and dynamics of one's own family system. Reiterating a common research notion, Berger and Anderson (1984) repeat, "...society has entrusted one of its most difficult tasks - care of the frail elderly - to its least trained and most poorly paid workers. Interpersonal problems are bound to result from this charge" (p. 457). The researchers offer a typology of problems inherent in the caregiving process. They include: responding to requests and complaints, initiating requests and influencing others, responding to behaviors interfering with care, responding to situations threatening the client, and coping with feeling of inadequacy or not being able to do enough (Berger & Anderson, 1984, p. 458). While such interpersonal problems are evident in the
caregiver-client dyad, they also appear to translate to the client's family and beyond the client's environment to the caregiver's personal family.

4. Despite federal regulations that reimburse costs of care delivered in a home setting by certified (trained) caregivers (OBRA, 1987); despite the emergence of "family responsive companies" (Felstehausen & Schulz, 1991); and despite recognition by health and human service professionals of the reciprocal impact of caregivers on families (Blieszner & Alley, 1990), the job of the home-based caregiver, like the child day care worker, is synonymous with low pay, low benefit and low prestige (Kane, 1989; Tellis-Nayak & Tellis-Nayak, 1989). Zola (1991) and other researchers argue for a new national philosophy of caregiving, a restructuring of means and methods to plan for and deliver home-based care (Bowman & Wolkenheim, 1987; Coleman, 1987; Fletcher, Dickinson & Philp, 1992; Grieco, 1991) and a focus on the effect in the workplace of accessible and affordable home-based care for families in need (Scharlach & Boyd, 1989). Qureshi and Walker (1991) identify the "career costs of caregiving" reflected in lost productivity, lost income, and missed opportunity for advancement and promotion experienced by growing numbers of employees caring for elders or disabled family members.

In summary, initial efforts to enhance skill levels of home-based caregivers emerged as a response to federal and state
regulations related to improved quality and to third-party funding for such care. Research reflects increasing pressure to enhance the quality of trained caregivers from trends a) recognizing the importance and unique characteristics of home-based care, b) reflecting demographic changes and the resurgence of the family unit in the caregiving process, c) acknowledging the varied and intense demands of the caregiving tasks or job, and d) admitting the status of the home-based caregiver as yet synonymous with low pay, low benefit and low prestige. All of these trends collide as the home-based caregiver crosses the threshold to a job site demanding more diverse skills, greater understanding of human behavior, and heightened sensitivity to the diversity found there.

Caregiver Training Issues and Strategies

Research highlights a range of training issues and strategies toward effecting quality of home-based care. The following discussion focuses on research addressing changes in three of those areas: 1) values ascribed to and the philosophical approach related to home-based caregiving; 2) reorganizing and restructuring the caregiver's job; and 3) expectations of competence in new curriculum areas of communications, human development, family systems and the dynamic nature of caregiver-client-family interactions throughout the life cycle.
1. Research and practice reflect a philosophical shift from viewing caregiving primarily as the caregiver-client dyad, to viewing caregiving as a system of many processes with opportunities for improving quality of care, quality of life and greater satisfaction for the caregiver, the client and the client's family. In suggesting "illness as an agent of change", Harrison and Cole (1991) join others in recognizing that caregiving is more than just administering direct client care, but is an opportunity for caregivers and others to assist client and family in adapting to the dramatic changes that occur within the family when a member becomes dependent. Dressel and Clark (1990) suggest the importance of helping clients and family members explore respective meanings of "family care" or care-giving (p. 773), arguing that unexpressed conflicting views can hinder the caregiving process, and conversely, understood differences can enhance the quality or perception of care (p. 779).

Clients, family caregivers, and paid caregivers all tend to benefit from a more extensive formal support structure. To that end, Greico (1991), Zimmer et al. (1985), Pratt and Kethly (1988), Linsk et al. (1988), and Harrison and Cole (1991) encourage a shift from viewing home-based care as the sole work of the home health aide, personal care attendant, or homemaker-chore worker, to a multifunctional, primary care team. Such a team, long common in institutional settings, for home-based care would include more active involvement of physician, social worker, aide, client and client
family members. Addition of client and family members to planning, case management and other care decisions, reflects findings that an informed family with a positive attitude about the client and his or her care is fundamental to client satisfaction, primary caregiver burden relief, and paid caregiver effectiveness (Applegate & Kay, 1989).

2. Industry efforts to improve caregiver productivity have included a variety of changes in the caregiver's job, including recognition of personal motivation in sustaining caregiver commitment to a demanding job. Caregiver job redesign (Smyer et al., 1991), job enrichment, and job audit (Fletcher et al., 1992) focus on improving quality of care by altering job characteristics in order to enhance caregiver abilities and motivation. Such restructuring ranges from enriching the job through added training in such concrete skills as working with the cognitively impaired and behavior management (Smyer et al., 1992), to achieving better understanding of the "patient's perspective" (Zola, 1988) and perfecting interpersonal problem-solving skills (Berger & Anderson, 1984).

3. The applied effect of a systems view of the caregiver-caregiving experience is emerging through refocused training and continuing education curricula. The initial training curriculum is being adapted for better balance between subject-, learner- and social-centered aims (Walker & Solis, 1992). The study of training
and job restructuring for nursing home assistants conducted by Smyer et al. (1992) challenges the notion of relying only on training as means to improve performance. While work on other strategies is vital to needed reforms in home-based care, other researchers support reforming training to address some of the complex factors associated with improving caregiver effectiveness and reducing caregiver stress and burden.

Agency training programs are supplementing nursing skills content with instruction in personal and client communication skills, human development, understanding diversity, and discussions related to the environmental conditions affecting quality and efficacy of care. This broader expectation of competence requires the caregiver have insight into the role of primary and secondary family members. Family members affect client satisfaction and the ability of the paid caregiver to sustain personal motivation to deliver needed services (Cattanach & Tebes, 1991).

Hasselkus (1988) expands this thought by exploring the effect of five "themes of meaning" (p. 687) important to the caregiver-carereceiver relationship. She suggests that caregiver, carereceiver and family members often have unique and disparate perceptions of what is needed and what is good for the carereceiver, and that much of the conflict stems from behaviors based upon those differing ideas or themes. Such disparity creates tension and impedes effective care. She advocates the caregiver adopt Schon's
"...reflective practice [which] means giving up claims to authority and sharing the ownership of the interaction with the client" (Hasselkus, 1988, p. 690). Caregivers trained in the use of descriptive questioning, such as "Would you start by telling me what your day is like?" can then listen and learn from the carereceiver and family members. With their thoughts clearly stated, the caregiver can better understand and relate shared meanings to his or her experience and perspective. Such shared meanings "...might result [in] a conversation based upon mutual respect for each other's naming and framing, actions and judgments" (Hasselkus, 1988, p. 690).

A phenomenological approach, Farran et al. (1991) suggest caregiving is enhanced and client satisfaction increases when caregivers understand the process of suffering. Improvement comes when the caregiver understands the process of suffering within a system of care. When the caregiver knows about the process of suffering, he or she can apply that understanding to the benefit of the client and family. From awareness of the phenomenon to perfecting related helping skills, the caregiver must acknowledge the client's and family's sense of loss (of roles, independence, livelihood, etc.) and feelings of vulnerability and powerlessness. Further, he or she must support the client making personal choices, encourage the client to value positive aspects of the new condition, and support the client in searching for and
finding new meaning for the caregiving experience and new ultimate or spiritual meanings (Farron et al., 1991).

Fletcher et al. (1992) advocate that the concept of quality of life goes beyond physical conditions. He suggests caregivers understand that they can affect all aspects of the client's life, material and physical, social, emotional and spiritual. Training implications include first assuring the caregiver understands and appreciates the importance of this concept. Second, training must equip the caregiver with appropriate skills and knowledge, with client's and family's help, to assess client's functional capacities, physical, mental and social status, as well as morale, life satisfaction and self-esteem. Where cognitively impaired, family and others can represent client's views (p. 143).

Greico (1991) suggests the following "cardinal tasks" as the backbone of successful family environment in home care, whether practiced by caregiver or client and family. They include: providing emotional support for the client, making observations, providing physical assistance, performing household chores, participating in the treatment regimen, and calling for assistance (p. 50).

Garrett (1992), Zola (1988), McAuley and Arling (1984), and Kapp, (1991) suggest caregivers better understand the process of aging to help client and primary family caregivers counteract stresses of daily living, compounded by age or condition-associated
physiological losses. Because the ability to communicate is strongly connected to self-identity, socialization, independence and self-maintenance, understanding caregivers equipped with skills can help client and family avoid misconceptions about client behaviors through better appreciation of client abilities and needs.

In conclusion, the research highlights several strategies by which our nation is addressing quality of caregiving for the home-based client. This discussion focused on current efforts to redefine the scope and nature of the work of the home-based caregiver, magnify the importance of that role as part of the caregiving team, and to apply a broader, more systemic, more wholistic view of the caregiver-caregiving experience.

Clustering Work-related Information

E. J. McCormick (1980) has identified a variety of purposes for and treatments of work-related information that results from occupational or task analysis procedures. Jonassen (1989) relies on the occupational analysis to provide information by which to examine "... the learning situation for the purpose of making instructional design decisions" (p. 14). In calling for more systematic study of human work, McCormick places primary importance on the determinations of the type of information needed and the method of data collection. Occupational analysis includes inquiries about the type of data to be collected, the form of the data, the agent to be
used, and the method of analysis to be used. When conducting task analyses to determine instructional or training needs, the effort should focus on descriptions of the content of the work reflected in the terminal performance of the trainees or students (McCormick, 1980). Finch and Crunkilton (1989) identify occupational task analysis as a widely used content determination strategy for vocational education curriculum development. They practically define task analysis as "...the process wherein tasks performed by workers employed in a particular job are identified and verified" (p. 144). A basic assumption of the task analysis process is the gathering of information directly from incumbent workers provides the best source of information about the requisite skills, knowledge and attitudes required for acceptable performance in a particular job or cluster of jobs (Finch & Crunkilton, 1989).

"The job inventory is one form of a structured job analysis questionnaire that consists of ... tasks... relevant to the jobs within some occupational area" (McCormick, 1980, p. 166). Initial work in this area was performed by the Personnel Division of the Air Force Human Resources Laboratory as well as other public and private, military and civilian organizations throughout the world. The inventory, which includes lists of job-related tasks, is submitted to job incumbents or others (sometimes panels of experts) for responses to questions about the relative importance of each task. Respondants refine the description of the job tasks in terms of
specific primary and secondary factors, i.e., amount of time spent, percent of the job, importance or criticality to the job, etc.

McCormick and others at Purdue University (McCormick et al., 1954; Chalupsky, 1954; Scheips, 1954; Finn, 1954; Gordon & McCormick, 1969) developed the primary body of literature related to analysis of occupational requirements of industry workers. Using analysis of job interrelationships, identification of job components, factor analysis of components, and identification of clusters of jobs, these researchers developed the model used as the basis for this study's methodology. Critical to this study was the collection of basic field data from established home-based caregivers, who indicated importance of competencies to their jobs by ranking competency lists. Competency interrelatedness was the basis for data analysis methods used in this study.

Courtney and Coster (1964) provide the model for this study's curriculum planning. In this research a common core of skills and experiences form the knowledge base for occupational entry. The "centripetal" approach suggested by these authors is centered on the identification of the elements of the common core. The elements are likely to resemble fragments of abilities and knowledge and are apt to be general rather than specialized, except as specialization relates to the entire occupation for which a person is being prepared. Where a person works is not so important as the nature of the work
itself. According to this premise, an empirically-based method for determining curriculum content can be derived (Halfin and Courtney, 1971).

In the centripetal approach there is a search for the least common denominator of the occupation of interest. This common core of knowledge and skills is described in accord with a moving inward process. Figure 1 depicts a number of overlapping circles which illustrate the centripetal method of content identification (Courtney and Coster, 1964). Curriculum planning is centered on identifying the elements of common overlaps and what the worker does is made the criterion for classification within the core (Courtney, 1962).

![Figure 1. Schematic illustration of the Centripetal Approach](image)

The present study resolved into a problem with curriculum ramifications for postsecondary vocational instruction in home-
based care. The identification of the statistically-related competencies required for home-based caregivers, along with a factor-based grouping of competencies, is important to designers of curriculum. The guiding principles of this focus are:

1. Factor (cluster) identification may be completed using worker-assigned values for the purpose of verifying competency statements.

2. Subject matter content may be descriptively grouped for analysis purposes. From such groupings, patterns of instructional units may be established for home-based caregivers working in the field so that the basic common competencies and necessary common experiences can be identified.

3. As content is determined, performance-based objectives for preparing certifiable home-based caregivers can be specified.

4. Using a sequence of performance-based objectives, instructional strategies may then be specified for related postsecondary instruction and training.

The basic thesis surrounding the use of this curriculum model is that a standard set of dimensions can be developed which provide guidance and content selection for statistically-related, home-based
caregiver instruction. The present research brings this matter into quantitative focus.

Acquired skills and knowledge of current caregivers should influence curriculum for training existing and prospective caregivers. Similar analytical methods were used by Stamps (1979), who developed a list of competencies in consumer education and personal finance, and Samahito (1984), who studied physical education competencies for validation of graduate level curricula. These and others (Behroozian, 1981; Soukup, 1984; and Starmach, 1988) mailed survey instruments to incumbent workers in their respective fields. Those workers as well as a sample of university faculty, completed the questionnaires and assigned values to competency lists. Data were analyzed using methods similar to those used in this study. In each case, content validation was established using a Delphi panel and reliability was verified through the analysis of variance method prescribed by Hoyt and Stunkard (1952) and Courtney (1991).

The Delphi technique is an acceptable way of providing content validity to the data-gathering device used for research purposes. Developed by the Rand Corporation to predict alternative defense futures, the Delphi technique is a group process for aggregating judgments of a number of individuals in order to improve the quality of decision-making. It is widely used in education to set priorities, establish goals, forecast futures and
develop curriculum especially in new occupational areas. The approach allows panel members to speculate independently of one another, and so form more creative reactions and recommendations, unbiased by other members of the group (Finch and Crunkilton, 1989).

Delbecq, Van de Ven, and Gustafson (1975) cite three critical conditions necessary to complete a successful Delphi: a) adequate time - the minimal required time for a Delphi is about 45 days; b) participants' skill in written communication; and c) high participant motivation to overcome constraints in working in isolation. Like all other group processes, the quality of responses is very much influenced by the interest and commitment of the participants.

Courtney (1988) identifies four steps in the Delphi technique:

1. The first questionnaire calls for a judgment about possible content of a data-gathering device. The researcher asks members whether or not items should be rejected for inclusion in the instrument, accepted for use as a part of the data-gathering tool, or modified for use in the instrument.

2. On the second round, each panel member, isolated from other members, receives a copy of the proposed list of items to be considered for the instrument, and is asked to rate or evaluate each
item by such criteria as importance level, probability of success, amount of time spent, or others.

3. A third round includes the list of competencies or items and the ratings from the second round and asks each member to revise their opinions or specify reasons for remaining outside the consensus view of other members.

4. The fourth round, if one is needed before consensus is met, includes the list of items, previous ratings, and consensus and minority views from all panel members. This round is the final chance to revise items to be included on the research instrument. If more steps are needed before consensus is reached, the process is continued (Courtney, 1983).

Finally, the methodology selected for this study reflects a vocational education principle that values the experience and opinion of the incumbent worker as an important influence in developing curriculum for education and training in home-based care. This study first sought input about competencies important to a job from the Delphi panel of experts. With a reliable survey instrument, the researcher obtained information from certified caregivers about current practice and the importance of those competencies in performing their work. The factor analysis method was appropriate for managing the data from this study. Reduction of the initial data into factors based upon common traits found
within the array of competencies, offered a logical means to group content areas for curriculum planning.
CHAPTER THREE

METHODOLOGY

Design of the Study

The design sets the stage for the analysis method in the research. It expresses the conditions under which observations are recorded and equates the dependent variable in terms of the objectives of the investigation (Courtney, 1988). These conditions are described below and substantiate the study's direction for purposes of analysis.

Dependent Variable

The dependent variable in the study was a scale value judgmentally assigned by each of the subjects participating in the study to denote the perceived importance of competencies required for home-based caregivers in the job classifications of home health aide and personal care attendant. The instrument was an inventory, developed using the Delphi technique to establish content validity (Delbecq et al., 1975). Dependent variable scores were assigned on the basis of the following five-point scale:
Each statement used in the instrument was treated individually. Hence, it was anticipated that there would be a total of approximately forty-three (43) dependent variable statements.

Independent Variable

The independent variable in the study was a classification describing the respondent's current status relative to work in the home-based care field. A respondent was noted as one of two types: working in home-based care, or not currently working in home-based care, but working in a related field.

Instrument

The instrument used for this study was a mailed inventory containing forty-three (43) competency statements describing the knowledge or abilities needed by the home-based caregivers. A five point Likert scale allowed respondents to judgmentally score the level of importance of each statement. The inventory was developed after a review of the existing curriculum and/or competency analyses for the targeted job classifications or titles. This research
focused on those general range competencies described as communications, household and human resource management, food and nutrition, working with special populations and instructional aspects of these basic competencies.

**Delphi Technique**

The Delphi technique was used to establish the content validity of the survey instrument. A panel of eight members were selected from public and private agencies, throughout Alaska. (See Appendix A) Participants selected for the panel displayed at least two of the following criteria:

1. At least two years of experience supervising, training and/or working with persons employed as either home health aides, personal care attendants, developmental disabilities resource specialists, those caring for very young children, disabled or home-bound ill persons, or dependent elderly;

2. Membership in related professional organizations, such as the National Homecaring Council, Foundation for Hospice and Home Care, Office on Aging, or any local or state affiliated associations as well; and
3. Instructor or faculty at post-secondary level from the disciplines of human services, home economics, education, nursing, psychology, and social work.

The nature of the Delphi technique overcomes the geographical barriers to securing consensus of experts from remote Alaskan sites and distant locations in the Lower 48 states.

The first round of the Delphi technique asked panel members to review and for each of seventy-one (71) competency statements respond on a three-point scale, indicating a preference to retain, reject, or retain with specified modifications. (See Appendix B) Second and third rounds with the panel deleted those items "rejected" by at least six of the eight members. Recommended modifications and comments for additions or changes were distributed to all members for consideration. A final inventory of thirty items was approved by consensus. (See Appendix C) Because two of those items had subcategories of responses, the final inventory had a total of forty-three (43) items. The final inventory was field tested on a small sample of individuals representative of the larger study population.

Reliability of the Instrument

An estimate of the internal reliability of the scores assigned by subjects to each of the identified competencies was determined
using the method described by Hoyt and Stunkard (1952). This method, using analysis of variance, provides a straightforward solution to the problem of estimating the reliability coefficient for unrestricted scoring items. For this study, there was a matrix consisting of approximately 252 subjects, ki components, and one response per cell. Schematically, the matrix is shown as follows:

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1  2  3...... J.....</td>
</tr>
<tr>
<td>2</td>
<td>Y11 Y12 Y13 Y1J</td>
</tr>
<tr>
<td>3</td>
<td>Y21 Y22 Y23 Y2J</td>
</tr>
<tr>
<td>*</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>Yk1 Yk2 Yk3 YkJ</td>
</tr>
<tr>
<td>Total</td>
<td>Y.1 Y.2 Y.3 YJ</td>
</tr>
</tbody>
</table>

A two-way analysis of variance produces sums of square values for subjects and items; the residual sum of squares is obtained by subtraction. The estimate of reliability is obtained according to the following formula:

\[
r = \frac{\text{Mean Square Subjects} - \text{Mean Square Residual}}{\text{Mean Square Subjects}}
\]
Past research studies which have utilized the equal appearing interval scale for data collection in task analyses have resulted in scale reliabilities approaching or exceeding + 0.90 (See Behroozian, 1981; Samahito, 1984; Soukup, 1984; and Starmach, 1988).

Selection of the Sample

The inventory was mailed to 997 persons currently certified in the State of Alaska as a home health aide or personal care attendant. Subjects were taken from Alaska Department of Commerce, Division of Occupational Licensing, list of certified health aides and personal care attendants. A total of 252 responses were received. According to Courtney (1983), the use of factor analysis to assure valid data interpretation requires approximately ten (10) respondents per instrument item. Kerlinger (in Tabachnick, 1989) however, states that where the sample is drawn from a homogenous population or sub-population, fewer subjects may be adequate to reduce error variance, which is commonly associated with factor analysis (Courtney, 1988). The sample for this study was drawn from a homogeneous setting and the 252 responses were considered adequate to meet the sample size criterion.

Collection of the data

Data were collected using a mailed inventory (coded for identification and follow-up), a stamped, self-addressed envelope,
an enticement device and an explanatory letter to each subject (Dillman, 1978). All data were collected within a four-week period. Once collected, the inventories were checked, the data coded and prepared for computerized statistical analysis.

Experimental Design

A major purpose of this study was to identify clusters of tasks or competencies relevant to preparation and training of home-based caregivers. Competency groupings and levels of importance, considered by currently employed caregivers, were important to instructional design and curriculum development. The statistical method used for analysis of the data was factor analysis, where the R-mode, with varimax rotation, was used as the vehicle for proving clusters or competencies. Factor analysis uses the following mathematical model:

$$V_t = V_{co} + V_{sp} + V_e$$

Where:

- $V_t$ is the total variance,
- $V_{co}$ is the variance that two or more measures share in common,
- $V_{sp}$ is the variance which is specific to an individual measure, and
- $V_e$ is the variance attributed to error.
The criterion factor loading weight for inclusion of an item or competency into a cluster was initially set at 0.50, with the option of lowering or raising the level for purposes of maximizing item identity with the parent clusters. Tasks were clustered in order to account for the largest percentage of common factor variance using the varimax rotation method of control.

An additional analysis of variance was conducted to test the hypothesis of no significant differences between trained caregivers currently working in home-based care (μ₁) and trained caregivers currently working in a related field (μ₂). The basis for rejection was set at alpha = .01, with df = 1, 147. One hundred and five (105) responses from those not working at all were eliminated from the calculations. Homogeneity of variance was tested using Bartlett's Test of Sphericity (Bartlett, 1950, 1951).

In summary, the completion of analysis of variance (ANOVA) and factor analysis, with application of Bartlett's and Hoyt-Stunkard's treatments, provided curriculum planning direction in the area of human behavior for postsecondary training for home-based caregivers. The dependent variables were scores assigned by 147 respondents reflecting their perceived importance of forty-three (43) competencies related to human behavior in performing their work as home-based caregivers. The independent variable was the two (2) classification levels of their working status, specifically: currently working in home-based care and working in
a related field. The study hypothesized no significant group mean differences in perceptions of importance of each of the competencies.
CHAPTER FOUR

RESULTS AND DISCUSSION

The analyses for this study used factor analysis, analysis of variance, the Hoyt-Stunkard method for establishing instrument reliability, and the Bartlett's test of sphericity to determine homogeneity of variance.

Reliability of the Instrument

The forty-three (43) item instrument was tested for reliability using the Hoyt-Stunkard method for unrestricted scoring methods. This procedure used analysis of variance to establish internal consistency reliability for the five-point scale. This process utilizes between-respondent variance and error variance to compute the correlation coefficient for reliability and provides a straightforward solution to the problem of estimating the reliability coefficient for unrestricted scoring items. The reliability for the instrument was determined to be +0.893, where a sample of fifty (50) randomly selected respondents was used in the analysis of variance. The results of this procedure indicated consistency of responses across the forty-three (43) variables. Table I shown below depicts the reliability coefficient for the instrument.
Table I
Reliability Coefficient of the Instrument

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>MS</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>49</td>
<td>10.985</td>
<td>+0.893</td>
</tr>
<tr>
<td>Residual</td>
<td>903</td>
<td>1.17</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>952</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ r = \frac{MS_{\text{Respondents}} - MS_{\text{Residual}}}{MS_{\text{Respondents}}} \]

therefore,

\[ r = \frac{10.985 - 1.17}{10.985} = +0.893 \]

Results of Homogeneity of Variance Testing

The Bartlett Test of Sphericity (Bartlett, 1950, 1951) was used to determine the homogeneity of variance for hypothesis testing for differences between means for each of the two working groups. The results of the Bartlett tests showed that each of the 43 items included in the study met the assumption of homogeneity of variance which is required for the analysis of variance. The assumption was tested at the 0.05 probability level with 1 degree of freedom as the criterion for the analysis.
Bartlett values ranged from 0.793 to 0.923 for the variables tested. Table II illustrates the Bartlett values for this study.

Table II  
Bartlett Values of Homogeneity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Bartlett Value</th>
<th>Variable</th>
<th>Bartlett Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.847</td>
<td>23</td>
<td>.885</td>
</tr>
<tr>
<td>2</td>
<td>.832</td>
<td>24</td>
<td>.815</td>
</tr>
<tr>
<td>3</td>
<td>.854</td>
<td>25</td>
<td>.839</td>
</tr>
<tr>
<td>4</td>
<td>.903</td>
<td>26</td>
<td>.831</td>
</tr>
<tr>
<td>5</td>
<td>.825</td>
<td>27</td>
<td>.804</td>
</tr>
<tr>
<td>6</td>
<td>.861</td>
<td>28</td>
<td>.856</td>
</tr>
<tr>
<td>7</td>
<td>.857</td>
<td>29</td>
<td>.916</td>
</tr>
<tr>
<td>8</td>
<td>.887</td>
<td>30</td>
<td>.876</td>
</tr>
<tr>
<td>9</td>
<td>.895</td>
<td>31</td>
<td>.870</td>
</tr>
<tr>
<td>10</td>
<td>.823</td>
<td>32</td>
<td>.923</td>
</tr>
<tr>
<td>11</td>
<td>.848</td>
<td>33</td>
<td>.901</td>
</tr>
<tr>
<td>12</td>
<td>.846</td>
<td>34</td>
<td>.881</td>
</tr>
<tr>
<td>13</td>
<td>.891</td>
<td>35</td>
<td>.845</td>
</tr>
<tr>
<td>14</td>
<td>.801</td>
<td>36</td>
<td>.891</td>
</tr>
<tr>
<td>15</td>
<td>.913</td>
<td>37</td>
<td>.863</td>
</tr>
<tr>
<td>16</td>
<td>.793</td>
<td>38</td>
<td>.884</td>
</tr>
<tr>
<td>17</td>
<td>.902</td>
<td>39</td>
<td>.897</td>
</tr>
<tr>
<td>18</td>
<td>.871</td>
<td>40</td>
<td>.899</td>
</tr>
<tr>
<td>19</td>
<td>.857</td>
<td>41</td>
<td>.833</td>
</tr>
<tr>
<td>20</td>
<td>.856</td>
<td>42</td>
<td>.901</td>
</tr>
<tr>
<td>21</td>
<td>.805</td>
<td>43</td>
<td>.871</td>
</tr>
<tr>
<td>22</td>
<td>.887</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results of Hypothesis Testing

The study compared the responses to forty-three (43) items by two (2) respondent characteristics, specifically those working in home-based care and those working in a related field. Therefore, a
total of forty-five (45) separate hypotheses were included in the data analysis. One hundred forty-seven (147) persons responded to the instrument, indicating on a five-point scale their perceptions of the importance of each of the forty-three competencies listed. Table III displays the results of this analysis.

In general, total group mean scores were high. Means for all respondents ranged from 2.986 to 4.522 on a five-point scale. Competency 27 (Low tech accessibility and consumer comfort) reflected the highest mean, and competency 5 (Redivide purchased food for consumer's meals) was the lowest (See Table III). Table IV displays competencies ranked by importance for the group as a whole and Table V for each of the two working groups.
Table III  
Results of Analysis of Variance Testing  
for Differences Between Group Means  
(Working and Working-Related)

<table>
<thead>
<tr>
<th>Competency #</th>
<th>( \bar{X} )</th>
<th>( \bar{X}_1 )</th>
<th>( \bar{X}_2 )</th>
<th>( F^- )</th>
<th>( Ho )</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.455</td>
<td>3.645</td>
<td>3.158</td>
<td>1.786</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>2</td>
<td>3.648</td>
<td>3.763</td>
<td>3.474</td>
<td>0.793</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>3</td>
<td>3.503</td>
<td>3.618</td>
<td>3.368</td>
<td>0.450</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>4</td>
<td>3.159</td>
<td>3.303</td>
<td>2.974</td>
<td>0.909</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>5</td>
<td>2.983</td>
<td>3.211</td>
<td>2.579</td>
<td>2.841</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>6</td>
<td>2.986</td>
<td>3.500</td>
<td>3.026</td>
<td>1.476</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>7</td>
<td>3.945</td>
<td>3.868</td>
<td>4.053</td>
<td>0.364</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>8</td>
<td>4.455</td>
<td>4.513</td>
<td>4.553</td>
<td>0.255</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>9</td>
<td>4.090</td>
<td>4.132</td>
<td>4.132</td>
<td>0.045</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>10</td>
<td>4.228</td>
<td>4.368</td>
<td>4.263</td>
<td>3.461</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>11</td>
<td>4.179</td>
<td>4.250</td>
<td>4.263</td>
<td>0.207</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>12</td>
<td>4.276</td>
<td>4.487</td>
<td>4.316</td>
<td>5.383</td>
<td>Reject</td>
<td>( \mu_1 &gt; \mu_2 )</td>
</tr>
<tr>
<td>13</td>
<td>4.042</td>
<td>4.066</td>
<td>4.053</td>
<td>0.012</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>14</td>
<td>4.317</td>
<td>4.395</td>
<td>4.316</td>
<td>0.543</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>15</td>
<td>4.324</td>
<td>4.329</td>
<td>4.395</td>
<td>0.297</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>16</td>
<td>4.346</td>
<td>4.303</td>
<td>4.395</td>
<td>0.352</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
</tr>
<tr>
<td>17</td>
<td>4.338</td>
<td>4.421</td>
<td>4.316</td>
<td>3.152</td>
<td>Not Rej.</td>
<td>( \mu_1 = \mu_2 )</td>
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<td>4.513</td>
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<td>( \mu_1 = \mu_2 )</td>
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*  
21 | 4.154  | 4.355  | 3.737  | 4.599  | Reject   | \( \mu_1 > \mu_2 \) |
22 | 4.074  | 4.237  | 3.684  | 3.288  | Not Rej. | \( \mu_1 = \mu_2 \) |
23 | 4.066  | 4.303  | 3.633  | 4.952  | Reject   | \( \mu_1 > \mu_2 \) |
24 | 3.993  | 4.118  | 3.763  | 1.230  | Not Rej. | \( \mu_1 = \mu_2 \) |
25 | 3.801  | 3.882  | 3.684  | 0.430  | Not Rej. | \( \mu_1 = \mu_2 \) |
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<th>$\bar{X}_2$</th>
<th>F-Ratio</th>
<th>Ho</th>
<th>Decision</th>
<th>Conclusion</th>
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* Deleted numbered sentences that were not actual competencies.

$\bar{X}_1$ = respondents working in home-based care

$\bar{X}_2$ = respondents working in a related field.
Twenty-two competencies received a mean score of 4.0 and above for all respondents as a group. The remaining twenty-one competencies received means scores between 3.945 as the highest and 2.986, the lowest. The highest means (from 4.317 to 4.522) reflected perceived importance of the following competencies:

#27 Low tech accessibility and consumer comfort
#8 Understand "normal" physical, psychological, emotional, social characteristics of each of these life stages: young children (infants through school age); teen age children; young and middle adulthood; aging and elderly
#19 Apply time management skills to your own workload to better balance demands from your work and family
#16 Observe, record and notify supervisor of client and family member responses to any part of care plan
#17 Identify areas of need for additional teaching and/or assistance
#15 Encourage, suggest and model ways to increase physical exercise as way to release tension and build body strength and flexibility
#14 Recognize signs and symptoms of emotional stress and other ill effects on family members

Conversely, the lowest importance (from 2.986 to 3.299) was awarded to the following competencies:
#5 Redivide purchased foods into daily servings for easy use of single clients or young or inexperienced cooks

#30 Help family members take on new jobs and responsibilities by modeling and supporting

#4 Help consumers and family read and understand written guidelines and product food labels

#29 Teach/show family more efficient and less expensive ways to clean, organize, and do household tasks

#31 Help family identify short, medium and long range goals, to better develop and maintain a household budget and other needed plan
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* "Consumer" is synonymous with patient, client, carereceiver.

The mean values for the two working groups ranged from a high of 4.513 to a low of 3.197 for the home-based careworking group where N=76, and from a high of 4.553 to a low of 2.579 for those working in a related field, where N=38.
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</table>

Analysis of variance testing for forty-five (45) variables revealed significant differences between mean scores of the working groups for thirteen variables. The null hypotheses for these variables were rejected. The null hypotheses for all other variables were not rejected. Significant difference between mean scores for respondents working in home-based care compared to those working in a related field existed for the following competencies:

#12 Consumer and family independence
#18 Community resources
#21 Food management
#23 Access and storage
Results of Factor Analysis

The use of factor analysis to establish clusters of statistically-related home-based caregiver tasks was the major analysis method for this study. The R-mode clustered competencies according to respondent ratings on a five-point scale for each of the forty-three (43) variables in this study.

A total of five (5) factors (or clusters) were generated through an R-mode process, using the roots-greater-than-one, where the numbers of factors retained for interpretation is a function of the eigenvalues or root values extracted during the analysis. Generally, the roots criterion specifies that as many factors will be retained as there are eigenvalues or roots of one or greater than one.

The results of the analysis revealed that thirty-six (36) competencies loaded beyond the 0.50 level, into the five factors.
There were seven (7) spurious competencies and no overlapping competencies.

Cluster titles were assigned to each of the five factors and are assumed to reflect a common nature of the competencies within each cluster. The five clusters included:

Factor One: Family systems
Factor Two: Nutrition and food management
Factor Three: Human development
Factor Four: Home safety and accessibility
Factor Five: Organization and interpersonal skills

Table VI shows specific results of the factor analysis, displaying all competencies within their respective cluster, and including mean scores and rating of common variance.
### Table VI
#### Results of Factor Analysis

**Factor One: Family systems**

<table>
<thead>
<tr>
<th>Competency Description</th>
<th>( \bar{X} )</th>
<th>( V_{co} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>39  Review Activities Daily Living</td>
<td>4.135</td>
<td>.670</td>
</tr>
<tr>
<td>40  Family dynamics</td>
<td>4.052</td>
<td>.840</td>
</tr>
<tr>
<td>41  Family decision-making</td>
<td>3.910</td>
<td>.770</td>
</tr>
<tr>
<td>42  Family communication styles</td>
<td>3.827</td>
<td>.774</td>
</tr>
<tr>
<td>43  Family behavior</td>
<td>3.887</td>
<td>.866</td>
</tr>
<tr>
<td>44  Family caring patterns</td>
<td>4.015</td>
<td>.843</td>
</tr>
<tr>
<td>45  Interfamilial dynamics</td>
<td>3.780</td>
<td>.789</td>
</tr>
<tr>
<td>46  Changes over time</td>
<td>4.273</td>
<td>.780</td>
</tr>
</tbody>
</table>

**Factor Two: Nutrition and food management**

<table>
<thead>
<tr>
<th>Competency Description</th>
<th>( \bar{X} )</th>
<th>( V_{co} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Plan normal and special diet</td>
<td>3.455</td>
<td>.829</td>
</tr>
<tr>
<td>2 Evaluate nutritional value</td>
<td>3.648</td>
<td>.763</td>
</tr>
<tr>
<td>3 Plan, organize and shop</td>
<td>3.503</td>
<td>.686</td>
</tr>
<tr>
<td>4 Understand food guidelines</td>
<td>3.159</td>
<td>.785</td>
</tr>
<tr>
<td>5 Repackage purchased food</td>
<td>2.983</td>
<td>.766</td>
</tr>
<tr>
<td>6 Safe food preparation</td>
<td>3.338</td>
<td>.810</td>
</tr>
</tbody>
</table>

**Factor Three: Human development**

<table>
<thead>
<tr>
<th>Competency Description</th>
<th>( \bar{X} )</th>
<th>( V_{co} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Human development</td>
<td>4.455</td>
<td>.541</td>
</tr>
<tr>
<td>9 Responses to change</td>
<td>4.090</td>
<td>.682</td>
</tr>
<tr>
<td>10 Dysfunctional family effects</td>
<td>4.228</td>
<td>.519</td>
</tr>
<tr>
<td>11 Cultural-spiritual differences</td>
<td>4.179</td>
<td>.743</td>
</tr>
<tr>
<td>12 Independence</td>
<td>4.276</td>
<td>.707</td>
</tr>
<tr>
<td>13 Consumer &amp; family guilt</td>
<td>4.042</td>
<td>.714</td>
</tr>
<tr>
<td>14 Stress symptoms</td>
<td>4.317</td>
<td>.776</td>
</tr>
<tr>
<td>15 Stress relievers</td>
<td>4.324</td>
<td>.755</td>
</tr>
<tr>
<td>16 Care plan</td>
<td>4.346</td>
<td>.503</td>
</tr>
<tr>
<td>17 Need for added teaching</td>
<td>4.338</td>
<td>.563</td>
</tr>
<tr>
<td>7 Food related behaviors</td>
<td>3.945</td>
<td>.426*</td>
</tr>
<tr>
<td>18 Community resources</td>
<td>4.018</td>
<td>.472*</td>
</tr>
<tr>
<td>19 Time management &amp; balance</td>
<td>4.397</td>
<td>.496**</td>
</tr>
</tbody>
</table>
Table VI (continued)

Factor Four: Home safety and accessibility

<table>
<thead>
<tr>
<th>Competency</th>
<th>Description</th>
<th>( \bar{X} ).</th>
<th>( V_{co} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Time management &amp; balance</td>
<td>4.397</td>
<td>.419**</td>
</tr>
<tr>
<td>21</td>
<td>Food management safety</td>
<td>4.155</td>
<td>.679</td>
</tr>
<tr>
<td>22</td>
<td>Clothing management</td>
<td>4.074</td>
<td>.751</td>
</tr>
<tr>
<td>23</td>
<td>Access to and use of storage</td>
<td>4.066</td>
<td>.618</td>
</tr>
<tr>
<td>24</td>
<td>Physical accessibility of home</td>
<td>3.993</td>
<td>.712</td>
</tr>
<tr>
<td>25</td>
<td>Safety precautions</td>
<td>3.801</td>
<td>.622</td>
</tr>
<tr>
<td>26</td>
<td>Home security</td>
<td>3.772</td>
<td>.428</td>
</tr>
<tr>
<td>27</td>
<td>Low tech accessibility</td>
<td>4.522</td>
<td>.653</td>
</tr>
<tr>
<td>30</td>
<td>Altered family roles</td>
<td>3.142</td>
<td>.488*</td>
</tr>
</tbody>
</table>

Factor Five: Organization and interpersonal skills

<table>
<thead>
<tr>
<th>Competency</th>
<th>Description</th>
<th>( \bar{X} ).</th>
<th>( V_{co} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Household management</td>
<td>3.235</td>
<td>.573</td>
</tr>
<tr>
<td>32</td>
<td>Quality of care plan</td>
<td>3.940</td>
<td>.476*</td>
</tr>
<tr>
<td>31</td>
<td>Goals, budgets, plans</td>
<td>3.299</td>
<td>.694</td>
</tr>
<tr>
<td>33</td>
<td>Positive speaking &amp; listening</td>
<td>4.015</td>
<td>.552</td>
</tr>
<tr>
<td>34</td>
<td>Clear, shared meaning</td>
<td>4.060</td>
<td>.700</td>
</tr>
<tr>
<td>35</td>
<td>Project management</td>
<td>3.617</td>
<td>.455*</td>
</tr>
<tr>
<td>36</td>
<td>Family meetings strategy</td>
<td>3.429</td>
<td>.670</td>
</tr>
<tr>
<td>37</td>
<td>Reminisce to heal</td>
<td>3.895</td>
<td>.843</td>
</tr>
</tbody>
</table>

* spurious factor
** spurious factor with relatively high loadings on two factors

Common Factor Variance

Common factor variance is the sharing of variance by two or more competencies. In this sharing, competencies are correlated and, therefore, have traits in common with each other.
The five factors from this study accounted for the percentage of common variance illustrated in Table VII.

Table VII
Percentage of Common Variance for the R-Mode

<table>
<thead>
<tr>
<th>Factors</th>
<th>Percentage of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor One</td>
<td>33.8</td>
</tr>
<tr>
<td>Factor Two</td>
<td>9.7</td>
</tr>
<tr>
<td>Factor Three</td>
<td>7.1</td>
</tr>
<tr>
<td>Factor Four</td>
<td>5.2</td>
</tr>
<tr>
<td>Factor Five</td>
<td>4.8</td>
</tr>
</tbody>
</table>

The pattern of common variance accountability reflected in Table VII is consistent with the factor analysis model. Competencies loaded to the first factor account for the largest percent of common variance of all variables. Each succeeding factor accounts for diminishing percentages of the common variance. The analysis for this study substantiates the assumptions about common factor variance.
CHAPTER FIVE

SUMMARY AND CONCLUSIONS

Restatement of the Problem

This study was conducted to provide direction for curriculum development in postsecondary vocational instruction by examining competencies required by home-based caregivers employed independently and/or within a service agency in the State of Alaska.

The methodology isolated a core of statistically-related competencies important to effective work of home-based caregivers.

Dependent Variable

The dependent variable was a score which was judgementally assigned by sample respondents to denote their perception of the level of importance of forty-three (43) competencies necessary to their work as home-based caregivers. Two (2) work status characteristics were identified as variables and were analyzed as supplementary items.
Reliability

The Hoyt-Stunkard reliability coefficient for internal consistency of the instrument was determined to be +0.893 (See Table I). This coefficient indicates that the ratio of error variance to the variance for the total group was adequate. Therefore, the qualitative reliability of the instrument was considered appropriate for the study.

Hypothesis Testing

The total sample of subjects included 997 health aides or personal care attendants, certified by the State of Alaska. Analysis of variance of the 252 respondents was used to test for significant differences between two (2) categories of those respondents. Those two (2) categories were: those currently working in home-based care (X1), and those not working in home care but working in a related field (X2).

The results of this testing revealed a strong pattern of similarity between those working in home-based care and those working in a related field related to the importance of human behavior competencies. The differences between the two (2) groups resulted in the rejection of thirteen (13) of the forty-three (43) null hypotheses (See Table III). Twelve (12) of the competencies were
reported as more important to home-based caregivers than those working in a related field. Those twelve (12) competencies were:

#12 Arran ge your work to allow consumer and family time to perform as many care tasks as they are able (consumer & family independence);

#18 Know about available resources (such as written materials, referrals and other services and community agencies) to share or refer those best suited to consumer and family needs (community resources);

#21 Be aware of safety rules and actions related to food storage, preparation and preservation (food management);

#23 Be aware of safety rules and actions related to storing and reaching frequently used items (access and storage);

#30 Help family members take on new jobs and responsibilities by modeling and supporting (altered family roles);

#34 Encourage consumers or family members to clarify personal likes and dislikes (clear, shared communications);

#36 Teach family how to use "family meetings" to work on problems (family meetings);

#37 Encourage others to reminisce and share past life events (reminisce to heal);

#39 Observe, record and notify supervisor of consumer's Activities of Daily Living tasks completed (review ADL);

#40 Observe, record and notify supervisor of behaviors, and consumer and family discussions (family dynamics);
#44 Observe, record and notify supervisor of others' reactions to consumer's needs (anticipate and help, willing responses, indifferent, mechanical responses, ignoring, etc.) (family caring patterns); and

#45 Observe, record and notify supervisor of interpersonal characteristics of others besides consumer (between children, other parent and children, other family members, etc.) (interfamilial dynamics).

"Observe, record and notify supervisor of changes over time in others' attitudes, behaviors, appearance, health status, as consumer care needs persist" (changes over time) was deemed more important by those working in a related field than by those working in a home setting.

Further, the importance ranking, as indicated by the mean scores for respondents currently working in home-based care, were only slightly higher for most competencies (variables) than the mean scores awarded by the group as a whole. These results suggest some differences in the way certified workers view the importance of many competencies depending on their current work status. All certified health aides and personal care attendants must complete the same basic training in core skills needed for the job of home-based caregiver. This research indicated that actual and recent work in a home-based site may influence a worker's perception of the importance of many competencies.
It can be concluded that core curriculum content for human behavior-related competencies, may be consistent for all students seeking training and/or skills upgrading in the area of home-based care, regardless of their work status. However, instructional emphases may need to be adjusted to accommodate differences in perceptions of importance and understanding of the competencies required for effective work in this field.

Factor Analysis

Factor analysis was used to establish clusters of statistically-related competencies for persons working in home-based care. The R-mode clustered competencies according to a five (5) point importance scale for each of the forty-three (43) variables in this study. Five (5) factors (clusters), each showing a minimum factor loading of +0.50 emerged from the analysis (See Table VII). Factor One contributed 33.8 percent of the common factor variance, while Factors Two, Three, Four, and Five contributed 9.7 percent, 7.1 percent, 5.2 percent, and 4.8 percent, respectively. There were six (6) spurious variables that did not meet minimum loading values.

Implications

Implications from this study are derived from both the data analyses and the review of current literature. To date, the
preparation of certified health aides and personal care attendants has included a minimum seventy-five (75) hour training curriculum including predominantly nursing skills and limited study of human behavior. All certified workers appear to begin with similar training which, once completed, equips them with a core of common competencies necessary for the job. Data from this study tends to corroborate findings in the literature, indicating that actual work experience highlights needs for additional skills or competencies in the area of human behavior to work effectively, as well as more indepth study of basic skills from initial training curriculum.

Therefore, the results of this study suggest the following:

1. A student's work status at the time of training may influence his/her perception of the importance of selected competencies. Such perceptions may affect the degree and/or manner by which the student learns, ignores or even rejects new curriculum material. Therefore, curriculum for home-based caregivers should incorporate a variety of instructional strategies to encourage students to take a more critical view of the role of the home-based caregiver. Inclusion of more thinking-focused teaching, practical field experience early in the training period, and exposure to caregiving teams and families of consumers of care are a few suggestions.
2. A common core of principles, skills, and experiences form the knowledge and attitudinal base for occupational entry in home-based care. Data from this study provide the basis for development of such a common core of requisite skills and knowledge for this field.

3. A logical series of performance-based objectives and instructional strategies can flow from the data provided herein and from the discussion of issues related to the work environment, training and job restructuring efforts, and emerging attitudes and actions related to family and home-based care.

4. The results of this study verified the use of this curriculum model for content identification and instructional planning. It is recommended that this model be used for other occupational curriculum development projects as well.

Suggestions for Further Study

The following suggestions flow from the findings and conclusions of this study:

1. Data collected during this study also included an indicator of frequency of performance associated with the listed competency. Additional analysis ought to consider correlating frequency of performance with perception of importance. Further
comparison of those correlations for each of the two (2) working categories of respondents would be instructive.

2. Additional study should determine the influences of other demographic characteristics, such as age, gender, ethnic origin and years working in the field. This study collected "years working in the field" as part of the inventory, but these data were not utilized for the data analysis. Because Alaska's culturally diverse population imposes further unique requirements on those providing or training for home-based care, ethnic data would be important to further study.

3. Further study similar to this one should ask respondents to rank the competencies in order of their priority within the group of all competencies. Such ranking would be a guide to further curriculum refinement.

4. A parallel survey administered to those not currently working in home-based care but working in a related field, should explore more specifically the reasons for not working in a field for which one was trained. Such a study could identify practical barriers and service system constraints that form the basis for policy recommendations for home-based care in the State of Alaska.

5. A parallel survey administered to former and current care receivers to determine their perceptions of the importance of selected human behavior competencies would provide a meaningful
look at "customer satisfaction" in this field. Their ideas about what is needed and how it should be delivered would offer new direction for training curriculum content and instructional strategies.
BIBLIOGRAPHY


Osterkamp, L. (1989, November). Caregivers' cognitive coping strategies: "These are things I'm talkin to me about" . Paper presented 42nd Annual Scientific Meeting of the Gerontological Society of America, Minneapolis, MN., 1-10.


APPENDICES
APPENDIX A
Delphi Panel Roster and Correspondence
DELPHI PANEL ROSTER

Janet Enos, Director of Rehabilitation Services
Mary Conrad Center
Centennial Way
Anchorage, AK 99504

Kate Wood, RN, Chief Andrew Issac Hlth Cntr.
Tanana Chiefs Conference
1638 Cowles Street
Fairbanks, AK 99701

Barry Anderson, Executive Director
Alaska Mgmt. Technologies, Inc.
Route 3, Box 107
Chapel Hill, North Carolina 27516

Dr. Robert Burgess, Medical Director
250 Gambel Street
Anchorage, AK 99501
Community Health Aide Program
Alaska Area Native Health Service
Anchorage, AK 99501
257-1154
Vonnie Carole, supervisor
257-1393
Sylvia Carlsson, AK Area Native Hlth Svce (paper review)
257-1363

Beth Vann, Director
Home Health Care
Providence Hospital
Anchorage, AK 99508
261-3173

Mary Fontaine, Professor
University of Alaska Anchorage
School of Nursing and Health Science
3211 Providence Drive
Anchorage, AK 99508

Karen Ward, Executive Director
ASETS* (Alaska Specialized Education and Training Services)
2330 Nichols
Anchorage, AK 99508
September 18, 1992

Thank you for agreeing to serve as a Delphi panelist in the development of a survey instrument for a study of the training needs of persons delivering home-based care. You have been selected based upon your expertise in working as or with home health aides, personal care attendants, homemakers, community health aides, resident assistants, or others who care for persons in a home or residential environment.

The purpose of the Delphi process is to determine the content of the instrument that will ultimately be used to survey a statistically random sample of paid and nonpaid Alaskan caregivers. Caregiver responses to the survey will provide information for development and revision of education and training curriculum for these workers.

The Delphi technique suggests that panelists react independently to each iteration of the survey instrument and forward responses to a coordinator. As the study coordinator, I will assimilate edits and comments from all panelists, and return subsequent revisions to each. There may be as many as three iterations, depending on the speed with which the group reaches consensus. Consensus will be reached when all panelists agree on the content of the instrument.

The initial task of each panelist is to assess, evaluate, and if necessary, modify the attached instrument (inventory). Please examine each of the competencies/activities listed and indicate your decision to: 1) retain, 2) reject, and/or 3) modify for its inclusion in the final instrument. The final instrument will be far shorter than the initial draft attached.

The timeline for the study is as follows:

Complete instrument development through Delphi Panel
* 1st round remarks due
* 2nd round remarks due
* 3rd round remarks due, if needed

Mail survey to caregivers
Mail first follow-up notice to non-respondents
Mail second follow-up notice to non-respondents
Mail third follow-up notice to non-respondents
Collect and analyze data
Prepare report of findings and recommendations

Please forward your remarks to me as soon as you can, either by mailing them to:
Jan Gehler  
Home Economics Department  
University of Alaska Anchorage  
3211 Providence Drive  
Anchorage, Alaska 99508  

...or, sending them via fax to (907) 786-6008. I appreciate your time and attention to this effort. Please also feel free to call me at any time with questions, concerns or comments regarding the study. My work number is (907) 786-1290 and home number is (907) 337-1436.

I will send each of you a copy of the final instrument and ultimately, the report of findings and recommendations. Thank you again for your contribution.

Sincerely,

Jan L. Gehler, Coordinator  
Home Economics
APPENDIX B
Survey Inventory - First Round
HOME-BASED CARE INVENTORY

This Inventory is part of a study of home-based services delivered to clients and families, conducted by Jan Gehler of the University of Alaska Anchorage, as a doctoral candidate with Oregon State University. The purpose of the study is to determine the importance of and degree of proficiency of selected skills needed in a home-based setting, by those who are temporarily or permanently unable to care for themselves. The results of this study will guide efforts to improve caregiver training and education.

Individuals asked to participate in this study have been selected to provide a representative sample of home-based caregivers in Alaska. In order to get a complete picture of home-based care, it is important that responses from everyone in the sample be included in the data.

If you are not currently working for an agency or as an independent paid home-based caregiver, or caring (nonpaid) for someone in a residential setting, there is no need to complete the Inventory. Simply mark the space below to indicate that you are not giving care now, and return the uncompleted Inventory in the postage-paid return envelope.

____ I am not currently working as a home-based caregiver.

Because we need a reply from everyone, it is important that you return the Inventory even if you are not working as a caregiver.

If you would like to receive a summary of the results of the study, please print your name and mailing address in the space below.

__________________________
__________________________

INSTRUCTIONS

In this Inventory, the word "client" is used broadly to describe any recipient of home care services. For example, clients can be elderly, small children, chronically ill, developmentally disabled, or others receiving agency-sponsored (paid) or trained (but unpaid) care in a residential setting. Settings can be individual homes, adult residential centers, or skilled nursing institutions.
Likewise, the word "family" represents any person(s) in close proximity to, or living with the client, whether they are related by blood or marriage, or are a significant friend or partner. The intent is to determine the nature and to what extent family dynamics affects caregiver service. Section One of the Inventory includes general questions about your work or service in home-based care. Please answer all of the questions. For some questions, it may be appropriate for you to mark "Does not apply."

Here I will add a variety of demographic and work description questions.

Section Two contains a list of numbered activities organized into five (5) categories. For each activity, we are asking you two questions:

How frequently do you perform this activity?
How important is this activity to your job?

Question 1: How frequently do you perform this activity?

Circle the number that most closely corresponds to your involvement with the activity.
1 never 2 occasionally 3 frequently

Occasionally reflects activity performed more than once but not on a regular basis. Frequently reflects something you do repeatedly and perhaps with some regularity, i.e. weekly, once or twice each month, sometime during each visit, etc.

Question 2: How important is this activity to your job?

Circle the number that most closely corresponds to your opinion about the value of this activity to your job.
1 not important 2 somewhat important 3 moderately important 4 very important 5 extremely important (critical)

You may not be currently performing some activities listed but think they would be important to the job. Please mark you
"importance" score as if you were performing the activity.

For most questions you can simply circle the number of the choice that best reflects your response. To change your answer, mark through your first mark, and then circle the correct number. A few questions ask you to write in information; print your answers in the spaces provided next to these questions. You may use a pencil or pen to complete this inventory.

It should take you about ---- to answer the questions. The best way to handle this inventory is to fill it out now using your best judgment, and send it back in the postage-paid return envelope. Thank you for your time and response.
1.0 FOOD MANAGEMENT AND NUTRITION

PANELISTS: Please mark a number corresponding to your decision to RETAIN, REJECT, or MODIFY next to each item. Rewrite any modifications below the item presented, or use the back of the page. Thank you.

******************************************************************************

1.1 Plan simple, low cost, nutritious meals for

* client and/or family with normal nutritional needs
* client and/or family with special nutritional needs

1.2 Offer acceptable, nutritious alternatives to client's proposed menus

1.3 Determine economic choices using cost-per-unit calculations

1.4 Develop and maintain a food budget

1.5 Plan and organize food and household shopping trips

1.6 Shop for food and household items

1.7 Use published, written guidelines, product food labels and care plan dietary restrictions to meet different nutritional needs of client and family members.

1.8 Redivide purchased foods into daily servings for easy use by single clients or young or inexperienced cooks

1.9 Teach use of efficient food preparation equipment and techniques (crock pot, rice cooker, toaster oven, foil wrap, browning bags, etc.) to reduce burden on client and/or family.
1.10 Use home-delivered meal or grocery service for clients living alone

1.11 Evaluate quality of food in home for nutritional value and safety

1.12 Determine the best source and quantity of food needed to meet adequate daily dietary requirements.

1.13 Evaluate client satisfaction with menus and meals

1.14 Observe and record food consumption and waste by client and family

1.15 Analyze and report actual nutrient intake

1.16 Observe and record food-related behaviors

1.17 Consult with supervisor about client and family food habits

1.18 Refer clients and family to other nutritional or dietary services

2.0 HUMAN GROWTH AND DEVELOPMENT

2.1 Explain to clients or family members normal stages /changes of the aging process
   * cognitive changes
   * physiological changes
   * psychological/emotional changes

2.2 Understand client's and family member's individual responses to the changes mentioned above

2.3 Help clients and family members understand normal progression of the condition (i.e. toward recovery, progressive deterioration, common but unpredictable outcomes, etc.)

2.4 Help clients and family members understand changes in authority and in roles played by each during the caregiving period
2.5 Observe and note behaviors that may stem from difficulties with changes in family structure (i.e. substance abuse, aggression, becoming withdrawn, poor work or school performance, etc.)

2.6 Observe and note cultural, spiritual or other characteristics that may be important to the client and/or family in coping with the condition

2.7 Arrange your work to allow client time to perform tasks that you could do more efficiently (i.e. encourage as much independence as possible and as safe)

2.8 Adapt tasks to encourage/allow client or family member to participate positively in care

2.9 Help others' deal with personal guilt feelings when they seek and accept offered help

2.10 Recognize physical symptoms and ill effects of caregiving demands on primary caregiver

2.11 Recognize signs and symptoms of emotional stress on family members

2.12 Encourage and suggest ways to increase physical exercise as way to release tension and build body strength and flexibility

2.13 Observe and record client and family member response to care plan

2.14 Identify areas of need for additional teaching and/or assistance

2.15 Evaluate available resources (written materials and community or other services) to select those best suited to client and family needs

2.16 Understand "normal" physical, emotional, social characteristics of:
   * infants (0 to 2 years)
   * preschool children
   * school age children
   * teen age children
   * young adulthood
* middle adulthood
* elderly
* aged

2.17 Teach others (informally by example, or formally by telling directly) about "normal" behavior/reactions by children when a caring adult is ill or incapacitated

2.18 Rearrange furnishings (such as carpets, chairs, lighting, appliances, etc.) for safer and easier access through the home

2.19 Discuss ways to involve client with normal family/household events as much as possible

2.20 Suggest ways client can modify work, hobbies, interests to maintain involvement

2.21 Recommend a variety of natural sleep inducers for client and family, when appropriate

2.22 Apply time management skills to personal work load

2.23 Helping others organize work and activities for improved time management

2.24 Research various public sources for information needed by client, client's family or self

2.25 Demonstrate skill in balancing the needs of work and family

3.0 HOME MANAGEMENT

3.1 Change household methods for improved safety in
* food storage, preparation and preservation
* collecting, laundering and storing clothes, bedding
* storing and accessing frequently used items
* improving access for persons experiencing physical limitations
* improving access to and from and movement throughout the house (safeproofing steps, railings, ramps, sharp-edged tables, cupboards, counters, etc.)
* barriers to wall sockets and other electrical devices
* other ____________________________
3.2 Teach/show family more efficient way to organize, clean and perform household tasks.

3.3 Teach/show how to substitute available household materials for more expensive and often hazardous products

3.4 Assist family members in taking on new roles and responsibilities (wife now cares for car; children now prepare and cleanup after all meals; husband now coordinates child care and school-related activities, etc.)

3.5 Adapt furniture for comfort and ease of use for clients with special needs

3.6 Examine security systems for effectiveness and recommend improvements for a more secure home and property

3.7 Sequence tasks for more efficient work

4.0 FINANCIAL PLANNING AND MANAGEMENT

4.1 Know and discuss with clients or family available community resources for other needed services, such as day care for children or elderly, respite care for disabled and chronically ill caregivers

4.2 Know and discuss services (other than those you provide) available for the client and/or family

4.3 Develop and share ideas for managing essential household duties with less money.

4.4 Develop and maintain a household budget

4.5 Assist client and family in identifying short, medium and long range financial goals or targets

4.6 Encourage family/client to accept others' offers of help, providing them with specific requests (i.e. staying with client one afternoon each week, transporting to doctor, or other outing, doing laundry, etc.)
5.0 COMMUNICATION

5.1 Request comments from client and/or family about the type and quality of care you provide

5.2 Request comments from supervisor about the type and quality of your work performance

5.3 Intervene, when appropriate, in arguments in the client's home

5.4 Negotiate and help others resolve differences/conflicts

5.5 Demonstrate positive and non-value/judgemental ways of speaking and listening to others

5.6 Teach others how to speak to one another and listen effectively

5.7 Encourage clients or family members to clarify personal values and goals.

5.8 Teach others how to develop a plan to accomplish desired tasks, to reach identified goals

5.9 Show others how to accomplish a large, complex task by breaking it into manageable pieces

5.10 Teach how to use "family meetings" to solve problems

5.11 Encourage others to reminisce and share past life events

5.12 Observe the following within the family:
* others' communication styles with client (frequency, volume, content, tone of voice, attitude, facial expressions, etc.)
* others' physical behavior with client (attention, proximity, closeness, touching, intimacy, avoidance, etc.)
* others' reactions to clients' needs (anticipate and help; willing response, indifferent, mechanical responses, ignoring, etc.)
* interpersonal characteristics of others besides client (between children, other parent and children, )
* changes over time in others' attitudes, behavior, appearance, health status, as client care needs persist
5.13 Document in writing the accomplishments and observations including:
* ADL and IADL tasks completed
* behaviors, discussions and client and family discussions
* suggestions, advice given to client and family and their responses

5.14 Explain the system of services (continuum) needed by clients

5.15 Encourage family members to find release from caregiving demand by participating outside interests (i.e. church, hobbies, education, networks for those in similar situations, recreation, etc.)
APPENDIX C
Final Survey Inventory and Cover Letter
January 4, 1993

Dear Caregiver:

We need your help with a statewide study of HOME-BASED CARE in Alaska.

The enclosed Home-Based Care Inventory is part of a study of home-based services delivered to consumers and families, conducted by the University of Alaska Anchorage, Assistive Care Program. The purpose of the study is to determine the importance of and level of proficiency of selected skills needed in a home-based setting, by persons who provide care to those who are temporarily or permanently unable to care for themselves. The results of this study will guide efforts to improve caregiver training and education.

You are asked to participate in this study as one of over 900 certified home-based caregivers in Alaska. In order to get a complete picture of home-based care, it is important that responses from everyone in the sample be included in the data. Please take about 15 minutes to complete each item on the Inventory. Use the postage-paid envelope provided to return the Inventory to me. Your answers are very important to this study. I welcome your response anytime, but would like to have this information by January 20, 1993.

If you are not currently working for an agency or as an independent paid home-based caregiver, or caring (nonpaid) for someone in a residential setting, there is no need to complete the Inventory. Simply mark the space below to indicate that you are not giving care now, and return the uncompleted Inventory in the postage-paid return envelope.

I am not currently working as a home-based caregiver. If you care to, please tell us why you no longer working as a caregiver.

Because we need a reply from everyone, it is important that you return the Inventory even if you are not working as a caregiver.

The first ten (10) people to return the Inventory will receive a complimentary caregiver reference book mailed directly to your home. So complete the Inventory and drop it in the mail today. If you would like to receive a summary of the results of the study, please check the box provided.

Thank you for taking a few minutes of your time to help us improve training and inservice education for home-based caregivers in Alaska.

Sincerely,

Jan L. Gehler, Coordinator/Faculty
Home Economics Department

Gerrie Ivy, Coordinator
Older Persons Action Group
Nurse Assistant Program
INSTRUCTIONS

In this Inventory, the word "consumer" is used broadly to describe anyone receiving home care services. For example, consumers can be elderly, small children, chronically ill, developmentally disabled, or others receiving agency-sponsored (paid) or trained (but unpaid) care in a residential setting. Settings can be individual homes, adult residential centers, or skilled nursing institutions.

Likewise, the word "family" represents any person(s) in close proximity to, or living with the consumer, whether they are related by blood or marriage, or are an important friend or partner. The study will look at if and how families affect caregiver service.

SECTION ONE of the Inventory includes general questions about your work or service in home-based care. Please answer all of the questions. For some questions, it may be appropriate for you to say "does not apply."

SECTION TWO contains a list of numbered activities. For each activity we are asking you two questions: How frequently do you perform this activity? and How important is this activity to your job?

Question 1: How frequently do you perform this activity? Circle the number that most closely describes how often you perform the activity: 1 = never; 2 = occasionally; 3 = frequently.

Occasionally means activity performed more than once but not on a regular basis. Frequently means something you do repeatedly and maybe with some regularity, for example, weekly, once or twice each month, sometime during each visit, etc.

Question 2: How important is this activity to your job? Circle the number that most closely corresponds to your opinion about the value of this activity to your job: 1 = not important; 2 = somewhat important; 3 = moderately important; 4 = very important; 5 = extremely important.

You may not be currently performing some activities listed but think they would be important to the job. Please mark your "importance" score as if you were performing the activity.

For most questions you can simply circle the number of the choice that best reflects your response. To change your answer, mark through your first mark, and then circle the correct number. A few questions ask you to write in information; print your answers in the spaces provided next to these questions. You may use a pencil or pen to complete this Inventory.

It should take you about 15 minutes to complete the Inventory. Please fill it out now using your best judgment, and send it back in the postage-paid return envelope. Thank you for your time and response.

SECTION ONE

Employer ____________________________________________________________
Caring for family or friend ____________________________________________
Fulltime _____ Parttime _____ Number hours per week _____ Paid: Yes ___ No ___
Job title ____________________________________________________________
Number of others with same title ________________________________________
How long with this employer? _________ How long doing this kind of work? _________
SECTION TWO
Circle the number that most closely describes how often you do the following, and then how important you think the activity is to performing your job well.

<table>
<thead>
<tr>
<th>Frequency of Performance</th>
<th>Importance to the job</th>
</tr>
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<tbody>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
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</table>

1. Help consumers plan simple, low cost, nutritious meals for consumers and/or family with both normal and special nutritional needs
2. Evaluate quality of food in home for nutritional value and food safety
3. Plan, organize and shop for needed items.
4. Help consumers and family read and understand written guidelines and product food labels.
5. Redivide purchased foods into daily servings for easy use by single client or young or inexperienced cooks
6. Teach safe and efficient methods for working with food to reduce risk and burden on consumer and/or family
7. Observe and record food intake, waste, food-related behaviors and general satisfaction of consumer and family
8. Understand "normal" physical, psychological, emotional, social characteristics of each of these life stages: young children (infants through school age); teen age children; young and middle adulthood; aging and elderly
9. Help consumers and family members understand their own responses to normal changes that occur in each life stage and those responses that are different during the care period
10. Observe, record and notify supervisor of behaviors that may come from family problems such as substance abuse, aggression, becoming withdrawn, poor work or school performance, etc.
11. Observe and note cultural, spiritual or other activities that may be important to the consumer and family in coping with the condition
12. Arrange your work to allow consumer and family time to perform as many care tasks as they are able.
13. Help consumer and family understand and deal with personal guilt feelings when they seek and accept help offered from others
14. Recognize signs and symptoms of emotional stress and other ill effects on family members
15. Encourage, suggest and model ways to increase physical exercise as way to release tension and build body strength and flexibility
16. Observe, record and notify supervisor of client and family member responses to any part of care plan
17. Identify areas of need for additional teaching and/or assistance
18. Know about available resources (such as written materials, referrals and other services and community agencies) to share or refer those best suited to consumer and family needs
19. Apply time management skills to your own work load to better balance demands from your work and family
20. Be aware of safety rules and actions related to:
   * 21. food storage, preparation and preservation
   * 22. collecting, laundering and storing clothes, bedding
   * 23. storing and reaching frequently used items
   * 24. improving access to and from and movement throughout the house
       (safetyproofing steps, railings, ramps, sharp-edged tables, cupboards, counters, etc.)
   * 25. barriers to wall sockets and other electrical devices
   * 26. home security systems
   * 27. making furniture more comfortable and easier for consumer to use
   * 28. other

29. Teach/show family more efficient and less expensive ways to clean, organize, and do household tasks.

30. Help family members take on new jobs and responsibilities (wife now cares for car; children now prepare and clean up after all meals; husband now coordinates child care and school-related activities, etc.) by modeling and supporting

31. Help family identify short, medium and long range goals, to better develop and maintain a household budget and other needed plans

32. Ask consumers, family members and supervisor to evaluate and discuss with you the quality of care you provide

33. Model and teach others how to speak positively to one another and listen effectively

34. Encourage clients or family members to clarify personal likes and dislikes.

35. Show others how to accomplish a large, complex task by breaking it into manageable activities

36. Teach family how to use "family meetings" to work on problems

37. Encourage others to reminisce and share past life events

38. Observe, record and notify supervisor of the following within the family:
   * 39. consumer's Activities of Daily Living tasks completed
   * 40. behaviors, and consumer and family discussions
   * 41. suggestions, advice given to consumer by family and any responses
   * 42. others' communication styles with consumer (frequency, volume, content, tone of voice, attitude, facial expressions, etc.)
   * 43. others' physical behavior with consumer (attention, proximity, closeness, touching intimacy, avoidance, etc.)
   * 44. others' reactions to consumer's needs (anticipate and help; willing response, indifferent, mechanical responses, ignoring, etc.)
   * 45. interpersonal characteristics of others besides consumer (between children, other parent and children,)
   * 46. changes over time in others' attitudes, behavior, appearance, health status, as consumer care needs persist

THANK YOU FOR COMPLETING THIS INVENTORY.
PLEASE RETURN BY JANUARY 20, 1993.