THE INFLUENCE OF A RELATIONSHIP ENHANCING PROGRAM OF CARE ON RESIDENTS, FAMILY MEMBERS AND NURSING STAFF.

by

Katherine Simone McGilton

A thesis submitted in conformity with the requirements for Doctor of Philosophy Graduate Department of Nursing Science University of Toronto

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Abstract
The Influence of a Relationship Enhancing Program of Care on Residents, Family Members and Nursing Staff

by
Katherine Simone McGilton
Doctor of Philosophy
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University of Toronto, 2001

Quality of life for residents in long-term care institutions has been linked to their having meaningful and genuine relationships with their careproviders, who are mainly health care aides (HCAs) and registered practical nurses (RPNs). Despite this link, there continues to be a paucity of controlled studies concerning the benefits of restructuring caregiving to enhance these relationships. A relationship enhancing program of care based on Winnicott's (1960) conceptualization of holding relationships was implemented over a seven month period with the objective of improving the quality of the relationship between the resident and a specific careprovider.

A quasi-experimental within group comparison design over time was used to evaluate the intervention on two long-term care units (1 intervention and 1 comparison). Data were collected at baseline and at four months post intervention. Paired t tests were used to compare the mean within group differences for residents, family members and careproviders on each unit before and after the intervention.
Over time, residents on the intervention unit perceived positive changes in the holding relationships with their careproviders, $t(20) = 2.88$, $p = .009$; however, residents did not perceive that close relationships had been developed with their careproviders. Family members perceived changes in the holding relationship between their relatives and their careproviders, $t(23) = 3.84$, $p = .001$, but in contrast to residents, perceived these relationships as close, $z = 2.33$, $p = .02$.

Finally, careproviders demonstrated an improvement in their ability to provide a holding relationship, $t(27) = 3.25$, $p = .003$, and in their ability to provide continuity of careprovider assignment, $t(27) = 11.6$, $p = .001$.

The intervention had no effects on secondary outcomes. No statistically significant changes over time were found on the comparison unit on any outcome. The intervention did lead to a change in the way careproviders related to residents and Winnicott's theory was useful in explaining the change.
Acknowledgments

In undertaking this research, I have been most fortunate to have had the influence and support of many individuals. I am grateful for the excellent guidance and support from my co-supervisors, Dr. Linda O’Brien-Pallas and Dr. Dorothy Pringle and the other committee members; Dr. Martin Evans, Dr. Francine Wynn, Dr. Donna Wells and Dr. Gerarda Darlington. I would also like to extend my gratitude to my external examiner, Dr. Norma Stewart, for her thoughtful comments and encouragement.

The participation of the residents, family members and nursing staff of the centre is gratefully acknowledged. Their thoughtful comments have given rise to my deeper understanding about careprovider-resident relationships and provoked new questions for my future consideration. I am also grateful to the management at the facility for their support of this research.

Fellowship support from a Connaught Scholarship, Quality of Nursing Worklife Studentship, Gail Donner Scholarship (RNAO), Jill E Schneuker Fellowship in Nursing (CNF) and an Ontario Graduate Scholarship is gratefully acknowledged.

No effort of this magnitude is ever accomplished alone. I am incredibly fortunate to have a network of family, friends and colleagues who have sustained me throughout my doctoral education. Above all, I dedicate my efforts to my husband Jim, my children Brian and Jeffrey, and to my parents, Gabrielle and Otto. Their love and encouragement was pivotal to the completion of this dissertation.
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Chapter 1: The Introduction

The Background

The quality of life of residents in long term care environments is one of the long-standing problems in health care. Regulations have been effective in reducing some of the most egregious problems, such as physical abuse and extremely neglectful care, but many problems continue to exist (Agich, 1990). Many elders are dehumanized as a result of interactions with careproviders (Mitchell & Jonas, 1995; Kayser-Jones, 1991). This depersonalization continues to occur despite reports that have linked quality of life for the older people in long term care with meaningful and genuine relationships with the people who care for them, that is, their careproviders (Aller & Van Ess Coeling, 1995; Ford, 1995; Grau, Chandler, & Saunders, 1995).

People are social beings and interacting with others provides support, comfort, love and affection; needs that are universal. If people become institutionalized in old age, social contact with friends and relatives may diminish, and many may experience intense needs for attachment, nurturance, and support (Barnard, 1988). Therefore, elderly individuals require meaningful relationships with nurses and careproviders (health care aides or registered practical nurses) to fill this need. From the family's perspective, the importance of these relationships is paramount, because families believe that caring for their family member is not just a set of tasks that can be assigned to particular roles, rather it is an ongoing process that must occur within meaningful relationships (Duncan & Morgan, 1994). The careprovider plays a critical role in building a relationship with the resident that supports, involves, and validates the human being with functional and cognitive impairments (Taft, Delaney, Seman & Stansell, 1993). Excellence of care and the manner in which it is given have much to do with the quality of a resident's life.
Nurses also have reported the importance of being involved in relationships with residents. They have indicated that interpersonal relationships with residents in nursing homes is what makes them stay at their jobs (Robertson, Herth, & Cummings, 1994), is the best aspect of their jobs (Monahan & McCarthy, 1992) and enriches their days at work (Rundqvist & Severinsson, 1999). These relationships represent a largely untapped resource for improving quality of life, although researchers, have tended to ignore them. Despite the mounting evidence of the need for a meaningful relationship between careprovider and resident, no intervention studies were found that specifically addressed methods for careproviders to build or enhance these relationships in long-term care. However, three approaches were found that suggest they might serve to facilitate the development of personal relationships. The first increases the continuity of provider (Teresi et al., 1993a; Patchner, 1987), the second uses educational interventions to increase the knowledge and skills of the nursing staff (Kihlgren et al., 1993, Coker et al., 1998), and the third provides the careproviders with support (Hallberg & Norberg, 1993).

Continuity of careprovider models have been implemented to improve the general quality of care to elders as careproviders have better knowledge of the resident which can increase individual attention provided to residents. This increase in continuity of contact between careprovider and resident has also resulted in benefits for the careprovider-resident relationship. Careproviders suggested that they "became closer to residents and felt they had a better relationship with them" (Teresi et al., 1993a) and "felt emotionally attached to the residents" (Patchner, 1987).

The second approach found to facilitate relationships between careproviders and residents involved training sessions aimed at improving the interactional skills of the careproviders.
Interventions have been aimed at enhancing interactions with residents (Allen & Turner, 1991; Loveridge & Heineken, 1988; Kihlgren et al., 1993) and to learn about the individuality of the person (Coker et al., 1998, Pietrukowicz & Johnson, 1991). These studies provided anecdotal evidence of the enhancement of a relationship between careprovider and resident (Kihlgren et al.), and that careproviders understood their residents better and were less likely to impose their values on the residents (Coker et al.).

Supporting careproviders is the third approach that was found to facilitate the development of a relationship between careproviders and residents. Hallberg and Norberg (1993) found that clinical supervision led to careproviders remaining close to their residents in spite of agitated behaviors. Careproviders commented that the supportive weekly sessions led by the investigator assisted them with interpreting the patients’ behaviours in a positive light and they were able to see the meaning of the residents’ lives. These results suggest that in an attempt to "care for the careproviders", a commitment from careproviders to the delivery of high quality care may occur, which may facilitate the careprovider-resident relationship.

Problem Statement

A major gap in the literature with respect to residents in long term care institutions is the absence of controlled studies that examine the benefits of restructuring the provision of care in order to enhance relationships that may optimize the residents' quality of life and the nurses' work satisfaction. The question investigated in this study was: What is the influence of a relationship enhancing program of care (REPC) on the relationships between residents and their careproviders? The program of care focused on combining and extending three different strategies to enhance interpersonal relationships between residents and careproviders that had
previously been tested individually and for which some evidence of effectiveness existed. The three strategies are (a) a continuity of careprovider model in which the careproviders have control over which residents are assigned to them, (b) the acquisition of the skills and knowledge required by the careproviders to enhance interpersonal relationships, and (c) support to the careproviders from their nursing supervisors to assist them in maintaining effective careprovider-resident relationships.

**Study Purposes**

The primary purpose of the study was to examine the influence of the relationship enhancing program of care (REPC) on resident-careprovider relationships from the perspective of the residents and their family members and on the behaviors of their careproviders. The secondary purpose of the study was to examine the influence of the REPC on residents’ physical status, on careproviders’ perceptions of their relationships with their residents and their supervisors, and on careproviders’ levels of expressed empathy.

**Review of the Literature**

In this section, theoretical propositions and empirical findings supporting the problem statement are presented. The review was guided by Ganong’s (1987) stages of an integrative research review. The individual studies were reviewed according to criteria set out by Polit and Hungler (1995). The literature review consists of three sections, (a) continuity of careprovider research, (b) careprovider/resident interaction research, and (c) the supportive work environment research. Research studies investigating these phenomena of interest were reviewed and the tables that summarize the studies for each section are organized by methodology (e.g., qualitative or case studies and quantitative studies). The qualitative and case studies were reviewed
according to the following criteria: (a) the source and the design, (b) the sample and setting, (c) the focus of the study, and (d) the findings. The quantitative studies were reviewed according to the following criteria: (a) the source and the study design (e.g., cross-sectional (CS), longitudinal (long), or quasi-experimental (quasi-exper)); (b) the study setting, sample and response rate (RR), (c) the independent variables and their psychometric properties if these data were provided; (d) the dependent variables; and (e) the study results. Only research that was conducted in a long term care environment was examined, since the philosophy, setting and outcomes selected differ from other clinical settings.

**Continuity of the Careprovider Research**

In the studies that were reviewed, continuity of careprovider assignments were implemented to improve the general quality of care to elders. However, they also showed that the elders benefited from the careprovider-resident relationship. Within nursing, continuity of provider is emphasized in the primary nursing literature. Although primary nursing models with all licensed staff do exist in some long-term environments (Goldman, 1998), in the majority of facilities, certified nursing assistants or health care aides make up the largest portion of nursing staff (McAiney, 1998). As a consequence, primary nursing continuity of care assignments are not appropriate in long-term care settings without modifications. In a setting with a broad skill mix, the professional nursing staff retain the primary accountability for client care. Health care aides (HCAs) or nursing aides (NAs), who provide direct care, are consistently assigned to the same resident and report to the registered staff. Such continuity of care assignments in long-term care are beneficial for the following reasons: (a) the nursing assistants caring for the same residents on a long-term basis have better knowledge of the residents' and family members' preferences, (b)
they have more intimate knowledge of the residents' current level of function and are sensitive to
changes that possibly are indicative of incipient medical problems, and (c) they are able to
coordinate care given to several residents because of the knowledge they have about the specific
needs of each (Teresi et al., 1993a). Continuity of care provider is challenging at times for the
care providers, as some residents are difficult to be with every day. For these care providers, the
need to have a break from challenging residents is vital for the success of a continuity of
care provider assignment over time. In long term care continuity of the care provider is effective in
generating positive resident and care provider outcomes (Table 1).

Table 1

Continuity of the Care Provider Research

<table>
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<tr>
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<th>Setting &amp; Sample</th>
<th>Focus of the Study</th>
<th>Findings</th>
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<tr>
<td>Athlin &amp; Norberg (1987)</td>
<td>1 long term care unit</td>
<td>To describe the development of the interaction between residents and their care providers during feeding in a permanent assignment model of care delivery. Nurses were interviewed after the 1st, 7th and 14th meal.</td>
<td>Nursing staff seemed to have adjusted their own behavior to that of the patient. This made feeding easier. Nursing staff reported feeling more certain about how to interpret the eating behaviors of their patients over time. Nursing staff reported a more positive attitude toward the patients.</td>
</tr>
<tr>
<td>Ethnographic Study</td>
<td>( n = 4 ) nursing staff (RNs &amp; HCA) ( n = 6 ) severely demented residents</td>
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<tr>
<td>Mitchell &amp; Jonas (1995)</td>
<td>6 long term care units</td>
<td>To understand the residents’ quality of life in a long term care facility.</td>
<td>Continuity of care may foster personal relationships between staff and residents, however clients who have controlling caregivers may suffer.</td>
</tr>
<tr>
<td>Qualitative: Parse's Methodology</td>
<td>( n = 80 ) residents and 20 were diagnosed with Alzheimer Disease</td>
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### Qualitative Studies

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<td>Netten (1993)</td>
<td>2 long term care facilities</td>
<td>To understand the residents’ quality of life in a long term care setting.</td>
<td>Residents who are permanently assigned to care providers appear to form connections with care providers as residents react with more apathy and disengagement when their usual care provider is absent. Care providers who have worked with the same residents may be more familiar with their personal histories.</td>
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### Quantitative Studies

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<th>Dependent Variables</th>
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<td>Anderson &amp; Hughes (1995)</td>
<td>3 long term units n = 17 nursing staff (RNs &amp; HCAs)</td>
<td>Modular nursing</td>
<td>Staff: Continuity; Accountability; Productivity; Quality of care (α.91); Cognitive and Behavior abilities of residents (intrarater reliability .58 to .97); Job satisfaction (α.92); Absenteeism; Turnover</td>
<td>Staff: Continuity increased for treatment group, t (16) = 8.6, p &lt;.001, but there was a significant decline in the perception of quality of care delivered, t (16) = 2.1, p &lt;.01</td>
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<td>Campbell (1985)</td>
<td>1 long term care unit</td>
<td>Primary care nursing</td>
<td>Staff: Turnover rate; Satisfaction with care delivered; Relationship with others; Professional nursing practice.</td>
<td>Staff: Turnover reduced by 29%. Residents: 75% reduction in ulcers; 11% increase in patient discharges to lower levels of care. (no levels of significance reported)</td>
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<td>Implemented over a 1 year period</td>
<td>Resident: Incidence of ulcers; Ambulatory status; Discharges to lower levels of care.</td>
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### Quantitative Studies

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<th>Significant Results</th>
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<td>Cox et al. (1991)</td>
<td>2 units in a nursing home</td>
<td>Quality of life nursing care model</td>
<td>Staff: Perceptions of residents’ control (α.68); Holistic care (α.73); Resident centered staffing (α.84); Perception of administrators’ commitment to holistic care (α.71) &amp; Resident centered staffing (α.68); Quality of care (α.63)</td>
<td>Staff: Perceptions of residents’ control, $E(1,9) = 5.29, p &lt; .03$, and quality of care increased for treatment group, $E(1,9) = 6.82, p &lt; .01$.</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>$n = 15$ nursing staff (RN &amp; HCAs)</td>
<td>Implemented over a 6 month period</td>
<td>Residents: Decisional control (α.87); Self care (α.91); Symptoms index (α.83) Psychological well being (α.87); Loneliness; Social activity index; Social network size; Health status; Satisfaction with care (α.78)</td>
<td>Residents: Treatment residents reported increases in choice and control and well-being, $t (20) = 3.84, p &lt; .001$, and a decline in health status and self care, $t (19) = -2.98, p &lt; .008$.</td>
</tr>
<tr>
<td>McAiney (1998)</td>
<td>4 nursing homes</td>
<td>Empowered aide model of care</td>
<td>Staff: Burnout (α.75-.91); Work Environment Scale (α.58-.78); Physiological stress response data - salivary cortisol &amp; immunoglobulin A; Perceptions of residents’ happiness and affect (α.90); Perceptions of residents’ hardness (α.57); Health conditions and habits, medication, and life events; Absenteeism.</td>
<td>Staff: Health care aides’ level of burnout decreased, $E (1,17) = 4.9$, $p &lt; .05$, and there was an improved perception of the work environment for the treatment group, $E(1,17) = 5.24, p &lt; .05$.</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>$n = 67$ nursing staff (HCAs)</td>
<td>Implemented over a 4 month period.</td>
<td>Staff: Quality of care; Turnover; Attitude towards the model</td>
<td>Staff: Quality of care increased and turnover decreased for treatment group (16.9% to 4.7%).</td>
</tr>
<tr>
<td>Patchner (1987)</td>
<td>2 nursing homes</td>
<td>Permanent assignment model</td>
<td>Residents: Behaviors; Attainment of care plan goal; Attitudes toward model</td>
<td>Residents: For treatment group lower incidence of inappropriate behavior. (39% to 24%).</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>$n = 41$ nursing staff (HCAs)</td>
<td>Implemented over a 9 month period.</td>
<td>(no levels of significance reported)</td>
<td></td>
</tr>
</tbody>
</table>
### Quantitative Studies

<table>
<thead>
<tr>
<th>Source &amp; Design</th>
<th>Setting &amp; Sample</th>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Significant Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teresi et al. (1993a)</td>
<td>2 nursing homes</td>
<td>Primary care model</td>
<td>Staff: Staff morale (α.76); Staff attitude toward primary nursing (α.83); Staff attitude toward permanent assignment; Staff global rating of permanent assignment.</td>
<td>Staff: Favorable attitudes toward primary care for treatment group, F(1) = 4.79, p &lt; .035.</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>n = 45 nursing staff (HCAs)</td>
<td>Implemented over a 6 month period.</td>
<td>Residents: Satisfaction with care (α.57); Global rating of resident satisfaction with care; Resident attitude toward primary care (α.66)</td>
<td>Residents: Intervention residents were more satisfied and had a more positive attitude about primary care, F(1) = 4.20, p = .01.</td>
</tr>
<tr>
<td>Teresi et al. (1993b)</td>
<td>2 nursing homes</td>
<td>Primary care model</td>
<td>Residents: Behavior measure (α.70); Rater observed behavior (α.80); Feeling tone questionnaire (α.90): Social activities index; Aide rated affect (α.71); Screen affect (α.73); Mood (α.66).</td>
<td>Residents: Treatment group had improved affect, F = 4.20, p &lt; .05, a decrease in disturbed behavior, t = 2.00, p = .05, and an improvement in their social activities, t = 2.57, p &lt; .01.</td>
</tr>
<tr>
<td>Wilson &amp; Dawson (1989)</td>
<td>2 long term care units</td>
<td>Primary care nursing</td>
<td>Staff: Job satisfaction; Attitudes; Absenteeism, Turnover</td>
<td>Staff: Treatment group had an increase in favorable attitudes of the residents</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>n = 53 nursing staff (RNs, RPNs, &amp; HCAs)</td>
<td>Implemented over a 6 month period.</td>
<td>Resident: Tranquility-Agitation (α.68), Vitality (α.72), Personal Control (α.80) Functional Independence Goal scale (α.90)</td>
<td>Residents: Increased functional independence (p &lt; .007) and reduction of agitation (p &lt; .004) for the residents in the treatment group.</td>
</tr>
</tbody>
</table>

The continuity of careprovider research that was reviewed suffers from various methodological shortcomings that limit the generalizability of the findings. The main limitations include a shortage of theoretical models, inadequacy of instruments, lack of control groups and some sampling concerns which are discussed in detail in the following paragraphs.

Only Cox, Kaeser, Montgomery, & Marion (1991) included a conceptual framework to
guide the study. The absence of theoretical models in the majority of the studies has created confusion in determining the appropriate outcomes affected by continuity of the careprovider. The outcomes are imprecise with 21 separate resident outcomes delineated in the studies reviewed in Table 1. Some of these outcomes include the residents’ social activities (Teresi et al., 1993b), ambulatory status (Campbell, 1985), satisfaction with care (Teresi et al., 1993a) and vitality (Wilson & Dawson, 1989). Only three studies had similar outcomes, i.e., the residents’ disturbed or agitated behavior (Patchner, 1987; Teresi et al., 1993b; Wilson & Dawson, 1989). As well, the effect of continuity on careproviders’ outcomes is diverse as there were a total of 10 delineated.

An additional issue is the inadequacy of instrumentation. Some tools had previously been used in long term care settings (Teresi et al., 1993a, 1993b) but some were developed by the investigators for the studies and were used without psychometric testing (Anderson & Hughes, 1995; Campbell, 1985). Further, investigators who used established tools only reported internal consistencies and the validity of instruments was not described (Cox et al., 1991; Teresi et al., 1993a; Wilson & Dawson, 1989). Another methodological problem concerning instrumentation was the choice of tools used to measure the residents’ change in affect and behavior. The instruments selected tended to be rating scales with participant observers such as nurses who worked in the setting (Patchner, 1987; Teresi et al., 1993b). This introduces the problem of bias since these nurses may rate the residents’ behavior based on their experience with the resident and not the observed behavior (Stewart, Hiscock, Morgan, Murphy, & Yamamoto, 1999).

Another difficulty encountered was the lack of control groups (Campbell, 1985; Patchner, 1987) and selection bias in allocating the treatment and control groups (Cox et al., 1991; Wilson
& Dawson, 1989). Lack of control groups threatens the internal validity of the study. Small or unreported careprovider sample sizes (Anderson & Hughes, 1995; Campbell; Cox et al.) limit the study power, and lack of reported response rates and nonprobability convenience samples that characterized the continuity of careprovider research decrease the generalizability of the findings.

Despite the methodological shortcomings, the research in this area has consistently shown that continuity of careprovider models can lead to positive outcomes for residents and careproviders. Residents who had careproviders that cared for them on a consistent basis showed (a) fewer incidences of agitation and disturbed behavior (Patchner, 1987; Teresi et al., 1993b), (b) an improved affect (Teresi et al., 1993b), (c) improved physical integrity (Campbell, 1985), and (d) a general increase in well-being (Cox et al., 1991). Careproviders who cared for residents under a continuity of care assignment model (a) had a better attitude toward the elderly (Cox et al.), (b) had lower turnover (Campbell); (c) had decreased levels of burnout and improved perceptions of the work environment (McAiney, 1998), (d) perceived that quality of care had improved as they got to know the residents better (Patchner), and (e) felt they became closer to residents (Teresi et al., 1993b). Among the qualitative studies, investigators found links between continuity and effective care (Athlin & Norberg, 1987) as well as continuity and personal relationships (Mitchell & Jonas, 1995).

Four of these studies, however, provided evidence that more than just a continuity of careprovider model was required. Cox et al. (1991) developed and tested a Quality of Life Nursing Care Model that instead of being focused exclusively on the physical care of the resident, encouraged the staff to expand their focus to include important quality of life considerations such as residents' needs for choice and control. In-service education was geared toward the provision
of quality of life nursing care. Teresi et al. (1993a, 1993b) evaluated a primary care model implemented in a long-term care unit. The added intervention included the development of a team approach and an enhanced communication component. McAiney (1998) evaluated a permanent assignment model of care that was focused on empowerment, organization, education, and teamwork for the health care aides. In a study by Patchner (1987), the intervention allowed the nursing aides to choose their permanent assignment based on the residents they enjoyed caring for. These additional interventions are warranted because clients who have task-focused and controlling careproviders may suffer under a continuous assignment system of care delivery (Mitchell & Jonas, 1995). As such, the need to maintain continuity of the careprovider was only one element of the newly designed care delivery system.

**Careprovider-Resident Interational Research**

A consensus has emerged that positive careprovider interactions with residents can have a critical impact on the development of the relationship between nursing home residents and their careproviders (Cars-Verhallen, Kerkstra, & Bensing, 1999). Yet, the following literature review will demonstrate that there are many factors influencing this personal relationship. The review of the research studies on interactions is organized as follows: (a) the nature of the careprovider/resident interaction in long term care environments, (b) the consequences of careprovider/resident interactions and relationships, and (c) the interventions utilized to enhance the careproviders’ interactional skills.

**Nature of the careprovider-resident interaction research.**

Several studies over the past 20 years have examined the nature of the careprovider/resident interactions in long-term care environments (Table 2). The influence of the
resident, careprovider, and work environment on the quality of the interactions is revealed to some extent in an analysis of the results.

Table 2

Nature of the Careprovider-Resident Interaction Research

<table>
<thead>
<tr>
<th>Source &amp; Design</th>
<th>Setting &amp; Sample</th>
<th>Focus of the Study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowers (1988)</td>
<td>2 long term care units</td>
<td>To understand the family members’ perceptions of care delivered to their relative.</td>
<td>Families felt that staff frequently failed to provide preservative care during their interactions with residents. Families expressed that preservative care included maintaining the person’s dignity, maintaining their relative’s hopes and maintaining their control over their environment. The type of care that existed was especially difficult for families to comprehend because when people are admitted to a long term care facility, their families hope that staff function as a surrogate family in a homelike setting.</td>
</tr>
<tr>
<td>Grounded Theory</td>
<td>( n = 20 ) family members whose relatives lived in a long-term care facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duncan &amp; Morgan (1994)</td>
<td>1 metropolitan area</td>
<td>To understand which staff behaviors were most important and to understand how family members evaluate care.</td>
<td>One clear theme that emerged centered on family caregivers’ reactions to how staff related to their family member. For some of the family caregivers interviewed, the observed interactions of the staff with their family members were not perceived as respectful and did not involve personal sensitivity for the resident. Family caregivers voiced a strong desire for staff to treat the resident as a person rather than as an object of care. In particular, these families did not want their resident’s needs for the technical services provided by the nursing home to result in loss of personal dignity and worth.</td>
</tr>
<tr>
<td>Phenomenology</td>
<td>( n = 171 ) family members of residents with Alzheimer Disease whose relatives lived in a long-term care facility.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source &amp; Design</td>
<td>Setting &amp; Sample</td>
<td>Independent Variable</td>
<td>Dependent Variable</td>
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</tr>
<tr>
<td>Armstrong-Esther &amp;</td>
<td>7 geriatric wards</td>
<td>Lucid, slightly</td>
<td>Resident behaviors and social interactions</td>
</tr>
<tr>
<td>Browne (1986)</td>
<td>4 psychogeriatric wards</td>
<td>confused and confused residents</td>
<td></td>
</tr>
<tr>
<td>Cross-Sectional (CS)</td>
<td>n = 23 residents</td>
<td>Lucid, slightly confused and residents</td>
<td></td>
</tr>
<tr>
<td>(1994)</td>
<td>n = 118 nursing staff</td>
<td>Lucid, slightly confused and residents</td>
<td></td>
</tr>
<tr>
<td>Armstrong-Esther et al. (1994)</td>
<td>1 geriatric medical ward</td>
<td>Lucid, slightly</td>
<td>Resident behaviors, social interactions, and activities.</td>
</tr>
<tr>
<td>CS</td>
<td>n = 24 residents</td>
<td>confused and</td>
<td></td>
</tr>
<tr>
<td>Caris-Verhallen et al. (1998)</td>
<td>1 nursing home for the elderly</td>
<td>Nursing staff working in a</td>
<td>Nursing staffs' verbal behaviors (Adapted from Roter's RIAS, 1989, interrater reliability = .69 and 1.)</td>
</tr>
<tr>
<td>CS</td>
<td>n = 23 nursing staff (RNs)</td>
<td>nursing home or in a home care organization</td>
<td></td>
</tr>
<tr>
<td>Caris-Verhallen et al. (1999)</td>
<td>1 nursing home for the elderly</td>
<td>Nursing staff working in a</td>
<td>Nursing staffs' non-verbal behaviors. (Adapted from Roter's RIAS, 1989, interrater reliability = .74 to .81)</td>
</tr>
<tr>
<td>CS</td>
<td>n = 23 nursing staff (RNs)</td>
<td>nursing home or in a home care organization</td>
<td></td>
</tr>
<tr>
<td>Source &amp; Design</td>
<td>Setting &amp; Sample</td>
<td>Independent Variable</td>
<td>Dependent Variable</td>
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</tr>
<tr>
<td>Clark &amp; Bowling (1990)</td>
<td>2 nursing homes, 1 geriatric unit.</td>
<td>Nursing staff working in a nursing home vs. a geriatric unit.</td>
<td>Resident activities, interactions and moods.</td>
</tr>
<tr>
<td>Dietz</td>
<td>At total of 232, 15 minute observations spread over 4 months</td>
<td>Resident sample size not reported.</td>
<td></td>
</tr>
<tr>
<td>Davies (1992)</td>
<td>Chronic Care Ward</td>
<td>RNs. vs. HCAs</td>
<td>Nursing staffs' verbal behaviors. (interrater reliability = .90)</td>
</tr>
<tr>
<td>CS</td>
<td>$n = 15$ nursing staff (RNss &amp; HCAs)</td>
<td>Vocally disruptive residents and controls</td>
<td>Amount of time residents spent in interactions and the type of interactions. (interrater reliability kappas = .60 to .80)</td>
</tr>
<tr>
<td>Hallberg et al. (1990)</td>
<td>Psychogeriatric ward</td>
<td>Nursing staff sample not reported (RNss &amp; LPNs)</td>
<td>Types of nursing staff interactions</td>
</tr>
<tr>
<td>CS</td>
<td>$n = 36$ vocally disruptive residents and $n = 37$ controls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lipman et al. (1979)</td>
<td>8 Homes for Old People</td>
<td>Rational vs. confused residents</td>
<td>Types of nursing staff interactions</td>
</tr>
<tr>
<td>CS</td>
<td>4,500 interactions</td>
<td>Resident and nursing staff sample sizes were not reported.</td>
<td></td>
</tr>
<tr>
<td>Source &amp; Design</td>
<td>Setting &amp; Sample</td>
<td>Independent Variable</td>
<td>Dependent Variable</td>
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</tr>
<tr>
<td>Nolan et al. (1995)</td>
<td>2 continuing care units</td>
<td>Long stay, short stay and respite patients; Socially able vs non socially able</td>
<td>Amount of time residents spent in interactions and the type of interactions (Molar Observation Code)</td>
</tr>
<tr>
<td>CS</td>
<td>$n = 39$ residents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salmon (1993)</td>
<td>2 psycho-geriatric wards</td>
<td>Routine care vs. formal activity periods; Nurses attitudes</td>
<td>Nursing staffs’ behaviors (Adapted from Kazdin, 1981, inter observer reliability .74-.82).</td>
</tr>
<tr>
<td></td>
<td>$n = 27$ nursing staff (RNs &amp; HCAs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thomas (1994)</td>
<td>9 continuing care wards</td>
<td>RN vs HCAs; Primary, team and functional nursing systems</td>
<td>Nursing staffs’ verbal interaction (intrarater reliability = .95)</td>
</tr>
<tr>
<td></td>
<td>$n = 47$ residents with dementia</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$n = 24$ nursing staff (RNs &amp; HCAs)</td>
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</tbody>
</table>

Methodological shortcomings were identified in almost all of the studies reviewed. First, the instruments used in these studies had limited psychometric testing; only half reported interrater reliability utilizing percentage agreement (Caris-Verhallen, Kerkstra, Van der Heijden, & Bensing, 1998; Caris-Verhallen et al., 1999; Davies, 1992; Hallberg, Luker, Norberg, Johnsson, & Eriksson, 1990; Salmon, 1993; Thomas, 1994), and only Hallberg et al. used the kappa statistic, a reliability measurement which takes chance into account.
The majority of investigators utilized an author-designed observational instrument but provided no evidence that they tested their instruments for content or construct validity (Armstrong-Esther & Browne, 1986; Clark & Bowling, 1990; Hallberg et al., 1990; Lipman et al., 1979; Nolan, Grant, & Nolan, 1995; Thomas, 1994). Lack of establishing validity of the scales resulted in investigations that were inconsistent in what was regarded as quality interactions. For some researchers, the criterion for quality interactions was the time spent in interactions by observing either the resident or the careprovider (Armstrong-Esther & Browne; Armstrong-Esther et al., 1994; Lipman et al.; Salmon, 1993; Thomas), and for other investigators it was the frequency of positive interactions which were uniquely defined (Clark & Bowling; Davies, 1992; Hallberg et al.). These rather diverse foci are also due in part to the lack of a clear conceptual definition of interactions which is related to the lack of an identifiable link to any theories. Two exceptions to this problem were the studies by Caris-Verhellen et al. (1998; 1999). These investigators used an established interactional tool called the Roter’s Interaction Analysis System (Roter, 1989) and modified the tool based on content validation using King’s interpersonal theory (King, 1981) as a frame of reference. They focused their observations on the verbal and non-verbal behaviors of nurses that occur during careprovider-resident interactions based on their conceptual definitions.

Another limitation was the failure of four of the investigators to report the number of subjects observed (Armstrong-Esther, Browne & McAfee, 1994; Clark & Bowling, 1990; Hallberg et al., 1990; Lipman, Slater & Harris, 1979). As well, the majority of the dependent variables involved an observational measure, and so, the Hawthorne effect may have been a threat to the external validity of the study. These concerns make it difficult to generalize the findings to
other long-term care settings.

In light of these concerns, only tentative conclusions can be drawn about the nature of interactions in long-term care environments: (a) interpersonal interactions between nurses and elderly patients are often suboptimal because interactions are task focused, limited in extent (Armstrong-Esther, Browne, & McAfee, 1994; Clark & Bowling, 1990; Hallberg et al., 1990) and fail to show respect for persons or maintain the residents’ dignity (Bowling, 1988; Duncan & Morgan, 1994), (b) certain characteristics of patients may impede interactions such as their cognitive status (Armstrong-Esther & Browne, 1986; Lipman et al., 1979) and their lack of social interactional skills (Nolan et al., 1995), (c) careproviders have characteristics that may impede interactions such as their job designation (Davies, 1992; Thomas, 1994), and (d) environmental factors such as the care delivery model (Thomas) and formal activity periods (Salmon, 1990) may influence interactions.

Three studies from this literature review section (Thomas, 1994; Caris-Verahllen et al., 1998:1999) warrant further attention because of their implications for this study. Thomas concluded that the influence of the care delivery system impacted on the nurses’ interaction styles. The eight nurses on wards practicing primary nursing used more effective communication than nurses practicing team or functional nursing. They spent more time seeking verbal feedback and offered the residents more choices. The importance of a continuity of delivery system on the careproviders’ interaction levels is worth highlighting as this suggests continuity in care may enhance interactions.

In the studies by Caris-Verhallen et al. (1998; 1999), they hypothesized that there were particular verbal and non-verbal careprovider behaviors that assisted in building nurse-resident
relationships. These behaviors were identified after the investigators analyzed video tapes of 181 nursing encounters involving 47 nurses. Specific verbal utterances that were listed as effective for the establishment of relationships included personal talk, jokes, affective behavior, social conversation, empathic behavior, sharing concern, warmth, and interest (Caris-Verhallen et al., 1998). Specific non-verbal behaviors include patient-directed eye gazing, affirmative head nodding, smiling, forward leaning and affective (spontaneous) touch (Caris-Verhallen et al., 1999). The hypothesis that specific behaviors led to relationships requires validation; however, these studies by these investigators are the first attempts at linking specific careprovider behaviors to the establishment of careprovider-resident relationships.

Consequences of the careprovider-resident interaction research.

In this second section of interactional research, studies were reviewed that focused on the outcomes that are related to resident-careprovider interactions or relationships (Table 3). The majority of the studies are qualitative as researchers try to understand the phenomena of interactions and relationships within different contexts.

Table 3

The Consequences of the Careprovider-Resident Interaction Research

<table>
<thead>
<tr>
<th>Source &amp; Design</th>
<th>Setting &amp; Sample</th>
<th>Focus of the Study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown (1995) Phenomenology</td>
<td>1 long term care unit, n = 9 nursing staff, n = 8 residents with dementia</td>
<td>To understand the nursing behaviors that soothe agitated residents.</td>
<td>There were three domains to the engagement process that helped soothe an agitated resident: staying with the resident; altering the pace of care while being sensitive to the resident’s response; and focusing on the resident and not persisting with the task at hand when the resident expressed resistance.</td>
</tr>
</tbody>
</table>
### Qualitative Studies

<table>
<thead>
<tr>
<th>Source &amp; Design</th>
<th>Setting &amp; Sample</th>
<th>Focus of the Study</th>
<th>Findings</th>
</tr>
</thead>
</table>
| Hallberg et al. (1995) | 2 psychogeriatric units Phenomenology | Nursing staff sample not reported  
\( n = 22 \) residents with dementia | **To understand high quality interactions between nursing staff and residents during morning care.** | Quality interactions were characterized by acting in mutuality and in pace with each other. Acting in mutuality meant that the patient and nurse were reciprocal in the relationship whereas acting in pace involved turning to each other as persons and to the task to be performed. Residents appeared less agitated during morning care when quality interactions occurred. |
| Kappeli (1987) | Geriatric ward Grounded theory | \( n = 20 \) nursing staff  
\( n = 12 \) elderly residents | **To understand the nurse behaviors that patients prefer.** | The preferred approach was typified by co-operation, commitment, care, and concern on behalf of the nurses. Patients reported enhanced quality of life with this approach. In contrast, the non co-operative nursing approach was characterised by resentment of time requirements by patients, and focus on task completion and efficiency. |
| Mitchell & Jonas (1995) | 6 long term care units Qualitative: Parse’s Methodology | \( n = 80 \) residents; 20 were diagnosed with Alzheimer Disease. | **To understand the residents’ quality of life.** | Residents spoke about uplifting times when nurses showed genuine concern. Participants said they felt good when nurses took time to listen, involve them in decisions and attend to the little things. Participants also spoke about the suffering that accompanied staff disregard. Residents with Alzheimer Disease spoke about feeling misunderstood; everything was seen within the context of their disease. |
### Qualitative Studies

<table>
<thead>
<tr>
<th>Source &amp; Design</th>
<th>Setting &amp; Sample</th>
<th>Focus of the Study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nussbaum (1991)</td>
<td>1 long term care unit</td>
<td>To understand the residents' views concerning relationships with the nursing staff</td>
<td>First, the elderly residents considered a relationship with at least one member of the nursing staff to be a normal occurrence. Second, the elderly residents talked about the companionship that such a relationship offers, a chance to relate on a more personal level and to fulfill needs of affiliation. The third theme concerned control as residents stated that they did not feel it was their 'place' to initiate a personal relationship with staff, however if the staff member made overtures, they indicated there was every reason for them to reciprocate with friendly behavior.</td>
</tr>
<tr>
<td>Ethnography</td>
<td>( n = 20 ) residents</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Rundqvist & Severinsson (1999) | 1 long term care unit | To understand nurses' perspective of caring relationships with persons with dementia. | First, caregivers spoke about the importance of touch as a way of communicating. Confirmation was the second theme. Mutuality, eye contact and sensitivity to the persons' response was important. Third, values such as consideration, patience and compassion were important for the relationship to unfold. |
| Phenomenology    | \( n = 6 \) nursing staff | | |

### Quantitative Studies

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<thead>
<tr>
<th>Source &amp; Design</th>
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<th>Dependent Variables</th>
<th>Significant Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burgener &amp; Barton (1991)</td>
<td>2 long term care units</td>
<td>Nurse behaviors (Interaction Behavior Measure, McCloskey &amp; Wright, 1971, ( \alpha = .80 ) and inter-rater reliability = .56 to .80)</td>
<td>Resident behaviors (Modified Interaction Behavior Measure, McCloskey &amp; Wright, 1971, ( \alpha = .82 ) and inter-rater reliability = .58 to .83)</td>
<td>Relaxed and smiling caregiver behaviors were related to residents being calm, ( F(6,221) = 2.80, p = .01. )</td>
</tr>
<tr>
<td>Cross-sectional (CS)</td>
<td>( n = 10 ) nursing staff (HCAs) ( n = 12 ) residents</td>
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<td></td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
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<th>Dependent Variables</th>
<th>Significant Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huss et al. (1988)</td>
<td>2 long term care units</td>
<td>Nurse/resident relationships (Risser's trusting relationship scale); Social isolation; Perceptions of health status; Activities of daily living; Presence of a confidante.</td>
<td>Life Satisfaction (Life Satisfaction Index, Huss et al., 1988)</td>
<td>A significant higher life satisfaction score for subjects who reported having a confidante was found, p &lt; .05.</td>
</tr>
<tr>
<td>CS</td>
<td>n = 30 residents</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Lester &amp; Baltes (1978)</td>
<td>1 unit in a nursing home</td>
<td>Resident dependent and independent behaviors</td>
<td>Careprovider reinforcing and punishing behaviors (Independent, Dependent Rating Scale)</td>
<td>Positive verbal reinforcers are significantly more often contingent upon the occurrence of dependent behaviors as compared to independent behaviors, F = 11.8, p &lt; .001.</td>
</tr>
<tr>
<td>Long.</td>
<td>n = 22 residents</td>
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</table>

No consistent research tradition or common analytical approach was used for the qualitative data. A limitation of the qualitative data is that only two of the six studies (Brown, 1995; Rundqvist & Severinsson, 1999) used validity checks as proposed by Glaser and Strauss (1967). Convenience sampling was used for the studies and sample sizes ranged from 3 to 80. Three of the five studies recorded limitations, notably small sample size (Brown) and limited generalizability (Kapelli, 1987; Rundqvist & Severinsson, 1999).

Another limitation is that effective interactions and relationships are an evolving process. By definition this process includes a time component and thus would appear to dictate longitudinal designs for meaningful investigation. The quantitative studies reviewed in this section focused on the consequences of interactions and relationships and were cross-sectional.

Therefore, the effect of relationships or interactions on outcomes was only measured at one point
in time. The exception was the study by Lester and Baltes (1978) who used a longitudinal design for their observation study to measure the dependent behaviors in the elderly and their consequences in terms of the nursing staffs' interactions.

Despite these weaknesses, evidence is accumulating to suggest that effective interaction and relationships between residents and careproviders can occur and that these relations may impact positively on life satisfaction outcomes and behaviors of residents. A particularly relevant study was conducted by Brown (1995) for her master's thesis. She found evidence of a close relationship between residents with cognitive impairment and their careproviders. Brown videotaped nine nursing staff caring for eight residents during morning care and analyzed 413 minutes of interaction between these dyads. She and her thesis supervisor paid careful attention to the analysis of the interactions which involved coding of nurses' and residents' behaviors, identification of agitation episodes and identification of common nursing actions. Brown hypothesized that when the nurse was in a close relationship with a resident, an engagement process existed between the two, which was similar to the relationship that exists between mothers and their infants as described by Winnicott (1960). Brown found that this relationship exists when a nurse is aware of the residents' needs, even if this in not a conscious awareness. Brown also suggested that the way care was given determines the residents' sense of well being which was evidenced by agitation behaviors. Also, she found a direct association between the nurse's ability to soothe a resident and the nurse's assertion that he/she liked caring for a particular resident, which speaks to the importance of letting the careprovider choose the residents for the permanent assignment model.

The actions Brown (1995) identified within the engagement process: staying with the
resident, altering the pace of care, and focusing on the resident, were similar to those actions identified by Hallberg et al. (1995) who found that quality nurse-patient interactions during morning care were characterized by acting in mutuality and in pace with each other. Acting in mutuality meant that patient and nurse were reciprocal in the relationship whereas acting in pace involved turning to each other as persons and to the task to be performed (Hallberg et al.). Similar non-verbal behaviors that have been hypothesized to facilitate careprovider-resident relationships have been identified by Caris-Verhallen et al. (1998).

In summary, positive outcomes related to effective interactions and relationships include for the resident (a) an enhanced quality of life (Kappeli, 1987), (b) greater life satisfaction, (Huss et al., 1988), (c) less agitation (Brown, 1995), and (d) fulfilling needs for affiliation (Nussbaum, 1991). Negative outcomes related to non-effective interactions include for the resident: (a) a feeling of being misunderstood (Mitchell & Jonas, 1995); (b) being tense and agitated (Burgener & Barton, 1992); and (c) dependent behaviors (Lester & Baltes, 1978). Rundqvist and Severinsson (1999) were the only authors to report a consequence of a caring relationship for the careproviders. They found that careproviders spoke about the "joy of confirmation" which involved residents recognizing and welcoming them which enriched their day.

**Intervention studies regarding careprovider-resident interactions.**

The third section on interaction research demonstrates that only a few researchers have attempted intervention studies in long-term care environments (Table 4). Some researchers have focused on the teaching of interactional skills (Allen & Turner, 1991; Loveridge & Heineken, 1988; McCallion, Toseland, Lacey & Banks, 1999) while other investigators have focused their interventions on careproviders becoming engaged in some way to learn about the person (Best,
1998; Coker et al., 1998; Kihlgren et al., 1993; Pietrukowicz & Johnson, 1991; Williams & Tappen, 1999).

Table 4

<table>
<thead>
<tr>
<th>Source &amp; Design</th>
<th>Setting &amp; Sample</th>
<th>Focus of the Study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best (1998)</td>
<td>1 long term care unit</td>
<td>To understand the effect of a life story on the resident and on the staff member.</td>
<td>Following the development of a life story and sharing it with nursing team members, a better understanding of the patient existed for the team. The specific nurse was able to gain a fuller view of the resident as a person and adapt that knowledge to meet care needs. The conclusion was made that using the life story could only lead to an enhancement of the relationship between nurse and client.</td>
</tr>
<tr>
<td>Coker et al. (1998)</td>
<td>1 long term care unit</td>
<td>Completion of life stories for residents by nursing staff</td>
<td>Following the completion of a life story with a resident, careproviders suggested that the knowledge they had gained about the individual would change the way care was delivered, as they would no longer impose their own values on their patients.</td>
</tr>
<tr>
<td>Williams and Tappen (1999)</td>
<td>2 psychogeriatric units</td>
<td>To enhance quality interactions between APNs and residents.</td>
<td>During the sixteen weeks the interactions between the APN and resident were taped. Analysis of the interactions revealed evidence that APNs were involved in therapeutic relationships with their residents. Most residents spontaneously shared their feelings and concerns, many remembered their nurse, looked forward to their visits, and were saddened by the termination of the visits.</td>
</tr>
<tr>
<td>Study</td>
<td>Setting, Sample &amp; Design</td>
<td>Independent Variable</td>
<td>Dependent Variable</td>
</tr>
<tr>
<td>---------------------</td>
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<tr>
<td>Allen &amp; Turner</td>
<td>Continuing care ward</td>
<td>Confirming interactions sessions</td>
<td>Interactional levels of nursing staff (Seiberg's confirmation/disconfirmation scale, 1969, inter observer reliability = .95) No significant results</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>n = 15 nursing staff</td>
<td>(9 weekly presentations)</td>
<td>Increase number of opportunities (17%) for residents to take part in decisions. 15% increase in verbal contact initiated by careproviders in the treatment group. (no levels of significance reported)</td>
</tr>
<tr>
<td>Kihlgren et al. (1993)</td>
<td>2 long term care units</td>
<td>Integrity promoting care</td>
<td>Nurses' interactions (Erikson's interactional scale, 1982, interrater reliability = .83). No significant results.</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>n = 10 nursing staff</td>
<td>(3 month program)</td>
<td>Nurses' interactional behaviors (Seiberg's confirmation/disconfirmation scale, 1969, interrater reliability = .93)</td>
</tr>
<tr>
<td>Loveridge &amp; Heineken (1988)</td>
<td>1 long term care unit</td>
<td>Inservice program of confirming vs disconfirming communication.</td>
<td>Staff: Mental Health; Knowledge of Alzheimer Disease; Turnover rates</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>n = 52 nursing staff</td>
<td>(4 weeks)</td>
<td>Staff: Treatment group had increased their knowledge on how to manage aggressive behaviors, $F = 11.75$, $p &lt; .001$. Turnover rates improved, $X^2 = 9.14$, $p &lt; .003$. Residents: Significant reduction in their behavior disturbances, $F = 17.59$, $p &lt; .001$, and their depressive symptoms, $F = 16.30$, $p &lt; .001$ for residents in the treatment group.</td>
</tr>
<tr>
<td>McCallion et al. (1999)</td>
<td>2 nursing homes</td>
<td>Communication skills program</td>
<td>Residents: Cornell scale for depression ($\alpha = .84$); Agitation inventory (intrarater reliability = .88); Multidimensional observation scale for elderly subjects ($\alpha = .80$, intrarater reliability = .72 -.97).</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>n = 88 nursing staff</td>
<td>(5 - 45 minutes group sessions and 4 - 30 minute individual sessions)</td>
<td>Staff: Treatment group had increased their knowledge on how to manage aggressive behaviors, $F = 11.75$, $p &lt; .001$. Turnover rates improved, $X^2 = 9.14$, $p &lt; .003$. Residents: Significant reduction in their behavior disturbances, $F = 17.59$, $p &lt; .001$, and their depressive symptoms, $F = 16.30$, $p &lt; .001$ for residents in the treatment group.</td>
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Because so few controlled studies of interactions have been conducted, it is not possible to draw any conclusions about their overall impact or about the specific way to improve interactions of careprovides. Two of the studies evaluating the interaction effectiveness used only a one group pre-post design with no control groups (Allen & Turner, 1991; Loveridge & Heineken, 1988) and consequently, these studies suffer from multiple threats to internal validity. As well, their interventions focused on mechanistic models of relating and communicating which may have contributed to the non-significant outcomes. However, the following intervention studies had positive effects on careprovides' knowledge and residents' behaviors, enough to warrant a continued search for ways to improve interactions.

The most convincing results were found in two recent studies. McCallion et al. (1999) developed and evaluated a Nursing Assistant Communications Skills Program (NACSP) which was designed to teach 88 nursing assistants (NA) to interact more effectively with persons with moderate or severe dementia. After four group and individual sessions with each NA, there was a significant decrease in residents' behavioral disturbances, and depressive symptoms. There was also an increase in the careprovides' knowledge on how to manage verbally aggressive behaviors. Also, focusing on persons with dementia but using a qualitative research design, Williams and

<table>
<thead>
<tr>
<th>Study</th>
<th>Setting, Sample &amp; Design</th>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Significant Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pietrukowicz &amp; Johnson (1991)</td>
<td>2 psychogeriatric care wards</td>
<td>Life reviews in some charts and not in others.</td>
<td>Negative and positive stereotypes; Knowledge about aging</td>
<td>Aides that received life histories in the chart viewed the resident as more adaptable, $t = 2.52$, $p &lt; .02$, and possessing more interactional skills, $t = 2.58$, $p &lt; .01$.</td>
</tr>
<tr>
<td>Quasi-exper.</td>
<td>n = 43 health care aides</td>
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Tappen (1999) taught four advanced practice nurses (APNs) to initiate the conversation but then to follow the participant’s lead and to make the discussions as meaningful as possible to the participant. As a result, the researchers found that residents with dementia displayed evidence of being involved in a therapeutic relationship, as defined by the nurse theorist Peplau (1960).

Williams and Tappen made the link between enhancing communication and relationships. For this study to be more applicable to long-term care environments where there are few APNs, it would be helpful if it was replicated with health care aides as the participants for the intervention.

Further, the establishment of a therapeutic relationship, as conceptually defined by Peplau, requires further validation.

In summary, results are mixed regarding the effect of interactional training on changing care providers' practice. The work of Allen and Turner (1991) and Loveridge and Heineken (1979) challenges utilizing only education and/or training as the way to enhance interactions and change care providers' practice. These investigators did not find significant changes in outcomes. The studies by Kihlgren et al. (1993), McCallion et al. (1999) and Williams and Tappen (1999) also used interactional skills but the emphasis was placed not on saying the right thing, but on listening to the person and responding to what was said. These investigators found positive resident outcomes. Evidence is also emerging that suggests knowing the individual's history or personhood, may lead to better care and enhanced interactions (Best, 1998; Coker et al., 1998; Pieturkowicz & Johnson, 1991).

**Supportive Work Environment Research**

Administrators and supervisors are central to the residents' experience because they determine the ambiance of the facility and the way nursing staff feel about their work (Glass,
1992) and quite possibly how they carry out their work. Five studies were found that suggested this relationship existed in long-term care environments. An underlying assumption of these studies is that when attempts are made to care for the careproviders, a commitment from them to deliver high quality care may occur that, in turn, may facilitate the careprovider-resident relationship. In this section, the studies will be described as they influenced the development of the supportive component of the intervention.

Both Hallberg and Norberg (1993), and Montegar, Reid, Madsen, and Ewell (1977) investigated the impact of a clinically supervised environment for nurses on resident outcomes. Hallberg and Norberg provided an intervention for nursing staff caring for residents with dementia. Systematic clinical supervision for six months combined with individualized care was implemented. The supervision consisted of providing a supportive group session for 19 nursing staff for one hour each week which was lead by the investigator. During the session, a particular resident was selected and the group shared their personal opinions with regard to caring for the resident. The researchers found that clinical support reduced burden for the nursing staff because they saw the residents as significantly more responsive, \( p = .04 \) (Hallberg & Norberg). In the study by Montegar et al., the effect of supervisor approval on staff-resident interactions was investigated in a state centre for multihandicapped elderly persons. Following baseline testing, an in-service training program designed to teach 15 staff members appropriate methods of interacting with and stimulating residents was instituted along with contingent supervisor approval. The supervisor was shown effective ways to reward staff for attempting to interact appropriately with residents. When the supervisor commented and attended to staff members for interacting with residents, staff-resident interaction increased 25 to 50% above baseline rates, \( p = .05 \).
Kihlgren et al. (1992), and Kovack and Krejci (1998) reported anecdotal evidence in support of a link between supportive management practices and quality care. Kihlgren et al. found that staff who work with residents with dementia need supervision and support aimed at giving them a deeper experience and meaning in their work. Their data suggested that if staff concerns were not addressed, poor job satisfaction might develop which in turn, could have an impact on the quality of care. Kovack and Krejci, who surveyed 181 long-term care employees, found that management personnel may need to be more visible, open, and validating of staff's contribution to dementia care outcomes. Employees also identified that better relationships with administrative staff, which included support, would facilitate improvement in dementia care.

Dean, Briggs and Lindesay (1993) evaluated a Domus model of care developed for residents with dementia living in long term care in the UK. The Domus model of care was based on the philosophy developed by Murphy and MacDonald (as cited in Dean, Proudfoot & Lindesay, 1993) and is based on four assumptions: (a) that the domus is the residents' home for life, (b) that the needs of the staff are as important as those of the residents, (c) that the domus should aim to correct the avoidable consequences of dementia and accommodate those that are unavoidable, and (d) that the residents' individual psychological and emotional needs may take precedence over the physical aspects of their care. There was a significant increase in interactions between 20 residents and 10 nursing staff between baseline and 12 months post intervention, \( z = 2.34, p = .03 \). But what was of most significance for the current study was that staff on the domus unit also commented on the following aspects that made their work rewarding: "they appreciated the competence of their supervisor and managers; they enjoyed the freedom they were given to make decisions and to do their job in their own way; they appreciated that what they said was
valued.” (p. 816). The investigators suggest that management support is crucial particularly when there is a need to attract staff into this area of work.

A review of the research on supportive work environments in long term care, shows the following: (a) there is a paucity of research conducted in this area of inquiry, (b) only one conceptual model with regards to a supportive environment was found to guide the research study (Dean et al., 1993), (c) there are many confounding factors that might affect this supportive environment, for example the commitment of the supervisor to the organization (Montegar et al., 1977), and their visibility in the environment (Kovach & Krejci, 1998), and (d) non-probability convenience samples characterize this area of research (Dean et al.; Kihlgren et al., 1992; Kovach & Krejci; Montegar et al.). Based on these concerns only a few tentative conclusions can be drawn. Hallberg and Norberg (1993) provide preliminary evidence that clinical supervision may affect nurses’ perceptions of their residents. Montegar et al. suggest that supervisor’s approval may increase staff-resident interactions, and philosophies of care that focus on careproviders’ needs might lead careproviders “to feel appreciated” (Dean et al.) and to “an improvement in care” (Kovach & Krejci).

**Summary of the Literature Review**

Research in three different areas was examined and several conclusions can be drawn. Continuity of the careproviders is critical to understanding the resident and to developing relationships with the resident over time (Athlin & Norberg, 1987; Mitchell & Jonas, 1995; Netten, 1993; Patchner, 1987; Teresi et al., 1993a). The teaching of interactional skills is not enough to change careproviders’ behaviors (Allen & Turner, 1991; Loveridge & Heineken, 1988); the careprovider must be engaged in some way such as learning about the person through
life stories (Best, 1998; Coker et al., 1998; McCallion et al., 1999; Pietrukowicz & Johnson, 1991; Williams & Tappen, 1999). If careproviders are called to enhance relationships with residents, they too must be supported in their work environments (Dean et al., 1993; Hallberg & Norberg, 1993; Montegar et al., 1977; Kovach & Krejci, 1998).

**Theoretical Foundation**

The environment as described by Kayser-Jones (1991) serves as a building block to understanding the importance and the context of the relationship between the resident and careprovider. Winnicott's theory of the parent-infant relationship (1960) was drawn upon to identify the essential capacities that the careproviders need to build these relationships.

**The Environment**

Several researchers have identified that the environment affects a resident's quality of life (Clark & Bowling, 1990; Kayser-Jones, 1989, 1991, Moos, 1980). Moos and Kayser-Jones (1991) propose that the environment in which the elders live may impact on their stability, morale, health and well being. Drawing on earlier work from Moos, Kayser-Jones (1991) developed a framework for the study of person-environment interactions in long term care institutions. She described three major contextual aspects of the environment: physical characteristics, social climate and psychological milieu. The physical characteristics include the physical setting, the colour, lighting, space and privacy available, as well as the sensory environment. Social climate includes staffing level and mix which provide information about the climate and the way care is provided. The climate also includes policy, financing and the presence or absence of mechanisms such as residents' councils. Psychosocial milieu refers to the existing norms, values, activities, and the philosophy of the administration, the attitudes and beliefs of the caregivers, and the personal
interactions of all who are a part of the institution, e.g., residents, staff and visitors. Kayser-Jones extends Moos’ work by suggesting the pre-eminence of the psychological milieu on resident outcomes. She contends that while the physical and organizational environments have been shown to be important, “the human relationship and social contact with others are more crucial in determining quality of life than the colour of the room or irritating noise” (p.32).

For this study, the psychological milieu of the framework was of most interest. Specific elements of the framework adopted for this study included: (a) the importance of the relationship between the careprovider and the resident, (b) the effect of this relationship on outcomes, and (c) the supervisor’s philosophy with regard to his/her support of the development of these relationships.

The Parent-Infant Relationship Theory

Winnicott's (1960) theory of the parent-infant relationship provides theoretical direction for understanding and enhancing the careprovider-resident relationship. The parent-infant relationship theory describes the essential capacities of the mother and the relationship that she develops with the child that meets the specific and developing needs of the infant. This is referred to as a holding relationship, and the relationship is constituted by the reliability and empathy of the mother. In his later work, Winnicott (1970) adapted this relationship theory to provide theoretical direction for understanding the health careprovider-patient relationship.

The holding relationship involves everything that the mother does with the infant. Holding "protects the infant from physiological insults, takes into account the infant's skin sensitivity and the infant's lack of knowledge of the existence of anything other than the self, and it includes the whole routine of care throughout the day and night" (Winnicott, 1960, p.49). Holding includes
especially the physical holding of the infant, which is a form of loving, and "perhaps is the only way a mother can show the infant her love" (Winnicott, 1960, p.49). Winnicott (1965) maintains that the crucial factor in an infant's development is maternal care and uses the term "good enough mother" to describe the kind of parenting necessary to give the child a good start in life. The "good enough mother" provides both a physical and psychological "holding relationship" and meets the needs of the infant.

**Reliability.**

Winnicott (1960) suggests that the holding relationship is constituted by essential capacities of the mother, one being reliability. The mother is reliable, as she meets the needs of the infant, by being dependable (Winnicott, 1965). Being reliable also implies that care should not be mechanical based merely on good technique. Winnicott (1960) argues that a "good enough mother" provides care in her own way, and what is important is meeting the needs of her child. Being reliable also involves protecting the infant from the unpredictable to foster the well being of the infant and to minimize the reaction of the infant to impingements by adapting to meet his needs.

Reliability also is called for in situations when the mother feels ambivalent toward the infant which Winnicott (1947) acknowledges as inevitable. He examines the normal ambivalence of mothers and suggests that a mother, despite her love for a child, has several reasons for "hating" her infant: the baby is an interference with her private life; the baby is not her own (mental) conception; the baby is a danger to her body in pregnancy and birth; and the baby tries to hurt her as he periodically bites her. Even so, Winnicott (1947) contends, that "a good enough mother" has to be able to tolerate hating her baby without retaliating. These are two remarkable
qualities about a mother: her ability to be hurt by her baby and not act on her hate, and her ability to wait for rewards that may or may not come at a later date.

**Empathy.**

The infant depends on maternal care based on maternal empathy, "rather than on understanding of what is or could be verbally expressed" (Winnicott, 1960, p.40). Empathy allows the mother to enter the private world of the infant and serves to contribute to the infant's experience of individuality. Empathy involves being sensitive to the infant's responses and not imposing a routine on the newly born child. Empathy is seen as responding to the rhythms of the baby, and this should not be interpreted as 'giving in' to his demands or 'spoil ing'. Maternal empathy, therefore, necessitates a recognition of the needs of the infant.

**Continuity.**

By providing continuity, care is provided over and over again, consistently.

When the baby is hungry, mother feeds him; when he requires rest, she creates a place of quiet for him to sleep; when he is distressed, she tries to comfort him (Wynn, 1996). Wynn, who has interpreted Winnicott, believes that continuity of caregiving is important and one committed caregiver who acts in her own unique and particular way is much better than many caregivers. The infant senses her and is comforted by what he perceives; he begins to differentiate her from other things and people in the world (Wynn, 1996).

**Support.**

Winnicott (1960) argues that a mother and infant come to the relationship differently, one in dependence and the other in responsibility. Wynn (1996) proposes that the mother draws in and is drawn into care for the new-born, and the new-born, because of this vulnerability and
absolute dependency, needs this drawing in. Winnicott suggests that properly protected, the mother is saved from having to turn outward to deal with her surroundings at the time she is wanting to turn inward. Winnicott believes that mothers who have it in them to provide good enough care can be enabled to do better by being cared for themselves. Wynn contends that mothers need to be cared for during this time of intense involvement and feels this care is both a family and a social responsibility.

The Careprovider-Resident Relationship

In a paper distinguishing care from cure in a medical setting, Winnicott (1970) proposed that phenomena he observed in the parent-infant relationship theory were analogous to those in the health careprovider-patient relationship. In both situations, it was important for careproviders to be themselves in the relationship. Also analogous to the mother-infant relationship, the elderly resident and careprovider come to the relationship differently, one in dependence and the other in responsibility. Both mothers and careproviders require the capacities of reliability, empathy and consistency in their approach, and it was recognized that both needed to be cared for so that they could be enabled to do better. Differences between the two relationships included the mother’s investment, love and commitment to her child, and the expectation of an eventual reciprocal relationship between the mother and child, which may or may not occur for the careprovider who is caring for an elderly resident.

It should not be construed that adapting the parent-infant relationship theory will lead to infantilization of the elderly. Because of the dependency and vulnerability of the institutionalized elder, careproviders may more easily exercise their authority over residents. Yet, infantilization is not what Winnicott espoused in his relationship theory as he argued that there is no room for
power relations and hierarchies in his proposed holding relationship. Winnicott (1970) believed that when a health care provider comes face to face with a client in the practice setting, they are two human beings of equal status. As a consequence, his theory can be used to uncover the essential capacities that careproviders need to build holding relationships with their residents, namely reliability, empathy, and consistency in approach; as well, they must be able to work in a supportive environment to facilitate the building of these relationships.

Reliability.

Winnicott (1970) suggested that the elderly live with an increased risk of dependency and vulnerability and that what is required in these situations with the elderly is dependability, or reliability from the careproviders. Residents may become anxious because they have to depend on strangers and need to ask for and accept help (Winnicott). Nursing staff caring for dependent elders are called upon to build reliability into their overall approach. Winnicott stated that reliability in care is not merely mechanical, based on a good technique that is delivered in the same way to every patient. Instead, this reliable care should express the uniqueness of each careprovider and arise from the individual needs and style of each patient. Careproviders need to be themselves when caregiving and be responsive to their residents' needs in their own ways. Moreover, this care should also protect the resident from impingements, i.e., events that threaten the adaptation of the resident to their environment, for without this type of care these impingements might cause deep distress and anxiety for the resident. Careproviders protect residents from external impingements by sheltering them from events such as loud music, very hot foods, cold drafts, bright lights, and from internal impingements such as hunger and pain.

According to Winnicott, being reliable involves acceptance of the residents' feelings of
love and hate. It is possible that at times careproviders will dislike the residents they care for
because, for example, the resident tries to hit the careprovider during care, the resident is
ungrateful, or the resident verbally abuses the careprovider with the family members present.
Even so, the careprovider has to be able to tolerate these feelings and not retaliate.

**Empathy.**

Empathy, another central capacity required of careproviders, involves being sensitive to
the resident's responses (Winnicott, 1970). Instead of careproviders imposing their routine on the
resident, they need to respond and adapt to the resident’s rhythm. This empathy necessitates a
recognition of the resident’s physical and psychological needs. Without empathy, caregiving may
be reduced to only a technical function. Consequently, it is essential that caregivers understand
their own motives and feelings in order to be empathic. Empathy involves standing in the other
person's shoes; this necessitates the capacity to recognize another’s needs. Careproviders must be
sensitive to the particularities of the resident through being aware of the person's expressions and
by recognizing the individuality of the person. The elderly person living in the facility has a
history and life experience that may be crucial to assist with this recognition. The need to be
recognized as a person (Agich, 1990) is one of the greatest desires of residents living in a long
term care facility. The importance of knowing the particularities of the person is eloquently stated
by Williams (1994).

The days of our lives, even the days and years spent in a long term
care facility, are for living, not merely for physical safe-keeping. To
live these days in all their potential it is necessary for all of us to be
known and responded to as individual people who have life
experiences and daily patterns of many sorts, who are
constitutionally different one from another, and who therefore have
different sources of meaning in our later years. In order to be
people that matter, to be of account to others as we have known ourselves to be at other ages and states of wellness, we must be heard and responded to individually as we try to make sense of our daily lives. It is equally important that we have opportunities to come together in ways that enable us collectively and creatively to shape both our daily living and our environment (p.99)

**Continuity.**

Care can be delivered in a more consistent manner with continuity of the careprovider. Thus, careproviders may be better able to interpret the residents' responses, learn about how to minimize the residents' reactions to impingements, understand what the residents' particularities are, and learn how to meet their needs. When care is provided by only a few permanently assigned careproviders for each resident, a high level of continuity is introduced into residents' lives. Continuity acts to minimize the lack of unpredictability in a resident's day.

**Support.**

Winnicott proposed that in order for the careprovider to be involved in a holding relationship with a resident, the provider must in turn experience a supportive environment. Such an environment includes not only the unit manager but also the registered nurses (RNs), as they are the charge nurses in long-term care environments who have the most contact with the nonregistered staff. Therefore, unit managers and registered nurses, the supervisors, are called upon to be empathic and reliable with the careproviders on their units. The supervisors' empathy was conceptualized to refer to their ability to recognize the careproviders' standards of care, to recognize and accommodate the careproviders' expressed needs such as providing for shift changes, and to understand the careproviders' points of view when they come forward with concerns. Reliability was conceptualized as the ability of the supervisor to be available for careproviders if things are not going well with residents or families, to protect the careproviders
from the unpredictable by keeping them informed of changes in the work environment, and to tolerate careproviders' feelings of frustration in the work place.

In summary, if a careprovider is reliable, empathic and consistent when interacting with a resident, and if a supportive environment is available, a holding relationship will be established for the resident by the careprovider. Consistency of caregiving is facilitated by continuity of care assignment. Supervisors, i.e., the unit manager and registered nurses, support careproviders by creating holding relationships for the careproviders who work with them. Based on Winnicott’s theory and empirical evidence, it is proposed that the development of this holding relationship for residents will lead to secondary outcomes for the careprovider and resident. Secondary outcomes proposed for the careproviders include feeling closer to their residents (Coker et al., 1998; Teresi et al., 1993b), expressing themselves with more empathy, and perceiving their supervisors as more supportive (Dean et al., 1993; Kovach & Krejci, 1998). No change or decline in the residents’ physical status (Campbell, 1985) is proposed for the secondary outcome for the residents.

Definitions

The following terms describe the roles of the participants that are used throughout this study.

1. Careprovider: These include all casual, part-time and full-time Health Care Aides (HCAs) and Registered Practical Nurses (RPNs) who provide direct care to residents

2. Charge Nurse: The charge nurse is a registered nurse who works on the unit and is the primary nursing contact person. The duties of the charge nurse involve organizing the daily care of residents by ensuring that the team of registered practical nurses and health care aides are assigned to care for them.
3. **Family Member:** These include the resident's spouse, or other next of kin.

4. **Nursing personnel:** This includes the unit manager, registered nurses, registered practical nurses and health care aides.

5. **Resident:** All individuals residing on the selected units in a long term care facility.

6. **Supervisor:** This refers to the registered nurse and the unit manager.

7. **Unit Manager:** This is the nurse administratively responsible for a unit including the quality of care provided. This nurse is also financially accountable for the functioning of the unit.

The following terms describe the dependent variables in the study.

1. **Holding relationship between the careprovider and the resident:** a relationship between the careprovider and resident which is characterized by reliability and empathy of the careprovider. Continuity of the careprovider and support for the careprovider are essential for contributing to the holding relationship.

2. **Continuity** is defined as consistency of the careprovider over time.

3. **Support for the careprovider** is defined as a holding relationship between the careprovider and the unit manager and a holding relationship between the careprovider and the charge nurse. These relationships are characterized by the reliability and empathy of the unit manager and the charge nurse.

4. **Reliability:** This is defined as being dependable, protecting the person from the unpredictable, and tolerating rejection without retaliating.

5. **Empathy:** This is defined as identifying with the wishes and particularities of the individual, recognizing the needs of another, and being sensitive to his/her response.
The following term describes the independent variable in the study.

1. Relationship Enhancing Program of Care (REPC): This is the program of care that was introduced to the nursing staff on the intervention unit. The REPC included a continuity of careprovider component, an acquisition of skills and knowledge component, and a supportive component and was based on Winnicott’s theory on relationships.

Research Questions

Primary Research Questions

The primary research questions were focused on the resident-careprovider relationship, conceptualized as a holding relationship:

1. Will residents who receive care within a relationship enhancing program of care (REPC) perceive a greater involvement in holding relationships with their careproviders, in comparison to those residents who receive the usual approach to care?

2. Will families whose members (the residents), receive care within an REPC perceive their members as more involved in holding relationships with their careproviders in comparison to those families whose members receive the usual approach to care?

3. Will careproviders who provide care to residents within an REPC demonstrate an improvement in their ability to provide a holding relationship, in comparison to those careproviders who follow the usual approach to care?

Secondary Research Questions

The secondary research questions were focused on the secondary outcomes believed to be influenced by the development of holding relationships:

4. Will residents who receive care within an REPC demonstrate no decline in their physical status
similar to that of residents who receive the usual approach to care?

5. Will careproviders who provide care to residents within an REPC perceive (a) an increased involvement in a close relationship with their residents, (b) perceive that they are involved in a holding relationship with their charge nurses and unit manager, and (c) demonstrate an increase in expressed empathy, in comparison to those careproviders who follow the usual approach to care?
Chapter 2. Pilot Work

Introduction

Pilot work included the development of scales and evaluation of the psychometric properties of questionnaires designed to measure perceived relationships between careproviders and residents, and their family members' perceptions of these relationships. Additional scales that were developed and evaluated included the unit manager scale and the charge nurse scale which measured careproviders' perceptions of being in a supportive holding relationship with their supervisors. The objectives of the pilot work were to evaluate: 1) the content validity, internal consistency and test-retest reliability of questionnaires designed to assess relationship measures between residents and careproviders, and careproviders' perceived support from their supervisors; 2) the face validity of the family relationship questionnaire and the charge nurse questionnaire; 3) the interrater reliability of an observational measure of careproviders' interactional behaviors; and 4) the feasibility of the newly developed scales.

Development of the Questionnaires

Careprovider-Resident Relationship (CR) Scale

After reviewing many long-term care studies, it was concluded that there were no suitable instruments to measure the careprovider-resident relationship in long-term care environments. Therefore, it was necessary to design a new instrument. Relationship measures were found in the psychiatric literature, such as the Relationship Inventory by Barrett-Lennard (1978) and a Relationship questionnaire by Truax and Carkhuff (1967). Both of these scales were developed to appraise the therapeutic relationship between the therapist and his or her patient. These measures were not applicable for the long-term care setting, as careprovider-resident relationships
in long-term care are different. Careproviders are called upon to be dependable and empathic, and to meet the dependency needs of the residents. The need for being dependable was not a construct found in any of the previously established older psychiatric relationships scales. The newly developed relationship measure was based on Winnicott’s conceptualization of a holding relationship.

The first stage of developing the relationship measures consisted of delineating the theoretical domains of Winnicott’s relationship theory and generating items related to the specific behaviors for each domain. The specific domains of the relationship are empathy and reliability of the careprovider. Empathy was conceptually defined as identifying with the wishes and particularities of the individual, recognizing the needs of another, and being sensitive to the individual’s response. Three specific items were generated based on the careproviders’ empathic behaviors: 1) treats me as an individual; 2) is responsive to my needs and; 3) understands me. Reliability was conceptually defined as being dependable, protecting the person from the unpredictable, and tolerating rejection without retaliating. Three specific items were generated based on the careproviders’ reliable behaviors: 1) is dependable; 2) has my best interests at heart; and 3) tolerates my being mean by not responding to me that way. Thus, the Careprovider-Resident Relationship (CR) scale was designed to capture the reliable and empathic characteristics of the careprovider (Appendix A).

In order to measure the reliable and empathic characteristics of the careprovider a three point Likert scale was used. The response items included “very little, somewhat, and very well”. Residents were asked to indicate their degree of agreement or disagreement with the six items of the careprovider-resident relationship scale (CR scale) with respect to the careprovider who took
care of them most often. To facilitate the interpretation of the measure, the responses to the items were summed to obtain a total score.

**Family Careprovider-Resident Relationship (FCR) Scale and Family Yes/No Relationship Scale**

The Family Careprovider-Resident Relationship (FCR) scale was developed based on the same six items of the CR scale. The same Likert scale format with three points was used to measure these relationships (Appendix B). Participants were asked to indicate their degree of agreement or disagreement with the items of the FCR scale with respect to the careprovider who took care of their relative most often. A dichotomous item scale, entitled the Family Yes/No Relationship Scale (FY/N), was developed and added to the FCR so that family members could indicate if they felt a close nurse-resident relationship was evident or absent between their relative and the same careprovider.

**Resident Visual Analogue Scale**

The Resident Visual Analogue Scale (RVAS) measured the careprovider’s perception of his/her relationship with a specific resident (Appendix C). The RVAS was a 100 mm, horizontal VAS. The anchors were a “close, involved relationship” and “not close, not involved relationship”. The advantage of the VAS is the speed of administration and, given that the careproviders were asked to complete one for each resident they cared for, this was an important factor to consider when developing the scale. This type of global scale permits the respondent to do what comes naturally: to combine aspects of the situation as he or she ordinarily thinks of them (Ironson, Brannick, Smith, Gibson & Paul, 1989).
Unit Manager Relationship Scale

After reviewing management support scales, no instruments were found that measured the unit manager-careprovider relationship in long-term care environments; therefore, it was necessary to design a new instrument. Measures were found that focused on the leadership qualities of the unit manager, such as the Leader Behavior Questionnaire (LBQ) (Ohio State Leadership Studies Centre, 1983), the Situational Leadership Inventory (SLI) (Warner, 1985), and the Supervisory Behavior Description (SBD) (Fleishman, 1953). All of these scales focused on two dimensions of the leader behavior: task behavior and relationship behavior (SLI), or initiating structure and consideration (SBD & LBQ). These scales were developed for industrial settings and were not focused on features of leadership in human service occupations.

Administrators are central to the residents’ experience as they determine the ambiance of the unit and the way nursing staff feel about their work. How they care for residents depends on the attitudes of those at the top (Glass, 1992). A commitment to excellence in caring that filters down to the residents is the role of the administrators. One measure was found that examined the supportive qualities of nurse leaders. Firth, McIntee, McKeown and Britton (1986) attempted to clarify the nature of effective support from a superior as perceived by qualified nursing staff in psychiatric settings. Personal respect, empathic attention, and absence of interpersonal defensiveness appeared to be important factors defining support. They measured these three constructs with a 100 item questionnaire which was not applicable for this study because of its length. As well, to remain conceptually consistent in operationalizing the holding relationship, the essential characteristics of supervisors who support nursing staff needed to be operationalized from Winnicott’s theory. Winnicott’s concepts, however, are not inconsistent with those found in
Firth et al.'s work.

The first stage of scale development consisted of delineating the theoretical domains of Winnicott's relationship theory and generating items related to the specific behaviors for each domain. The specific domains of the relationship, reliability and empathy of the unit manager, were defined exactly the same as they had been for the careprovider. Empathy was conceptually defined as the unit manager identifying with the wishes and particularities of the careprovider, recognizing the needs of the careprovider, and being sensitive to the careprovider's response. The specific empathy items were the same as for the careprovider-resident relationship.

Reliability was conceptually defined as the unit manager being dependable, protecting the careprovider from the unpredictable, and tolerating rejection without retaliating. Again, the three specific reliability items were the same as for the careprovider-resident relationship. The Unit Manager Relationship (UMR) scale thus captured the reliable and empathic characteristics of the unit manager (Appendix D).

A Likert scale format with three points was used to measure this relationship. Participants were asked to indicate their degree of agreement or disagreement with the six items of the unit manager relationship scale (UMR scale). The responses to the items were summed to obtain a total score.

**Charge Nurse Relationship Scale**

Winnicott's conceptualization of a supportive environment, included the unit manager and the registered nurses (RNs), because the latter are the charge nurses on many shifts in long term care environments, and they have a lot of contact with the nonregistered staff. The charge nurse in this facility was a registered nurse who worked on the unit and was the primary nursing contact
person. The duties of the charge nurse involved organizing the daily care of residents by ensuring that the team of registered practical nurses and health care aides was caring for them effectively. The charge nurse and the other careproviders report to the unit manager who is their supervisor. The registered nurses were also called upon to provide the necessary supportive component to enable the careprovider to focus on the enhancement of the relationship between careprovider and resident. The items of the Charge Nurse Relationship Scale (CNR) were based on Winnicott and were identical to the items found on the UMR scale (Appendix E).

**Careprovider Interactional Behavior Scale (CIBS)**

Few observational instruments exist for assessment of careproviders’ caring behaviours. Burgener, Jirovec, Murrell, and Barton (1992) used the Interaction Behavior Measure (IBM) developed by McCroskey and Wright (1971) to rate caregiver behavior in difficult caregiving situations. The Quality of Interaction Schedule (QUIS) has a common category system for interaction behavior of caregivers. The observer assigns the category of positive, neutral or negative behaviours, after taking detailed notes during the observation (Dean, Proudfoot, & Lindesay, 1993). The Quality Patient Care Scale (QUALPACS) evaluates the process of care and the quality of nursing care delivered to patients while care is in progress (Wandelt & Ager, 1974). The observer indicates the frequency of occurrence of the nursing staffs’ behaviors. The concern with using these scales is that they are atheoretical and hence, there is no link between what behavior is expected of the careprovider and why. For this study then, a careprovider interactional behavioral scale was developed based on the research findings by Brown (1995) which is based on the relationship theory by Winnicott (1965). The three careprovider domains that address the careproviders’ ability to provide a holding relationship include: 1) staying with
resident during the care episode, 2) altering the pace of care by being sensitive to the resident's response, and 3) focusing on the resident and not persisting with the task at hand (Brown, 1995). These behaviors also operationalize the essential capacities of the careproviders to provide a holding relationship by demonstrating reliability and empathy. Empathy involves recognizing the needs of another and being sensitive to their responses as evidenced by items 2, altering the pace of care and 3, focusing care beyond the task, where care is based on the needs of the person. Reliability refers to dependability and is operationalized in item 1, as staying with the resident which involves attempting to be there for the resident (Appendix F). Specific careprovider behaviors that operationalize each domain were identified (Appendix G). Preliminary content validity was established for the scale and the method is addressed in the content evaluation section in this chapter.

Smith (1978) has described essential attributes of the activity elements in a work sampling study that were considered while developing the Careprovider Interaction Behavior Scale (CIBS) for this study. (1) The items on the tool must be easily observable, since work sampling is unobtrusive. The criterion, staying with the resident, and attempting to connect with him/her, for the untrained person, may be thought of as not readily observable. Videotapes of care providers interacting with residents used in a study by Brown (1995) were thus utilized as part of the training of the research assistant who participated in collecting this information. (2) The elements in the tool must be mutually exclusive; each observed action must be classifiable as only one of the activity elements. (3) The activity elements must be collectively exhaustive in that each action must be classifiable and correspond to one of the activity elements. (4) The elements in the tool must be reasonable in number. The activities in the interactional observational checklist appear
comprehensive, discrete and unambiguous.

In this study, the investigator was interested in observing the careproviders' interactions with residents. However, the customary split second work sampling observation would not capture the essence of the interaction (McCloskey & Wright, 1971; Winnicott, 1965). For instance, altering the pace of care if the resident becomes agitated is not captured in a one second interval. Therefore, a more valid method involving the observation of the total interaction, which lasted up to 15 minutes during morning or afternoon care, was used.

Two forms of the CIBS were pilot tested because the best approach to capturing the phenomenon of a holding relationship was not known. The choice involved a global rating of behavior over three, five minute periods (Form 1) (Appendix F) or observations over a series of one minute intervals for 10 minutes (Form 2) (Appendix H). The structure of Form 1 was constructed by examining a behavioral checklist developed by McCrosky & Wright (1971) who utilised observational forms to capture careproviders' interactional behaviors. This form used semantic differential scales to measure behaviors and a global rating of the behavior at five, ten and fifteen minutes into the interaction were recorded and an average score was obtained. The structure of Form 2 was constructed by examining a behavioral checklist (EBIC) developed by Stewart, Hiscock, Morgan & Murphy (1992), who had utilized an observational format to capture cognitively impaired elders' behaviors in response to environmental stimuli.

Following the pilot study, Form 1 was chosen as more useful for the interpreting the findings for this study because it allowed for the observer to measure whether the careproviders behavior was positive or negative since the scale had adjectives with opposite meanings (e.g., staying with resident vs. not staying with resident). The rating scale for the CIBS had seven
points and consisted of three ratings which were negative, three that were positive and one that was neutral. If careproviders scored a one on the rating scale, they were consistently negative for the whole time; if they scored a two, the were frequently negative, and a three represented occasionally negative. A score of four represented being neutral in their behavior. A seven meant consistently positive throughout the interval, six represented frequent positive behavior that was interrupted, and five indicated that occasionally the careprovider was positive.

**Procedures and Evaluations**

The procedures and the evaluations for the psychometric properties of the newly developed scales are described in the next section. Psychometric evaluation of the six newly developed scales included face or content validity, stability (test-retest), internal consistency, and interrater reliability using Cohen’s kappa to control for chance agreement (Table 5). Construct validity was not carried out as there were no 'known groups' since it was not clear which residents perceived themselves to be in holding relationships and which did not. However, establishing content validity is an important first step to construct validity (Waltz, Strickland, & Lenz, 1991) and to quote Guion (1977) “all validity is at its base some form of construct validity... It is the basic meaning of validity” (p. 410). This study attempted to learn more about the construct and predictions will be tested in future work (Streiner & Norman, 1991).
Table 5

Psychometric Properties of Tools to be Evaluated

<table>
<thead>
<tr>
<th>Scales</th>
<th>Number of Items</th>
<th>Content Validity</th>
<th>Face Validity</th>
<th>Internal Consistency Reliability</th>
<th>Test-Retest Reliability</th>
<th>Interrater Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careprovider-Resident Relationship (CR) Scale</td>
<td>6</td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Family Careprovider-Resident Relationship (FCR) Scale</td>
<td>6</td>
<td></td>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Unit Manager Relationship (UMR) Scale</td>
<td>6</td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Careprovider Interactional Behavior Scale (CIBS)</td>
<td>3</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Resident Visual Analogue Scale (RVAS)</td>
<td>1</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charge Nurse Relationship (CNR) Scale</td>
<td>6</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Content Validity Procedure

Lynn (1986) describes content validation as a rigorous assessment consisting of a two stage process: development and judgement quantifications. The development stage consists of domain identification, item generation and instrument construction (DeVillis, 1991). The development stage was addressed previously and it involved the investigator and some of the
committee members’ developing the items for the scale to reflect the full content domain of the holding relationship as conceptualized by Winnicott.

The second stage, judgement quantification, entailed asking experts to evaluate the validity of items individually and as a set (DeVellis, 1991; Lynn, 1986). Grant and Davis (1997) suggest the soundness of the validation process is greatly influenced by how the content experts are chosen and utilized for instrument development. Criteria used to select the experts were clinical expertise, research experience on the phenomenon of interest, or expertise related to the conceptual framework. The experts were able to be objective and they had sufficient distance from the investigator to avoid sources of bias. Five experts were selected for each of the two scales, (n=10), as among them they had the desired expertise and range of representation for the panels. The experience of the content experts was captured utilizing a survey that each participant completed (Appendix I).

The five relationship experts all held master’s degrees in nursing which were obtained between 1975 and 1990. Of these, three held doctorates and on average, the group had 15 years of clinical practice. Two held faculty positions, had expertise with the conceptual framework and had published in the area of relationships, and three worked at teaching hospitals in either clinical or administrative positions, and had completed master’s theses in this field of inquiry.

The five administrative experts all held master’s degrees in nursing which were obtained between 1978 and 1993. Two held doctorates and three were pursuing a Ph.D. in nursing. Three held faculty positions and two worked in administrative positions in teaching facilities. The group members ranged from 10 to 25 years of administration experience. The majority of the experts had published and had completed research studies in the area of administration and leadership in
The content validation procedure consisted of a two step process for both the UMR and CR scales. In step 1, a covering letter (Appendix J) was sent to the relationship and managerial experts along with a letter of introduction (Appendix K & L), a content evaluation questionnaire (CVEQ) (Appendices M and N), and the original scales. The scales were initially evaluated by the experts using Part 1 and 2 of the content validity evaluation questionnaire. The scales were revised based on their recommendation and in step 2, and a letter was sent out to the experts (Appendix O and P) and the second revision of the scales was evaluated using Part 3 of the CVEQ (Appendix Q and R).

In step 1, part 1, the expert panel were asked about the specific items of the scale and were requested to indicate on a 4-point rating scale whether questionnaire items that reflected the reliable and empathic concepts were relevant, i.e., reflective of the underlying theory. The content validity assessment scale (1 = not relevant; 2 = unable to assess relevance without item revision or item is in need of such revision that it would no longer be relevant; 3 = relevant but needs minor revision, such as clarity in wording; and 4 = very relevant and succinct) was adapted from the work of Lynn (1986). Content validity was determined by the proportion of experts who scored items as relevant with either a 3 or 4. The content validity index is the percentage of total items judged to be content valid by receiving a score of 3 or 4. A new content valid instrument should have a minimum content validity index of .80 (Davis, 1992). In step 1, part 2, the expert panel was asked to comment on the comprehensiveness of the total instrument and about the clarity of the items using the CVEQ.

The scale was revised based on the expert panel’s recommendations and in step 2, the
second revision of the scales was evaluated using Part 3 of the CVEQ. During Part 3, the expert panel was asked to rate the newly revised scale according to five questions related to the individual items and the comprehensiveness of the scale. At that time the content validity index was calculated again.

Content Validity Evaluation

Careprovider-resident relationship scale.

Parts 1 & 2: The CR questionnaire included six questions with 4/6 receiving a three or four on the 4 point scale by at least four of the five reviewers (Table 6). The content validity index was 66%. Two of the questions underwent major revisions and the items were reworded based on the feedback from the experts. The other four also changed to include examples which assisted in making the items more understandable. The major criticism of the initial scale was the failure to contextualize the items to reflect what is expected in a careprovider-resident relationship. Also, the experts at this first rating did not agree that the complete set of instrument items was sufficient to represent the total content domain: they felt the items needed to be more specific to the resident's experience of reliability and empathy. One expert also felt that a five point Likert scale would allow for a more reasonable distribution of responses so all the Likert scales were revised. The five response items included: “always, often, occasionally, seldom and never”.
### Table 6

**Content Validity Assessment of the Careprovider-Resident Relationship Scale by 5 Reviewers**

<table>
<thead>
<tr>
<th>Concept</th>
<th>Rating Scale**</th>
<th>(N=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 = not relevant</td>
<td>2 = needs revision</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>treats me as an individual</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>sensitive to my responses</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>understands me</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dependable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>has my best interests at heart</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>tolerates me being mean</td>
<td></td>
<td>*</td>
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</tbody>
</table>

**Rating scale adapted from the work of Lynn, 1986.**

Part 3: The revisions of the CR scale were sent back to the panel. The relationship experts unanimously agreed that the items on the revised CR scale captured the essence of a holding relationship (Appendix S). A 100% content validity index was obtained from the panel for the CR scale in the second evaluation (e.g., that all questions received a 3 or 4 by all five reviewers). The reviewers agreed that the items were relevant to a careprovider in a long term care facility. They all felt that appropriate context and specificity were included in the items. They felt the items were an adequate representative sampling of the collection of situations in which the careprovider is reliable and empathic and they were pleased with the order in which the items were presented in the scale. The items of the CR scale changed considerably from the initial scale because of the
comments generated from the reviewers.

**The Unit manager-careprovider relationship scale.**

**Part 1 & 2:** The UMR questionnaire included six questions with 5/6 receiving a three or four on the 4 point scale by all the reviewers (Table 7). The content validity index was 83.5%. The question pertaining to the unit manager’s tolerating the careprovider’s being mean required extensive revision, as this item was deemed an unrealistic expectation for a careprovider-manager relationship. All the items were revised to include more context. The experts at this first rating did not agree that the complete set of instrument items was sufficient to represent the total content domain.

Table 7

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Rating Scale**</th>
<th>(N = 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 = not relevant</td>
<td>2 = needs revision</td>
</tr>
</tbody>
</table>

**Empathy**

- treats me as an individual
- sensitive to my responses
- understands me

**Reliability**

- dependable
- has my best interests at heart
- tolerates me being mean

**Rating scale adapted from the work of Lynn, 1986.**
Part 3: The revisions of the scale were sent back to panel members. Following the revisions the experts felt that the items on the UMR scale captured the essence of the supportive relationship between careprovider and manager. A 100% content validity index was obtained by the reviewers for the revised scale. The reviewers agreed that the items were a realistic expectation of a unit manager in a long term care facility. They all felt that appropriate context and specificity were included in the items. They felt the items were an adequate representative sampling of the collection of situations in which the unit manager is reliable and empathic. The final instrument included significant changes based on the feedback from the experts (Appendix T).

Careprovider Interactional Behavior Scale (CIBS).

For this study, the careprovider interactional behavior scale was developed based primarily on the research findings by Brown (1995) that are based on the relationship theory by Winnicott (1965). The construction of the CIBS involved an iterative process of conceptual analysis, observations of careprovider interactions and a careful review of the results of the Brown study. This phase established preliminary face validity of the scale through observation of videotapes of careprovider behaviors in long-term care, manual recording by two observers, and a review of specific careprovider behaviors by the investigator and by Brown, a clinical nurse specialist in long-term care. Specific behaviors that operationalize each domain were identified during this iterative process and an expert in Winnicott’s work verified the domains and the specific behaviors. This process for establishing face validity for an observational tool is similar to the one outlined by Stewart et al. (1999).
Face Validity Procedure

The Family Careprovider-Resident Relationship Scale (FCR) and the Charge Nurse Relationship Scale (CNR) were reviewed by five family members and five charge nurses because of their familiarity with the construct through direct personal experience (Grant & Davis, 1997). The investigator did not know any of the respondents personally. Each person was given the scale to complete and asked to comment on the scale’s ease of use, its use for the assessment of empathic and reliable careproviders or supervisors, and the relevance of each item.

The FCR was constructed to replicate the items on the CR which was content validated by the relationship experts. Likewise the CNR was similar to the UMR scale which was content validated by the managerial experts. As described in the next two sections, once these original scales were reviewed by the family members and the one managerial expert, the context of the items had to be changed for both scales and therefore, only face validity of the scales was achieved.

Face Validity Evaluation

Family careprovider resident relationship (FCR) scale.

During the pilot test, three of the five family members who reviewed the items found that they were difficult to complete because they had relatives who were not able to communicate. For example, item three on the scale stated, “Do nurses understand your family member?” Family members did not know how the nurse could understand their family member as they could not communicate their wishes and reactions. Based on this concern, the scale was revised to include items that the family member could complete even if the resident was nonverbal (Appendix U). These items still reflected Winnicott’s conceptualization of a holding relationship. Face validity of
the scale was achieved by asking the same family members to review the items. Family members felt the new items captured the domains of the careprovider being there for their relative and being sensitive to their responses. Family members appreciated being able to comment on the relationship between careproviders and relatives. Some family members also added comments about why relationships do or do not exist between their relatives and careproviders, so an open-ended question was added to this questionnaire.

**Charge Nurse Relationship Scale (CNR).**

Prior to asking charge nurses to review the scale, the original CNR was sent to one of the content experts who was working as an administrator in a long-term care facility. The expert made some suggestions and the context of the items were revised to capture the responsibilities of charge nurses in long-term care environments. Following this process, five registered nurses reviewed the scale for face validity. Comments made by these registered nurses indicated that they felt the items reflected what was expected of them when they were at work (Appendix V).

**Resident Visual Analogue Scale (RVAS).**

During the pilot testing, the resident visual analogue scale (RVAS) was also sent to the relationship experts for their feedback regarding the anchors that were developed. One expert on the panel suggested that the anchor of the RVAS be changed from “close, involved relationship” to a “very close nurse-resident relationship” (Appendix W). The expert felt that by including the ‘nurse-patient relationship’, the careprovider might feel more comfortable because of the relationship modifier.

**Internal Consistency and Test-retest Reliability Procedure**

In order to assess internal consistency and test-retest reliability of the revised CR, UMR
and FMR questionnaires, 30 residents, 30 careproviders and 30 family members from four units in the adjoining chronic hospital and from one unit in the nursing home were asked to participate in the study. The characteristics of the residents, family members and nursing staff were similar to the intervention sample. Inclusion criteria for the careproviders were: a health care aide or registered practical nurse with at least three months work experience in a long term care facility with either full-time, part-time or casual status; for residents the criteria were living in a long term care facility and being able to understand English; and the criteria for family members were being a family member of a resident who is currently residing in a long-term care facility and able to understand English.

The unit manager provided the researcher with a list of names of eligible staff, residents and family members who visited frequently to facilitate the distribution of questionnaires. An information letter and questionnaire were distributed to each potential participant (Appendices X, Y, & Z). After obtaining consent from all the participants, (Appendices AA, BB, & CC), the investigator and research assistant completed the questionnaires with the participants on the unit, (i.e., asked them the items at a time convenient for the subjects). This method of data collection assisted in increasing the response rate. Anonymity was assured for each participant. All participants were invited to complete the questionnaire twice, two weeks apart. A confidential code was assigned to each subject so that matching of the questionnaires was feasible.

The internal consistency of each of the scales was evaluated using the Cronbach’s alpha coefficient, which measures the extent to which performance on any one item on an instrument is a good indicator of performance on any other item in the same instrument. (Nunnally, 1978). Cronbach’s alpha usually provides an acceptable estimate of reliability. According to Nunnally
and Bernstein (1994), a satisfactory level of reliability depends on the purpose of the measure and in early construct validation research, time and energy can be saved by using instruments with reliability around .70. Test-retest reliability was examined to evaluate the stability of the responses as it was assumed that these relationships are stable. Pearson correlations were computed to compare individual subjects' responses on identical questionnaires completed two weeks apart. This time frame was chosen so that memory recall would not be an issue (Waltz, Strickland & Lenz, 1991).

**Internal Consistency and Test-retest Reliability Evaluation**

**Careprovider-resident relationship questionnaire.**

This questionnaire was completed by 30 residents living in long term care. The residents' average length of stay on the long term care units was 22 months. Seventy-five percent of the respondents were female and their mean age was 84 years (SD = 9.9). The Cronbach's alpha coefficient average for all six items of the CR scale was .86. Item to total correlations were acceptable at between .4 and .7. This is acceptable as the criterion is >.3 (Nunnally, 1978). The test-retest scale correlation for the CR scale was .69. This moderate correlation raises the question about the stability of the measure as it may be closely related to the most recent care episode with the careprovider and thus situational in nature. The correlation may also be related to the resident evaluating a different careprovider on each occasion.

**Unit manager-careprovider relationship questionnaire and Resident Visual Analogue Scale (RVAS).**

Questionnaires were completed by 30 nursing staff in long term care. The nursing staff consisted of 10 registered nurses, 11 registered practical nurses and 9 certified health care aides.
They had worked on average for 12 years in the long term care environment and their average age was 44 years. The Cronbach’s alpha coefficient for the UMR was .87. Item to total correlations were between .3 and .8. The test-retest scale correlation was .89. The careproviders also completed the RVAS and the test re-test score for this scale was .86.

**Family resident-careprovider relationship questionnaire.**

This questionnaire was completed by 30 family members of residents living in long term care. The family members on average visited four times a week. The majority of the family members were spouses. The Cronbach’s alpha coefficient for this scale was .68. The test-retest scale correlation was .85. The internal consistency of this scale was moderate and therefore, a more thorough assessment of the internal consistency of the scale was warranted. Item to total correlations were acceptable at between .4 and .6. This is acceptable as the criterion is > .3 (Nunnally, 1978). Item # 5 had the lowest item to total correlation but dropping it only improved the Cronbach alpha to .71 so it was retained for the time being.

**Interrater Reliability Procedure**

Interrater reliability refers to the degree of agreement among different raters in assigning scores to the same objects or responses at the same time (Nunnally, 1978). Interrater reliability was determined by the researcher and the RA scoring the careproviders’ behavior on the Careprovider Interactional Behavior Scale (CIBS) items independently at the same time. The group of nurses who were examined were on videotapes that were made available through a study conducted by Brown (1995). The videotapes depict careproviders providing morning care to residents with cognitive impairment who live in a long-term care facility. The careproviders and residents who were videotaped had signed a consent indicating that the tapes were allowed to be
viewed for further analysis and for educational purposes (Brown, 1995). The research assistant and researcher watched the tapes (eight resident and careprovider dyads) to establish acceptable interrater reliability of the CIBS. The interrater reliability was assessed with the kappa statistic. Kappa provides an estimate of agreement over and above chance and is preferable to percentage agreement (Bakeman & Gottman, 1986). Feinstein (1985) defined kappas of .61 to .80 as substantial agreement. The use of the videotapes permitted repeated checking of the data to ensure accurate interpretations. Videotapes were useful for frame-by-frame analysis. Once interrater reliability was achieved watching the video tapes, the two raters went into the field and watched 10 careprovider-resident dyads over two days to ensure that interrater reliability was maintained.

Interrater Reliability Evaluation

Interrater reliability was calculated during the training program between the research assistant and the investigator. Kappa's were obtained for each domain of the scale. The kappas were as follows: staying with the resident = .80, altering pace of care = .83 and focusing care beyond the task = .80. A coefficient of 1 indicates complete agreement which means the relative ordering or ranking of scores assigned by one judge matches the relative order assigned by the other judge (Waltz, Strickland, & Lenz, 1991).

Discussion of the Psychometric Properties of the Scales

Two of the three scales, the CR and the UMR, had adequate internal consistency as their alpha scores were close to the minimum standard of .9 set by Nunnally (1978). Since only 30 family members completed the FCR scale, and because the item to total correlations were acceptable, it was decided to proceed with the scale for the main study and to re-examine the
internal consistency of the scale at that time. The UMR, FCR, and the RVAS scales had adequate test-retest correlation scores, as the closer the correlation is to 1, the more stable the measurement is presumed (Waltz, Strickland, & Lenz, 1991). The CR scale had a moderate correlation of .69 which may be evidence that this is measuring an unstable phenomenon or one that may be contextual in nature. The interrater reliability of the CIBS was very good with kappas within the acceptable range.

**Evaluation of the Feasibility of the Scales**

During the pilot study, the feasibility of administering the instruments was evaluated. Evaluation of the utility of the scales is recommended as the adequacy of the instruments and the data collection strategies and proposed methods may reveal problems that can be revised prior to initiating a larger study (Burnside, Preski & Hertz, 1998). As well, the potential sources for error regarding data collection utilizing these scales were evaluated so that for the main study they could be alleviated or minimized.

**Scales completed by the Residents**

During the pilot study it became evident that evaluating the relationship between the resident and the careprovider that took care of them “most often” would not always be feasible. Careproviders changed so frequently that residents did not know who they had most often, but most were able to evaluate the one careprovider they “knew the best”. However, for a few residents, neither option was feasible and they evaluated “all of nursing staff” when answering the questionnaire. The residents’ selection was recorded. This inconsistency potentially could pose a threat to the validity of the study; however, it reflected the reality of this and many long-term care environments. The intervention was directed at overcoming this reality by permanently assigning
careproviders to residents so the residents would be able to respond to directives to assess the relationship with the careproviders who cared for them most often in the post-test.

Sources of measurement error for elderly populations have been identified by Polit and Hungler (1995) and these were taken into account when administering the scales. The following threats will be discussed as well as the actions taken to reduce response bias, factors within the subject bias and instrument clarity bias.

Response bias. Two of the 30 residents spoke about fear of repercussion. Clear direction and reassurance was provided to all subjects that the information collected would remain confidential. The location for the interview was usually in the resident’s room, and if someone entered the room, the interview was suspended until privacy was assured.

Factors within the subject. Various physical and psychological factors within the subject can influence the subject’s ability to respond accurately to the questionnaire. Because of this concern, all residents were approached after breakfast when most residents were alert and not hungry or tired. Also to circumvent this bias, if residents did not feel well on the day the researcher was there to collect data, a return visit was scheduled. Five of the 30 residents were approached on a subsequent day as they were not feeling well on the day the researcher collected data. Another factor worth mentioning was the resident’s cognitive abilities and hence, his/her ability to respond accurately to the questionnaire. To enhance the accuracy of the data collected, the investigator utilized a simple cognitive screen developed by Ouslander and Schnelle (1993). The cognitive screen required residents to state their name on request and reliably identify two common objects. Only if they responded accurately, was the interview continued.

Instrument clarity. The questionnaire was typed with a font size of 16 points which was
recommended by the Ethics Review Committee at the Facility and early in the pilot study, it
became evident that this print was not large enough for some residents. The questionnaire was
read to the resident but the response code was difficult for some to remember, i.e., always,
sometimes, etc. The response code was typed with a font size of 22 points and this assisted with
collecting the data more accurately.

Scales Completed by the Family Members

During the pilot study, it became evident family members also had difficulty evaluating the
relationship between themselves and the careprovider who took care of their relative “most
often”. Family members were asked to evaluate either the careproviders whom they “knew the
best” or who cared for their relative “most often” or to evaluate “all the nurses”. This information
was recorded. Due to the nature of the intervention, family members were able to evaluate the
careprovider who cared for their family member “most often” post-intervention.

The threats to administrating the questionnaire and factors within subject bias will be
discussed as well as the actions that were taken to reduce them.

Administrating the questionnaire bias. During the pilot study most family members were
interviewed and completed the scale with their relative in the room. On occasion, the family
member would ask the resident for his/her opinion, which sometimes conflicted with how the
family member felt, and hence would then affect the family member’s final response. To minimize
this phenomenon, in the main study family members were not interviewed in the presence of the
resident (their relative); instead, they were contacted by phone at their place of residence in the
evening. Some researchers have expressed concerns relating to the suitability of telephone
interviewing as a method of collecting data from older people (Herzog, Rodgers & Kulka, 1983),
and the feasibility of using this method when there has been no prior face-to-face contact (Marcus & Crane, 1986). In spite of these reservations, no difficulties were encountered with telephoning family members. Family members were pleased to share their perceptions of care with the investigator. In a more recent study by Wilson & Roe (1998), they telephone interviewed elderly clients and encountered few difficulties and were satisfied with both the response rate and response quality.

**Factors within the subject.** Some of the family members who responded to the questionnaires were in their eighties or nineties. Before telephone interviewing, the family members were asked if this was a good time to be interviewed. On two occasions, family members asked the researcher to phone back when they had more energy. Respecting their wishes meant allowing them to respond to the questionnaire when they were not in a state that would affect the accuracy of the data.

**Scales Completed by the Careproviders**

Response and performance bias, and situational factors were threats to the accuracy of the data collection that were noted during the pilot test. Strategies to circumvent these threats were tested with success during the pilot study.

**Response bias.** Five of the 30 careproviders (17%) refused to answer the questionnaires about their unit manager for fear of repercussion. The introductory paragraph was rewritten which stressed the confidential nature of the data. Additionally, prior to interviewing the careproviders, the researcher stressed to each subject that the collected information would be kept confidential and that the unit manager would not know who participated. It was further communicated to the participants that the researcher was not affiliated with the long-term care
There is some concern as to whether careproviders may have been the subject of performance bias, also known as Hawthorne effect, meaning that since the careproviders were aware of someone observing them in practice, they may have behaved differently. Previous experience indicates that the anxiety a nurse may experience because she/he is being observed will diminish and disappear in time (Caris-Verhallen, Kerkstra & Bensing, 1999). As well, in order to decrease the nursing staff’s discomfort with being observed, the Research Assistant (RA) spent time getting to know the nursing staff prior to observations and interviewed the careproviders prior to observing them. The careproviders reported spontaneously at times to the RA, that the observed encounter was a typical representation of their normal situation.

The possibility of performance bias was also more of a concern because the observational data between each specific resident and careprovider dyad were collected at only one time, which as Waltz, Strickland and Lenz (1991) indicate, is subject to more errors than observational data collected at multiple times. However, to compensate for this potential threat, the same careprovider was observed with the resident for a 15 minute interval. Also, the careproviders were observed with more than one resident which increased the probability that the individual’s true careproviding abilities were being measured.

Quickly it became very clear that there were few optimal private places to interview careproviders in this facility and the careproviders had very little time in their day to be interviewed. Innovative ways to meet the need for privacy were developed such as meeting in the tub room or in the clean linen room. Attempts had to be made to meet with the
staff at times they preferred. For some, this was during their coffee break, but for most, this time was not acceptable, and alternative times were arranged. The careproviders were not compensated for their time. The need to be imaginative, perseverant and flexible as a researcher was duly noted!

**Summary and Conclusion**

Table 8 provides the results from the various psychometric testing that was completed in the pilot study. In conclusion, this pilot work provided preliminary evidence of the reliability and validity of the newly developed questionnaires. Methods to reduce the threats during data collection were explored and these strategies were utilized in the main intervention study to assist with accuracy in data collection. The following chapter describes the design and methods for the main study.
### Table 8

**Psychometric Properties of Tools**

<table>
<thead>
<tr>
<th>Scales</th>
<th>Number of Items</th>
<th>Content Validity Index</th>
<th>Face Validity</th>
<th>Internal Consistency Reliability</th>
<th>Test-Retest Reliability</th>
<th>Interrater Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careprovider-Resident Relationship (CR) Scale</td>
<td>6</td>
<td>Time 1 = 66% Time 2 = 100%</td>
<td></td>
<td>$\alpha = .86$</td>
<td>$r = .69$</td>
<td></td>
</tr>
<tr>
<td>Family Careprovider-Resident Relationship (FCR) Scale</td>
<td>5</td>
<td></td>
<td>$\checkmark$</td>
<td>$\alpha = .68$</td>
<td>$r = .85$</td>
<td></td>
</tr>
<tr>
<td>Unit Manager Relationship (UMR) Scale</td>
<td>6</td>
<td>Time 1 = 83.5% Time 2 = 100%</td>
<td></td>
<td>$\alpha = .87$</td>
<td>$r = .89$</td>
<td></td>
</tr>
<tr>
<td>Careprovider Interactional Behavior Scale (CIBS)</td>
<td>3</td>
<td>$\checkmark$</td>
<td></td>
<td></td>
<td></td>
<td>kappas = .80, .83, .80</td>
</tr>
<tr>
<td>Resident Visual Analogue Scale (RVAS)</td>
<td>1</td>
<td>$\checkmark$</td>
<td></td>
<td></td>
<td>$r = .86$</td>
<td></td>
</tr>
<tr>
<td>Charge Nurse Relationship (CNR) Scale</td>
<td>6</td>
<td>$\checkmark$</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Chapter 3: Methods And Design Chapter

Setting

The study took place at a university affiliated long-term care facility in an urban area. This facility was selected as the Vice President of Nursing and the unit managers were willing to participate in an intervention that aimed at improving relationships between careproviders and residents. The facility is a 892-bed teaching centre offering a range of residential, ambulatory and day care services for older persons. For this study, two nursing home units of the centre were utilized. Forty-four residents lived on each of the intervention and comparison units.

Research Design

The research design for this study was quasi-experimental for two reasons: (a) the allocation to intervention or comparison group was done at the unit, rather than the individual participant level, and (b) the allocation to groups was non-random (Cook & Campbell, 1979). Two units with similar residents and careproviders from the participating facility were selected for this study. The intervention was implemented in one, self-selected unit. The other unit served as the comparison. Data were collected at baseline, then the careproviders on the intervention unit received the intervention. The intervention was designed to last for six months but, in fact, the sessions were held over a seven month period because the conversion to a continuity of care assignment took one month longer than originally planned. The length of the intervention was based on studies by Cox et al. (1991), Teresi et al. (1993a), and Wilson and Dawson (1989) who demonstrated changes in nurses’ and residents’ behaviors following the implementation of a continuity of care delivery model over a similar length of time. Participants in both units were again assessed for change in the outcome variables nine months following the initial data
collection period.

**Selection of Research Units**

Randomization of nursing staff to control or intervention units was not appropriate for this type of study. It is unrealistic to expect a health care aide or any other member of the nursing staff to be one way with some residents and quite a different way with others who are all on the same unit. Furthermore, previous research (McAiney, 1998; Teresi et al., 1993a) and Kayser-Jones’ (1991) theory indicated that in order to change the care delivery system on a unit, it is important to have all the staff on a unit with their supervisors included. As well, randomization by careprovider within a given unit would have increased the risk of contamination of the comparison group (Ouslander & Schnelle, 1993). Random selection of units was not considered because unexpectedly, four units were not available because another study was being conducted on them (several more units were required by this study than originally planned) and this precluded their availability to choose among. Of the four remaining units, the nurse manager of two of them, a key player in the intervention, was leaving. One of the remaining units had been used in the pilot study leaving only one unit available as the intervention unit for this study. The comparison unit was chosen from one of the two units that had a new unit manager as it was most similar to the intervention unit in terms of resident characteristics and skill mix of staff.

The overall response rate for subject participation from the two units at Time 1 for all the subjects, including residents, family members and careproviders was 76%. Sample size calculations and the recruitment strategy are discussed below.
Sample Size

Resident Sample Size

The resident sample consisted of all residents who consented on each of the two units. A total of 44 residents lived on each unit so this provided the upper limit of individuals who could participate. There were no previous studies conducted in this field of inquiry that focused on enhancing relationships between residents and careproviders, and as such, there were no available data to predict an actual effect size. Detection of a large effect size was of interest as this was an exploratory study. The conceptual rationale for anticipating a large effect size is that this intervention consisted of multiple components and, furthermore, multi-component interventions usually demonstrate large effect sizes (Devine, O’Connor, Cook, Wenk, & Curtin, 1980). It was estimated that with an alpha level of .05, a power of .8 and a large expected effect size, 26 residents were required in each of the treatment and comparison groups (Cohen, 1992).

Family Member Sample Size

The family member sample consisted of one family member per resident on each of the two units. Since 44 residents lived on each unit the maximum number of family members available was 44. It was estimated that with an alpha level of .05, a power of .8 and a large expected effect size, 26 family members were required in each of the treatment and comparison groups (Cohen, 1992).

Careprovider Sample Size

The careprovider sample consisted of all careproviders (HCAs and RPNs) on each of the two units who provide care to the residents. There were 13 careproviders on the intervention unit and nine on the comparison unit so it was estimated there would be a total of 22 careproviders in
the sample. It was recognized that this small sample size resulted in limited power and that voluntary participation, while ethical, may introduce sampling bias.

The minimum number of careprovider observations on each unit was estimated. The observation of the careproviders' interactions with residents called for event sampling; the observer needed to be in a position to watch the careproviders during care and hence time sampling strategies were not appropriate (Waltz, Strickland, & Lenz, 1991). The developer of another event sampling observational tool called QUALPACS (Quality Patient Care Scale), which was created to measure careproviders' behaviors during care episodes, suggested that to monitor the quality of patient care on a unit 15% of the total patient population on a unit should be observed (Wandelt & Ager, 1974). Based on this precedent, the minimum number of observations required at each data collection time was seven residents per unit.

To offset the potential low power of the careprovider sample size, it was expected that at the end of seven months, significant changes, (i.e., large effect sizes) would have had time to appear based on studies by Cox et al. (1991), Teresi et al. (1993a), and Wilson and Dawson (1989). Further, design measures were included in the study that assisted in reducing error and increasing the effect size. The measures used were reliable and valid, and the "dose" of the careprovider intervention was believed to be sufficient to produce a treatment effect (Burns, 2000).

Sample/Subject Recruitment

A non-probability sample of residents, family members and nursing personnel working on the units was obtained for the main study. The recruitment strategy and inclusion criteria varied for each participant group.
Residents

Within the sample there were two sub samples, a questionnaire sub sample and an observation sub sample. For the questionnaire sub sample, nurse managers for both the intervention and comparison units were asked to provide a list to the investigator of the residents who met the following eligibility criteria: (a) medically stable, (b) sufficiently able to understand English to be able to respond to questions, and (c) cognitively able to provide informed consent and respond to questions. Twenty-six residents on the intervention unit and twenty-nine on the comparison unit were identified as they met the eligibility criteria. The researcher then contacted each resident to provide him/her with an information letter for the study and explain the purpose of the study (Appendix DD). If residents agreed to participate after reading the letter, informed consent was obtained (Appendix EE). Of the 26 residents on the intervention unit who met the eligibility criteria, three residents declined to participate which led to a sample size of 23 and a participation rate of 92%. Of the 29 residents on the comparison unit who were invited to participate, two residents declined which led to a sample size of 27 and a participation rate of 94%. Their reasons for declining included their discomfort in evaluating nurses who cared for them, and concerns about confidentiality.

Subject recruitment for the observation sub sample was quite different. While the questionnaire sub sample was determined by inviting all eligible subjects to participate, the observation sub sample was invited to participate based on whomever the careprovider was assigned to care for on their designated observation day. The careprovider informed the research assistant (RA) of the residents they would be assigned to on their designated day of observation. Following this discussion the RA selected which residents to observe with the careprovider based
on the preset inclusion criteria: (a) the resident was medically stable, and (b) required moderate to high levels of assistance for personal hygienic care. The RA observed each careprovider with at least two residents at each data collection period. Prior to the observations informed consent was obtained from the resident (Appendix EE). If a proxy consent was required, the resident’s substitute decision maker’s name was identified from the chart and the researcher contacted him/her either by telephone or in person while he/she was visiting the centre. The investigator explained the nature of the study to the primary contact person (Appendix FF) and if he/she agreed to have his/her relative/friend participate, arrangements were made for him/her to sign the consent form (Appendix GG). Although written informed consent was provided by the primary contact person of some residents, the final decision to participate or not was made by the resident.

On the intervention unit, there were 24 residents observed at time 1 and 24 residents were observed at time 2. Membership in the observation sub sample was not consistent from time 1 to 2 because careproviders were observed with different residents during the two observation periods. The inconsistency was created because the intervention called for careproviders to choose residents to care for on a continuing basis. Therefore, on the intervention unit a total of 38 residents were observed at time 1 and 2; 10 of these residents were observed at both times. Written consents were obtained from 20 residents and 18 substitute decision makers for the observation sub sample. One resident withdrew from the study because during the observation period he became suspicious of the RA in the room.

On the comparison unit, 16 residents were observed at time 1 and 15 were observed at time 2. Six of the same residents were observed at both times and therefore 25 consents were obtained from the observation sub group. Twenty residents provided written consent to be
observed and five substitute decision makers consented for their relatives to be observed. During the first data collection period two residents on the comparison unit asked the RA to come back on another day and their wishes were respected.

**Family Members**

Family members whose relatives resided on either the intervention or comparison unit and who were sufficiently able to understand English were included in the sample. To recruit family members into the study, the phone number and address of the resident’s family member who was the substitute decision maker was obtained from the resident’s chart, and information letters were sent to the family members (Appendix HH). Family members were then phoned and were asked to participate in the study. If they agreed to participate, the RA arranged a time to meet with them so that the consent forms which contained explanations about the nature of the participation, the rights of the family members concerning participation, and the risks and benefits of participating in the study could be signed (Appendix II).

Seven family members from the intervention unit and nine from the control unit were not recruited into the study because the researcher was unable to contact them after five telephone attempts. In addition, 11 family members declined on the intervention unit as did 14 on the comparison unit. Family members who declined to participate excused themselves because they rarely saw nursing staff during their visits and felt they could not give an accurate reflection of their care. Therefore, for those family members who were contacted, participation rates of 52% for the intervention group and 47% for the comparison group were realized.

**Nursing Personnel**

The investigator met with each Unit Manager to explain the study and to obtain
permission to recruit nursing staff into the study. Two meetings were held with staff on the unit to provide them with an opportunity to discuss the purpose of the study. An information sheet was provided to them at those meetings (Appendix JJ). Staff were assured at this time that privacy and confidentiality would be maintained. If they agreed to participate in the study, informed consent was obtained (Appendix KK). All the nursing personnel including the unit managers (UMs), the registered nurses (RNs), the registered practical nurses (RPNs) and the health care aides (HCAs) on the two units, who worked either full-time, part-time or casual, and who had at least three months of experience in the setting were eligible for inclusion in the sample. This time period has been identified as the minimal amount of time that an employee needs to be on a new job before becoming comfortable and capable of a fair evaluation (Weisman, Alexander, & Chase, 1980).

Of the 25 nursing staff on the intervention unit eligible to take part in the study, 7 HCAs, 5 RPNs, 6 RNs and 1 UM agreed to participate for a total of 19. Six careproviders (3 RPNs and 3 HCAs) refused to be involved in the study at baseline and hence, the overall participation rate for all nursing staff on the intervention unit was 76%. However, five of these six careproviders participated in a survey regarding how they felt about permanent assignments four months post baseline. The reasons these careproviders gave for not participating initially included concerns regarding confidentiality of information, and mistrust of research.

A total of 6 HCA, 3 RPNs, 5 RNs and 1 UM participated in the comparison group for a total of 15. Only 1 RN eligible to participate declined because she was retiring the following month; therefore, the participation rate was 93%.
The intervention was designed and based on Winnicott’s (1960) theory of relationships. This section will describe the purpose of the intervention and the type of activities that constituted the intervention. The process of implementing the intervention was guided by Beer’s (1988) framework for change (Appendix LL). The format for reporting the intervention is based on work by Sidani and Braden (1998). Following the discussion of the specific characteristics of the intervention, the teaching methodology that was utilized in the study is highlighted.

The primary purpose of the relationship enhancing program of care (REPC) was to promote relationships between careprovider and residents. In order to promote these relationships this program had three interrelated elements: (a) a continuity of careprovider model in which the careproviders have control over which residents are assigned to them, (b) the acquisition of skills and knowledge required by the careproviders to enhance interpersonal relationships, and (c) support to the careproviders from their nursing supervisors to assist them in maintaining effective careprovider-resident relationships. Two separate interventions were developed, one for the careproviders that addressed the acquisition of skills and the continuity of careprovider model, and another that was developed for the supervisors (unit managers and charge nurses) and focused on the supportive component. These strategies had been previously tested individually and there is some evidence of their effectiveness. The REPC was the first time all three strategies had been combined and delivered together.
The Sessions of the Careprovider Intervention

The acquisition of skills and the continuity of careprovider components consisted of five sessions that were designed to support the enhancement of relationship skills of the careproviders by addressing the following areas: (a) appreciating the need for change, (b) developing empathic and reliable characteristics, (c) establishing a continuity of careprovider assignment, (d) developing resident profiles and (e) sharing the resident profiles with each other.

Session 1: Appreciating the need for change. Dissatisfaction involves making the change recipients aware that the current state is not acceptable and helping them become aware that there is dissatisfaction with the status quo (Beer, 1988). The session was planned to engender commitment to the need for change and to introduce experiential learning into the sessions as a way to enhance empathy (La Monica, 1993) which was done by asking careproviders to reflect on their values and beliefs about quality of life. Opportunities were made available for staff to comment on their own experiences, or those of their loved ones, of being hospitalized, and how hospitalization made them feel.

Next, the investigator presented studies that indicated that residents and careproviders felt that close relationships between nursing staff and residents supported the quality of life of residents and higher job satisfaction of staff. Reflective practice was utilized to focus on which relationships with residents had been successful in the past and why. The new vision for the unit, that was drafted with assistance from the unit manager and the charge nurses and focused on the enhancement of resident-careprovider relationships, was shared with the nursing staff in the monthly newsletter (Appendix MM).

Session 2: Developing empathic and reliable skills. In the second session, the attainment
of the essential attributes prescribed by Winnicott (1960), i.e., reliability and empathy, was the focus for the skills development. Opportunities were made available to nurses to reflect on reliable and empathic behaviors, and discussions involved how nurses could enhance these capacities when caring for residents. Expressing oneself empathically was also a component of this session but the emphasis was not placed on saying the right thing. Rather, the focus was on the person and listening to the residents’ experiences. Emphasis was placed on opening lines of communication by acknowledging the resident’s emotion and by trying to provide choices and understanding. To summarize what had been learned, careproviders were asked what careprovider behaviors indicate that care was being delivered reliably and empathically.

Session 3: Establishing a continuity of careprovider assignment. In the third session, nursing staff were introduced to the benefits of consistency of caregiver over time and were given an opportunity to express their concerns over the proposed assignment. RNs were invited to these sessions because in this facility, they were involved with hands on care for residents; thus their assignment would be affected as well. All nursing staff were asked to submit a list in order of preference of 15 residents for whom they would like to care on a continuous basis. Nursing staff were asked to select residents with whom they already had a relationship or connection, or at the very least, with whom they had no outstanding issues. This continuous assignment was defined as “continuous for a period of 6 months or until death, transfer, or a request by the nursing staff member, family, or resident for reassignment” (Patchner, 1987, p.52). Discussions regarding the residents’ wishes and choices for being involved in the selection of the health care aide were also part of this process. Once the lists were received, three assignments were developed by the investigator based on their choices. The goal was that each careprovider would
be assigned to at least two-thirds of their preferences. The three assignments were circulated to all nursing staff who then had input into the fairness of the assignments based on their perceptions of workloads. Following their input, a final draft was developed based on a vote by all the nurses; they also had the opportunity to comment before the new assignment was implemented. Staff were informed that accommodations would be made if conflicts arose between careprovider and resident.

**Session 4: Developing resident profiles.** In this session careproviders were asked to develop profiles about a resident they cared for on a continuous assignment basis. The development of the profiles was an attempt to get nursing staff familiar with the particularities of their residents and articulate how they protected the residents from impingements, i.e., guard them from events that bother them. The questions the staff used to develop the profile were based on what they felt nursing staff would need to know about residents to deliver care effectively. The emphasis was on the importance of knowing the individual and knowing his/her likes and dislikes. Nursing staff left the session, after selecting a resident for whom they would develop the profile, with the understanding that the investigator would be available if assistance was required. The questions assisted the careproviders to gain a better understanding of their residents' individual needs. An example of two completed profiles are found in Appendix NN. It was anticipated that the unit manager or charge nurse would continue this endeavour once the researcher had left the unit, so all the residents on the unit would be profiled.

**Session 5: Sharing the resident profiles with each other.** Following the completion of the profiles, nursing staff were asked to share the resident profiles with others on the nursing care team. This activity occurred twice a week with small groups of nursing staff. What became
apparent is that some of the residents' needs and wishes required assistance from other health team members to become fulfilled. For example, some residents wanted to meet other residents; so careproviders thought an evening tea time might be beneficial but they needed some assistance from the recreational therapist to organize the function. Thus the profiles were eventually shared with the interdisciplinary health care team, usually two a week, at the regular weekly staff meeting. Also, careproviders who were present were encouraged to discuss their feelings with regard to caring for particular residents. This sharing of information with fellow careproviders was to assist with meeting the resident's need for continuity (Winnicott, 1960) and was designed to enhance careproviders' empathic capacities. Supportive ways to work with persons that others had learned were shared at these sessions. Presenting the profiles of the residents was scheduled after the post data collection ended, and the intention was that the sessions would continue even after the researcher had left the unit and would be led by the unit manager, charge nurse or clinical nurse specialist on the unit.

The Strength of the Careprovider Intervention

The strength of an intervention refers to the a priori knowledge of the intensity and duration of the treatment needed to produce the expected change (Sechrest, Ametrano, & Ametrano, 1983). Since this is a new field of inquiry, the investigator was not sure what the strength of the intervention should be. However, similar work in two of the sessions had been done in other studies, i.e., developing profiles (Coker et al., 1998) and developing permanent assignment models (Patchner, 1987; Teresi et al., 1993a), and similar time was spent with the nursing staff for these intervention studies. Further, from these studies anecdotal evidence from the nursing staff suggested that they developed closer connections with their residents following
the intervention.

The strength of the intervention is operationally defined by three dimensions: amount, frequency and duration (Sidani & Braden, 1998). The first four sessions of the REPC were planned to last for 20 minutes each (amount); each session was given monthly (frequency) for a total of four months (duration). Even though the sessions were planned for only 20 minutes, careproviders were required to do “home-work” between the sessions. Following session four, careproviders were asked to develop profiles for their residents. The fifth session of the REPC, which involved the sharing of the profiles, was the final component of the intervention and the session lasted for two months, until the second data collection period. Therefore the duration of the total intervention was planned to take six months. Participants were expected to attend the first four sessions and as many profile sharing sessions as possible to benefit from the intervention.

The Sessions of the Supervisor Intervention

The purpose of this intervention was to enhance the support careproviders receive in their work environment. Winnicott (1970) proposes that careproviders will be enabled to care better if they themselves are cared for. The rationale behind this intervention is such that if supervisors learn supportive strategies and utilize them in practice, careproviders will feel more supported. The intervention consisted of two sessions, (a) to introduce the supervisors to the relationship enhancing program of care, and (b) to introduce them to supportive strategies.

Session 1: To introduce the supervisors to the relationship enhancing program of care.

The first session was to introduce the supervisors to the new model and to gain their support for implementing the intervention. The session also centred on going over the REPC before sharing it with the careproviders. Specific attention was paid to informing the charge nurses on how to
recognize reliable and empathic careproviders. During this session the investigator introduced them to the idea of creating a vision for the unit so that nursing staff would know what outcome the investigator was trying to achieve.

**Session 2: Introduction of supportive strategies.** This session focused on introducing the supervisors to supportive strategies that have been recommended in the management literature: methods such as verbal praise and letters of acknowledgment for good performance were reviewed. The supervisors were encouraged to utilize these supportive strategies when careproviders made an effort to be reliable and empathic with residents. Also presented were basic strategies to enhance the unit managers’ and charge nurses’ supervisory capacities for being reliable such as being there for staff, protecting the careprovider from the unpredictable (such as a change in the work environment), and tolerating careproviders’ negative feelings without retaliation. As well, strategies to enhance the supervisors’ capacities for being empathic were described, such as recognizing the careproviders’ standards of care, trying to understand the careproviders’ points of view, and being sensitive to the careproviders’ responses. A draft vision statement was produced and discussed with the supervisors at the end of the session. Follow up sessions during the course of the intervention, once monthly, also enabled the charge nurses to share with the researcher and each other, their experiences, frustrations, and suggestions for supporting careproviders in practice.

**Strength of the Supervisor Intervention**

The strength of the supportive program consisted of two 30 minute sessions over a two week period. Further informal meetings with the unit manager and charge nurses, were held monthly, for 10 minutes, for the duration of the time the investigator was on the unit which was
The main teaching strategy that was utilized for the intervention with careproviders involved an informal approach as there is little support for the effectiveness of formal teaching sessions (Philips & Baldwin, 1997). The researcher used methods that emphasized experiential learning and assisted learners to see the direct application of the concepts to resident care. Adult learning theory emphasizes that learners must perceive the relevance of the information and must actively participate in the learning process (Philips & Baldwin). Therefore, less than 10% of each session was spent in didactic lecture format. The sessions involved asking the participants about their prior learning and their life experiences. Information was provided to the careproviders as they requested it, not in a pedagogical format but in an information sharing way. This attempt to meet the needs of the careprovider as they were presented, paralleled what Winnicott (1970) espouses careproviders should do for the patients they care for. Traditional training methods that rely heavily on reading and writing skills were not utilized because the average literacy level for the health care aides was grade five. Writing was kept to a bare minimum.

The five sessions that constituted the formal part of the intervention, were presented in various formats as utilizing one format is usually not motivating to learners (Phillips & Baldwin, 1997). Various strategies for experiential learning were used (Reynolds, Scott & Jessiman, 1999). Stories and quotations from residents were used as they could resensitize the nursing staff to some of the issues for residents living in these environments (Mayers, 1997). Discussion sessions following the stories were utilized for the purposes of trying to understand the residents’ perceptions of their experiences. Role playing was also encouraged during the interactional
component of the program. Developing resident profiles and sharing them with others was another format utilized in the sessions.

The plan was to offer each session of the relationship enhancing program of care (REPC) several times to small groups of careproviders on the day and evening shifts for the purpose of reaching all participating staff at a convenient time. Additionally all of the charge nurses were invited to attend. Night shift staff did not take part because they worked permanently on nights and they had limited contact with residents when they were awake. Night nurses were kept informed of the progress of the study through monthly newsletters that were developed by the investigator and were given to all nursing staff on the unit, regardless of whether they had agreed to participate in the intervention or not. The investigator used the newsletter to highlight positive comments and changes seen on the unit but also to anonymously address concerns raised by nursing staff about the study.

The investigator conducted all of the educational sessions and adhered to the protocol when delivering it. An intervention checklist was developed to ensure that all topics in the sessions were covered with each participating staff member at the end of the intervention. The targeted attendance rate for the program was 90% of the full time careproviders and approximately 70% of the part time and casual careproviders. These sessions were offered at a time most convenient to the careproviders based on their feedback. A booklet was developed for each careprovider that provided the careproviders with written information about the sessions.

**Procedures**

All data for the dependent variables were collected at baseline and post intervention for the intervention and comparison participants (See Time line for the study, Figure 1).
### Figure 1: Time line for the Study

|----------------|---------------|-------------------|----------------|-----------|
| Psychometric testing of the instruments  
1) content validity and reliability of the CR, UMR & FCR  
2) test-retest reliability of the CR, UMR, FCR & RVAS  
3) interrater reliability of the careprovider interactional behavior scale (CIBS)  
Orientation sessions with the careproviders, residents, and families. Then residents, family members and nursing staff are entered into study:  
Demographic data obtained for residents: age, sex, specific diagnosis, cognitive and functional abilities and length of stay.  
Demographic data obtained from family member: status, # visits per week  
Demographic data obtained for careproviders: age, gender, experience, education. | Collect baseline data:  
1) **Study and Comparison Residents**  
Perception of Relationship (CR)  
Close Relationship (CVAS)  
Physical Status - Ulcers, Falls  
2) **Study and Comparison Families**  
Perception of Relationship (FCR)  
Close Relationship (FY/N)  
3) **Study and Comparison Careproviders**  
Careproviders' Interactional Behaviors (CIBS)  
Continuity of Care Index (CI)  
Perception of Relationships with Residents (RVAS)  
Perception of Relationship with Unit Manager (UMR) and Charge Nurse (CNR)  
Expressed Empathy (SPIR)  
Supportive sessions with the unit manager and registered nurses begin | The relationship enhancing program of care (REPC) is implemented: Nov - Session 1 completed  
Dec - Session 2 completed  
Feb - Session 3 completed - The careproviders were permanently assigned to residents of their choice. Mar - Session 4 completed | REPC continues. Session 5 is implemented: Sharing of resident profiles with careproviders and attending nurses for 20 minute sessions and then sharing of profiles during weekly meetings with multi-disciplinary teams. | Post intervention data collection: Same as baseline  
Continuation of Session 5 |
The outcomes chosen for this study were selected after an extensive review of the literature. Data were collected from three distinct populations, the residents, the residents' family members and the careproviders. The data collection procedures and the data collected for each sample group will be individually described.

**Data Collection: Resident**

Four types of resident data were collected: functional status, demographic, questionnaire, and physical status data.

1) **Resident functional status.**

A charge nurse from each unit who had knowledge of all the residents was hired to complete a questionnaire about the residents' physical and cognitive functioning for the purposes of comparing how similar the residents were on the intervention and comparison units. This information was collected at baseline only using the London Psychogeriatric Rating Scale (LPRS) (Hersch, Kral, & Palmer, 1978) (Appendix OO). The LPRS is a 36 item scale developed for the assessment of geriatric patients on four dimensions (a) mental disorganization or confusion, (b) disengagement, (c) socially irritating behavior, and (d) physical disability. The LPRS has been described as having clinical value for the assessment of the residents' function in a non-intrusive manner (Reid, Tierney, Zorzitto, Snow & Fisher, 1991). Each item is a descriptive statement of the behavior of a patient within the past week and was rated by the unit nurse as never (0), occasionally/sometimes (1), and often/frequent (2). The mental disorganization dimension of the LPRS has a interrater reliability of $r = .92$ and a concurrent validity of $r = .79$ with the Mini Mental Status Exam Questionnaire (Reid et al.). Higher scores indicate a greater degree of disability.
2) Resident demographics.

The RA who was hired for the study collected information about the resident from the resident’s chart. She was blinded to which unit was designated intervention and which was designated as the comparison unit. Information on the residents’ age, gender, length of stay, medical diagnoses and whether or not they had a paid companion was collected on the demographic profile sheet (Appendix PP).

3) Resident questionnaire.

It was recognized that some elderly people may have limited vision and/or difficulty writing and therefore, the data from the two scales that were related to the residents’ perception of a careprovider-resident relationship were collected by way of an interview. Residents were interviewed by the investigator usually in the morning after breakfast in the resident’s room to achieve privacy.

i) Careprovider-Resident Relationship Scale (CR) (Dependent Variable). The quality of the careprovider-resident relationship was assessed using the CR scale. The resident's perception of the relationship with their main careprovider was measured with a scale that operationalizes the essential capacities of the careprovider required for a holding relationship to enfold (Appendix S). This measure was developed for this study and the reliability and validity of this instrument are reported in the pilot chapter.

ii) Careprovider Visual Analogue Scale (CVAS) (Dependent Variable). To gain a better understanding of the relationship between the resident and careprovider, it was decided that residents would be asked to complete a Careprovider Visual Analogue Scale (CVAS) (Appendix QQ). Just like the RVAS that measured the careproviders’ perceptions of a close relationship with
residents, the closeness of the careprovider-resident relationship from the residents' perception was measured by using a single item that consists of a 100 mm visual analogue scale. Residents were asked to evaluate the same careprovider they had selected when completing the CR scale. The anchors of the CVAS were "very close, nurse-resident relationship" and "not at all close, nurse-resident relationship". Face validity of the anchors was established as they are the same for the RVAS.

There have been criticisms that the VAS is not well understood by people who are elderly (Streiner & Norman, 1991), but more evidence exists that indicates, with careful strategies for VAS training and assessment, the elderly can comprehend the VAS (Gift, 1989; Herr & Mobily, 1993). In a recent study, Tiplady, Jackson, Maskrey and Swift (1998) supported the validity of using a VAS for older subjects as they found ratings on VAS similar for those over and under 65.

4) Resident's Physical Status.

The resident's physical status was tracked monthly via quality assurance reports that the unit managers collected. Information was collected about the number of pressures sores and falls that occurred for all residents who participated in the study.

Data Collection: Family Member

Family Member Questionnaire.

Only questionnaire data were collected from the family members in this study. The majority of participating family members were asked to respond to the items of the questionnaires over the phone by the investigator and some were interviewed at the centre. The family members' perceptions of the careprovider-resident relationship were captured with the following two scales.
i) Family Careprovider-Resident Relationship Scale (FCR) (Dependent Variable). The family members’ perception of their relatives’ relationship with the main careprovider was measured with a scale that operationalizes the essential capacities of the careprovider in order for a holding relationship to enfold (Appendix U). This measure was developed for this study and the reliability and face validity of this instrument are reported in the pilot chapter.

ii) Family Yes/No Relationship Scale (FY/N) (Dependent Variable). The family members’ perception of a close relationship between their relatives and the careproviders was measured by a dichotomous, Yes/No scale. This measure was developed for this study (Appendix U).

Data Collection: Careprovider

Three types of careprovider data were collected: questionnaire, observational, and assignment data.

1) Careprovider questionnaire.

English was the second language for many of the careproviders, therefore interviews were structured using the questionnaires. Careproviders were interviewed by the RA, blind to group assignment, at a time that was most convenient for them. The RA also collected demographic information from the careproviders (Appendix RR). There were five dependent variables that were measured in the questionnaire.

i) Relationship Visual Analogue Scale (RVAS) (Dependent Variable). This questionnaire measured the careproviders’ perceptions of their relationship with a specific resident (Appendix W). The RVAS anchors were “very close nurse-resident relationship” and “not at all close nurse-resident relationship”. This measure was developed for this study and the reliability and validity of this instrument are reported in the pilot chapter.
ii) Staff-Patient Interaction Response Scale (SPIR) (Dependent Variable). The nurses' expressed empathy was measured by the SPIR. The SPIR was developed by Gallop, Lancee & Garfinkel (1989) to assess psychiatric nurses' expressed empathy based on their written responses to a series of statements made by hypothetical patients (Appendix SS). Although originally developed to measure the responses of staff in psychiatric settings, this scale has been modified for use in acute care settings (Olson, 1995). Each of the instrument's four pages contains a description of a patient and five statements. The statements associated with the different hypothetical patients are equivalent in semantic content, although the phrasing of the statements differ from page to page and the order in which the statements are presented on a given page is random. Gallop et al. have conceptualized 10 possible categories of responses, representing three levels of empathic care, from no care to addressing patient's self-esteem. Within the three levels, each response has been assigned a weight of -1, 0, 1 or 2, depending on whether responses are (a) belittling (-1), (b) platitudes (0), (c) seeking solutions (1), or (d) reflecting affective involvement in the subjective experience of the other (2). A scoring method developed by Gallop, Lancee & Garfinkel was used to rate the expressed empathy in the responses (Appendix TT).

The hypothetical situations were changed to reflect the population of this study. The scale was also revised in that only two situations were completed by the subject and not the usual four, as the researcher was concerned with the burden this places on the subjects. Permission for revising this scale was granted by the author of the scale (Gallop, personal communication, January, 21, 1997). Interrater reliability was utilized to assess the responses to the SPIR. Responses were scored by the investigator and the RA. In this study a kappa of .72 was achieved at the pre test and a kappa of .74 was realized at post test.
iii) Unit Manager/Relationship Scale (UMR) (Dependent Variable). The careprovider's perception of a holding relationship with the unit manager was measured with the UMR. The scale operationalized the essential capacities of unit managers in order for them to provide holding relationships with their staff (Appendix T). This measure was developed for this study and the reliability and validity of this instrument are reported in the pilot chapter.

(iv) Charge Nurse/Relationship Scale (CNR) (Dependent Variable). The careprovider's perception of a holding relationship with the charge nurse was measured with the CNR. The scale operationalized the essential capacities of charge nurses in order for them to provide holding relationships with their staff (Appendix V). This measure was developed for this study and face validity but no reliability of the instrument is reported in the pilot chapter.

v) Careproviders' Perception of Permanent Assignment. A scale developed by Teresi et al. (1993a) was used to measure the staff's perceptions of the assignment model over time. No reliability measures were reported (Appendix UU).

2) Careprovider Observations.

The careproviders were observed caring for residents either during morning or evening care. The observational data collected were related to the careproviders' interactional behaviors.

Careprovider Interactional Behavior Scale (CIBS) (Dependent Variable). The careproviders’ interactional behaviors were assessed using the CIBS scale (Appendix F). Interrater reliability of this instrument was acceptable with kappas reported between .72 to .80 (Feinstein, 1985) and preliminary content validation was achieved on the scale during the pilot study. Interrater reliability was replicated for the two observers for the study during the intervention trial as a check on “observer drift” (a gradual change in the manner in which
observers use the observational system; Patterson, Reid, & Maerov, 1978). Interrater reliability checks were made on 10 trials during the data collection periods (the aim was 10% of observations). Five trials were conducted after an acceptable level of agreement was reached during the pre test period, and five trials were conducted at post test. Based on the total number of reliability trials, checks were conducted on 11% of the total number of trials (10/86).

3) Careprovider assignment (Dependent Variable).

The RA was responsible for photocopying the weekly nursing staff assignment sheets which were used to calculate the Continuity Index (CI). The continuity index measured the number of times the careprovider provided direct care for a resident on a day or evening shift relative to the total shifts worked in a two week period.

Data Analysis

It was planned that data analysis would involve a pre and post comparison of the resident, family member and careprovider outcomes within and between the units. To compare the intervention and comparison units pre and post intervention, independent t-tests were planned. Paired t tests were used to examine changes in the resident, family member and careprovider outcome variables over time within each of the intervention and the comparison units. One issue of concern was that of multiple analyses. The problem associated with multiple tests is that significant results may be found by chance since a number of tests are being made. The approach taken was to focus on the primary research questions and set the level of significance at 0.05. Data were analysed using SPSS-PC programs. Descriptive statistics were completed for the demographic data collected on the sample of residents, family members and careproviders and for each outcome variable.
**Data Management and Quality Monitoring**

The data entry from the pilot work and the main trial was done by the investigator and a research assistant. To reduce any potential for bias on the part of the researcher, the data from the questionnaires for the main trial were not read and entered until after Time 2 data had been collected. Thus, the researcher was not aware of how the subjects responded until after the study had ended. Periodical checks of all data sets were done by the investigator. Extreme values were verified. Data entry inconsistencies were checked against the original questionnaire and appropriate corrections were made. In addition, all data were double entered for all outcome variables.

**Missing Data**

Over the course of the study, not all participants completed every question or every questionnaire. With respect to the primary research question for the residents, the total amount of missing data from the scales including both pre and post items was 1.9% (12/610). Five residents on the intervention unit and three on the comparison unit failed to complete the one item CVAS so these were deleted. In four instances the residents on the comparison unit failed to complete one item on the CR scale. Since this was less than 25% of the items on the scale, for each case, a mean value was substituted for a missing value (Polit & Hungler, 1995). On the other hand, 11/24 (45%) of the family caregivers failed to complete question #4 on the FCR scale. This question asked, “If the main nurse who is assigned to your family member is not working, do the other nurses know how to care for your family member?” These family members stated that they did not know if their relative had a main nurse. Therefore, a decision was made to delete this item from the scale and following the revision there were no missing data from the FCR scale. It is
unlikely that there was a loss of meaning by deleting this item since the remaining four items in the scale operationalized the empathy and reliability of the careprovider and the inability of the family members to respond to it, limited its usefulness. With respect to the FY/N data the number of missing data was 2.4% (2/82). There were no missing data from the careprovider questionnaires.

**Response Distribution of Questionnaire Scales**

The constructs used in this study were conceptualized as continuous and, therefore, according to Bohnstedt & Borgatta (1981), the data can be analyzed using parametric statistics even though they may be interpreted as imperfect interval-level scales. For all interval data, if the number of observations was larger than 15, parametric statistics were utilized. Edwards (1990) states that there is considerable evidence to show that the t test for the difference between two means is relatively insensitive to departures from normality in the distribution of the population mean for cases greater than 15 observations. If there were fewer than 15 subjects, the data were checked for skewness by examining the data plot. If data were skewed, the non-parametric Wilcoxon matched signed rank test was used, otherwise the t-test was used. One variable was found to be skewed and in this case both parametric and non-parametric statistics were applied. The two methods gave almost identical results and therefore the means and standard deviation are cited in the results section, although the significance level achieved by the more conservative non-parametric analysis are cited in the table (Ritchie et al., 1992).

**Internal Consistency of Questionnaire Scales**

The internal consistency of the multi-item scales was re-examined using the responses from baseline and at post test time. The Cronbach's alpha reliability coefficient at both times for all the scales was acceptable (Table 9).
<table>
<thead>
<tr>
<th>Scale</th>
<th>Sample Size</th>
<th>Pre Intervention (alpha level)</th>
<th>Sample Size</th>
<th>Post Intervention (alpha level)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careprovider-Resident Relationship Scale</td>
<td>49</td>
<td>.95</td>
<td>43</td>
<td>.92</td>
</tr>
<tr>
<td>Family Careprovider-Resident Relationship</td>
<td>46</td>
<td>.88</td>
<td>42</td>
<td>.85</td>
</tr>
<tr>
<td>Unit Manager Relationship Scale</td>
<td>21</td>
<td>.89</td>
<td>19</td>
<td>.88</td>
</tr>
<tr>
<td>Charge Nurse Relationship Scale</td>
<td>21</td>
<td>.87</td>
<td>19</td>
<td>.77</td>
</tr>
<tr>
<td>Careprovider Interactional Behavior Scale</td>
<td>49</td>
<td>.89</td>
<td>43</td>
<td>.91</td>
</tr>
</tbody>
</table>

**Protection of Human Subjects**

Prior to the initiation of the study, approval was obtained from the Ethics Committee at the Centre. The rights of the subjects were protected by ensuring that all information obtained about them remained confidential and was reported anonymously. Each subject was assigned a code that was used on all research materials. A master list of subjects was kept locked in the researcher's possession. This material was accessible only to the researcher and the RA. Following completion of the study, all materials obtained from the study, including consent forms, will remain locked for seven years with the researcher. After this time, all material will be destroyed.

It was clarified with all participants (residents, their family members, nursing staff) that there was no obligation to participate and that they could withdraw from the study at any time without the care of the residents being affected in any way. The potential risks to the subjects as a
result of participating in this study were believed to be minimal. The potential of some nurses and residents to experience anxiety at the presence of an observer was recognized. Previous experience with observational data collection indicated that this anxiety would diminish and disappear with time. Last, the participants were informed that although the study might not benefit them directly, the findings might ultimately enhance the care provided to residents in long-term care facilities. The opportunity to think about relationships might have some benefit for the individual careprovider and hence the resident.

Residents who decided not to participate were likely to have received increased continuity of provider and enhanced relationship building from their careproviders but no data were collected. There is absolutely no evidence that getting more interpersonal attention from a more consistently present careprovider is harmful; rather most evidence points in the opposite direction.
Chapter 4: Results

Staffing Ratios Description

Prior to discussing the characteristics of each participant group, the ratio of nursing staff to residents is presented in Table 10. Upon examining the staffing ratios on the day and evening shifts, it is apparent that there were more nursing staff on the intervention unit than on the comparison unit. This was also reflected in the higher resident to nursing staff ratio on the comparison unit. On the comparison unit there were some HCAs who worked short day shifts (from 7 am to noon).

These staff-resident ratios reflect that the registered staff provided direct hands on care to 4-6 residents daily as well as assumed many additional responsibilities. The RNs were responsible for the overall day to day management of the unit, whereas the RPNs were responsible for the delivery of medications and treatments to all the residents. The HCAs were responsible for personal care including bathing, grooming and dressing.
Table 10

**Ratios of Nursing Staff to Residents by Shift**

<table>
<thead>
<tr>
<th>Shift</th>
<th>Intervention Unit</th>
<th>Comparison Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Days (7 am - 3 pm)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNs: Residents</td>
<td>2 RNs : 8 Residents</td>
<td>2 RNs : 12 Residents</td>
</tr>
<tr>
<td>RPNs: Residents</td>
<td>2 RPNs : 8 Residents</td>
<td>2 RPNs : 8 Residents</td>
</tr>
<tr>
<td>HCAs: Residents</td>
<td>4 HCAs : 28 Residents</td>
<td>2.5 HCAs : 26 Residents</td>
</tr>
<tr>
<td>Total # Nursing staff: Residents</td>
<td>8 Nursing staff : 44 Residents</td>
<td>6 Nursing staff : 44 Residents</td>
</tr>
<tr>
<td><strong>Evenings (3 pm - 11 pm)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN: Residents</td>
<td>1 RN : 5 Residents</td>
<td>1 RN : 8 Residents</td>
</tr>
<tr>
<td>RPNs: Residents</td>
<td>2 RPNs : 12 Residents</td>
<td>1 RPNs : 8 Residents</td>
</tr>
<tr>
<td>HCAs: Residents</td>
<td>2 HCAs : 27 Residents</td>
<td>2 HCAs : 28 Residents</td>
</tr>
<tr>
<td>Total # Nursing staff: Residents</td>
<td>5 Nursing staff : 44 Residents</td>
<td>4 Nursing staff : 44 Residents</td>
</tr>
<tr>
<td><strong>Nights (11 pm - 7 am)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN: Residents</td>
<td>1 RN : 22 Residents</td>
<td>1 RN : 22 Residents</td>
</tr>
<tr>
<td>HCA: Residents</td>
<td>1 HCA : 22 Residents</td>
<td>1 HCA : 22 Residents</td>
</tr>
<tr>
<td>Total # Nursing staff: Residents</td>
<td>2 Nursing staff : 44 Residents</td>
<td>2 Nursing staff : 44 Residents</td>
</tr>
</tbody>
</table>

**Sample Description**

**Resident Participants**

The overall sample was composed of residents on two long-term care units, one designated the intervention group and one the comparison group. In each of the groups there were residents who completed questionnaires (the questionnaire sub sample) and there were residents who were observed during care (the observation sub sample). The observation sub sample was selected so the careproviders' interactional behaviors could be evaluated. The demographic characteristics of the observation sub samples at Time 1 are found in Table 11.
Typically, residents who were observed on the intervention unit were female and had lived on the unit for over three years.

Table 11

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>19 female (79%)</td>
<td>13 female (81%)</td>
</tr>
<tr>
<td></td>
<td>5 male (21%)</td>
<td>3 male (19%)</td>
</tr>
<tr>
<td>Age</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>87.1 (9.1)</td>
<td>89.5 (6.32)</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Most</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CVA,</td>
<td>Arthritis,</td>
</tr>
<tr>
<td></td>
<td>CommonTypes</td>
<td>Heart Disease</td>
</tr>
<tr>
<td></td>
<td>Heart Disease</td>
<td></td>
</tr>
<tr>
<td>Paid Companions</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9 (37%)</td>
<td>5 (31%)</td>
</tr>
<tr>
<td>Length of Stay</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43 months (35)</td>
<td>50 months (42)</td>
</tr>
</tbody>
</table>

Note: M = mean; SD = standard deviation

* 15 residents were observed at time 2

For this study, the questionnaire sub sample is of most interest and determines the true resident sample size for this study. The demographic characteristics of the resident questionnaire sub samples at Time 1 are provided in Table 12. The resident questionnaire sub sample living on the intervention unit were largely female (83%), with an average age of 87 years and with an average residential tenure of 39 months. Ten (43%) had paid companions from two to eight hours a day to assist with their care. Six of the companions were with residents for two hours a day, Monday to Friday, usually in the afternoon. Two of the companions were with the residents four hours a day, again usually during weekday afternoons. Two of the residents had companions
every day during the week for 8 hours. Paid companions provide company to the residents and assist with certain activities of daily living such as feeding and bringing residents to activities.

The attrition rate for the intervention unit sample was 9% because two residents in the intervention group experienced a significant decline in their cognitive abilities and were unable to complete the questionnaires at time 2. Three residents in the comparison unit died, and one resident refused to participate at time 2, which led to an attrition rate of 14%. The final post intervention sample of residents was, 44 (21 intervention and 23 comparison).

Table 12

Demographic Characteristics of the Residents in the Questionnaire Sub Sample at Time 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n = 23^* )</td>
<td>( n = 27^{**} )</td>
</tr>
<tr>
<td>Sex %</td>
<td>19 female (83%)</td>
<td>21 female (78%)</td>
</tr>
<tr>
<td></td>
<td>4 male (17%)</td>
<td>6 male (22%)</td>
</tr>
<tr>
<td>Age M (SD)</td>
<td>86.7 (9.2)</td>
<td>85.9 (5.0)</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Most</td>
<td>CVA, Arthritis,</td>
</tr>
<tr>
<td></td>
<td>Common Types</td>
<td>Heart Disease, Heart Disease</td>
</tr>
<tr>
<td>Paid Companions %</td>
<td>10 (43%)</td>
<td>6 (24%)</td>
</tr>
<tr>
<td>Length of Stay M (SD)</td>
<td>39 months (48)</td>
<td>45 months (50)</td>
</tr>
</tbody>
</table>

Note: \( M \) = mean; \( SD \) = standard deviation

* 21 residents completed scales at time 1 and 2

** 23 residents completed scales at time 1 and 2

To compare the physical and cognitive abilities of the residents in the intervention and comparison groups, the London Psychogeriatric Rating Scales (LPGR) was used. Table 13 shows how the different groups varied in character. Residents in the intervention group had
statistically significantly more disengaging behaviors, greater physical disabilities, and overall were more impaired based on their composite score. Therefore the groups were significantly different prior to the intervention.

Table 13

London Psychogeriatric Rating Scale Scores (LPRS) of the Residents in the Questionnaire Sub Sample at Time 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intervention</th>
<th>Comparison</th>
<th>Difference</th>
<th>p value **</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 23</td>
<td>n = 27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPGR - Composite</td>
<td>M (SD)</td>
<td>20.8 (8.0)</td>
<td>13.3 (8.1)</td>
<td>7.5</td>
</tr>
<tr>
<td>LPGR - Disengagement*</td>
<td>M (SD)</td>
<td>6.0 (1.5)</td>
<td>4.8 (1.6)</td>
<td>1.2</td>
</tr>
<tr>
<td>LPGR - Physical Disability*</td>
<td>M (SD)</td>
<td>9.5 (4.2)</td>
<td>5.6 (4.0)</td>
<td>3.9</td>
</tr>
<tr>
<td>LPGR - Socially Irritating*</td>
<td>M (SD)</td>
<td>.65 (1.1)</td>
<td>.24 (.83)</td>
<td>.31</td>
</tr>
<tr>
<td>LPGR - Mentally Disorganized*</td>
<td>M (SD)</td>
<td>4.6 (3.8)</td>
<td>2.6 (3)</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Note: M = mean; SD = standard deviation

*Maximum Mean Scale Scores: LPGR = 72; Disengagement subscale = 12; Physical disability = 18; Socially Irritating Behavior = 16; Mentally Disorganized = 26. Higher scores indicate higher levels of disability.

** Based on independent t test comparing time 1 data.

Family Member Participants

This sample was composed of a family member for each of the residents who lived on the intervention and comparison units. The majority of family members on the intervention unit were
sons and daughters and on the comparison unit, daughters and nieces were in the majority (Table 14). Even though there were 12 men in the resident sample there were no wives in the family member sample.

Between times 1 and 2, one resident in the intervention group, and three residents in the comparison group died, and therefore, the attrition of family members was 8% in the intervention group and 14% in the comparison group. The final post intervention sample of family members was 42 (24 intervention and 18 comparison).

Table 14

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intervention n = 25*</th>
<th>Comparison n = 21**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Member Type</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>9 sons (36%)</td>
<td></td>
<td>11 daughters (52%)</td>
</tr>
<tr>
<td>8 daughters (32%)</td>
<td></td>
<td>5 nieces (23%)</td>
</tr>
<tr>
<td>3 sisters (12%)</td>
<td></td>
<td>2 sons (10%)</td>
</tr>
<tr>
<td>2 husbands (8%)</td>
<td></td>
<td>2 cousins (9%)</td>
</tr>
<tr>
<td>2 granddaughters (8%)</td>
<td></td>
<td>1 brother (5%)</td>
</tr>
<tr>
<td>1 niece (4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visits per week</td>
<td>Mode</td>
<td></td>
</tr>
<tr>
<td>Once a week</td>
<td></td>
<td>Once a week</td>
</tr>
<tr>
<td>Range</td>
<td>(daily to monthly)</td>
<td>(daily to every 2 weeks)</td>
</tr>
</tbody>
</table>

* 24 family members completed scales at time 1 and 2
** 18 family members completed scales at time 1 and 2

Nursing Personnel Participants

The nursing staff were composed of registered nurses (RN), registered practical nurses (RPN), health care aides (HCA), and the unit managers (UM) on the two long term care units. At least 6 careproviders declined to participate but the characteristics of these individuals were
similar to the sample who did participate. There were no differences in their age, level of education, or length of time on the units. The attrition rate was 5%, as one RN moved to another unit and was not able to provide information at time 2. Of those who participated on the comparison unit, one RPN and one HCA were not able to provide information at both times because of a maternity leave and a transfer respectively, and therefore the attrition rate was 13%.

The final post intervention sample of careproviders, completing both the measures pre and post intervention, consisted of 19 (12 intervention and 7 comparison). The final post intervention sample of RNs was 10 (5 in each of the intervention and comparison groups), and 2 UMs.

As table 15 shows, the careproviders in the intervention group were predominantly female, worked full time, and had worked an average of 13 years in the institution. The mean age of the careproviders was 42 years and the majority were health care aides. Likewise, the majority of the RNs were female, had worked for about the same length of time on the unit, however, they were on average older (48 years) and only 50% worked full time.
Table 15

Demographic Characteristics of Nursing Staff in the Intervention Group at Time 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intervention RNs</th>
<th>Intervention Careproviders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 6 *</td>
<td>n=12</td>
</tr>
<tr>
<td>Age</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>48.1 (12.5)</td>
<td>41.8 (13)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 RN diploma</td>
<td>7 HCA</td>
</tr>
<tr>
<td></td>
<td>1 BScN degree</td>
<td>5 RPN</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 male (17%)</td>
<td>4 males (23%)</td>
</tr>
<tr>
<td></td>
<td>5 females (83%)</td>
<td>8 females (67%)</td>
</tr>
<tr>
<td>Length of Time</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12.1 years (7.9)</td>
<td>13.3 years (10.1)</td>
</tr>
<tr>
<td>Time on Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 full-time (50%)</td>
<td>6 full-time (50%)</td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 part-time (50%)</td>
<td>5 part-time (42%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 casual (8%)</td>
</tr>
</tbody>
</table>

Note: M = mean; SD = standard deviation

* Only 5 RNs completed the scales at time 1 and 2

The only noticeable difference between the comparison and intervention group was the absence of male staff on the comparison unit (Table 16). On the comparison unit the careproviders were slightly older than the RNs and had worked longer on the unit. Most careproviders were health care aides and worked either full time or part time, whereas more of the RNs worked full time rather than part time.
Table 16

Demographic Characteristics of Nursing Staff in the Comparison Group at Time 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Comparison RNs</th>
<th>Comparison CareProviders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 5</td>
<td>n = 9*</td>
</tr>
<tr>
<td>Age</td>
<td>M (SD) 43.4 (12.1)</td>
<td>47.5 (9.3)</td>
</tr>
<tr>
<td>Education</td>
<td>3 RN diploma</td>
<td>6 HCA cert.</td>
</tr>
<tr>
<td></td>
<td>2 BScN degree</td>
<td>3 RPN cert.</td>
</tr>
<tr>
<td>Gender</td>
<td>5 females (100%)</td>
<td>9 females (100%)</td>
</tr>
<tr>
<td>Length of Time on Unit</td>
<td>M (SD) 8.8 years (7.9)</td>
<td>16.5 years (10.6)</td>
</tr>
<tr>
<td>Employee</td>
<td>3 full-time (60%)</td>
<td>4 full time (44%)</td>
</tr>
<tr>
<td>Status</td>
<td>2 part time (40%)</td>
<td>4 part time (44%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 casual (12%)</td>
</tr>
</tbody>
</table>

Note: M = mean; SD = standard deviation

* Only 7 careproviders completed the scales at time 1 and 2.

In the following section, the between group results of the data analyses related to the main outcomes from the study are reported.

Background to Changes in Research Questions and Analysis

The differences on the major outcome variables between the participants in the intervention and the comparison groups at baseline are described in this section. The new questions and analyses which were developed because of these differences are described below.

Baseline Comparison of Groups on Primary Outcomes

The original research questions for this study called for a between group analysis strategy. Baseline comparisons between the groups were conducted and significant differences between the
intervention and comparison units were found. Not only were there statistically significant
differences in the residents’ physical and cognitive functioning between the units (Table 13) but
there were statistically significant differences at baseline on all the primary outcomes (Table 17).
The multiple outcomes that were different at time 1 provide strong evidence that these two units
were very different from the onset.

Table 17

**Statistically Significant Group Means of the Participants in the Intervention and Comparison**

**Groups at Time 1**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention</th>
<th>Comparison</th>
<th>t value and (df)</th>
<th>p value**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careprovider Relationship</td>
<td>M (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale (CR)*</td>
<td></td>
<td>n = 23</td>
<td>n = 27</td>
<td></td>
</tr>
<tr>
<td>Family Careprovider-Resident</td>
<td>M (SD)</td>
<td>21.5 (6.3)</td>
<td>25.8 (4.7)</td>
<td>3.17 (48)</td>
</tr>
<tr>
<td>Relationship Scale (FCR)*</td>
<td></td>
<td>n = 25</td>
<td>n = 21</td>
<td></td>
</tr>
<tr>
<td>Careprovider Interactional</td>
<td>M (SD)</td>
<td>14.9 (3.1)</td>
<td>17.2 (2.2)</td>
<td>3.14 (44)</td>
</tr>
<tr>
<td>Behaviors Scale (CIBS)*</td>
<td></td>
<td>n = 28</td>
<td>n = 21</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.3 (1.1)</td>
<td>5.9 (.6)</td>
<td>2.09 (41)</td>
</tr>
</tbody>
</table>

Note: M = mean; SD = standard deviation

* Maximum Mean Scale scores: CR Relationship = 30; FCR = 30; CIBS = 7. Higher scale scores
  of the scales indicate higher levels of empathy and reliability of the careproviders.

** Based on independent t test comparing time 1 data.

Understanding the Differences Between these Groups

In an attempt to better understand the reasons for these variations between groups, four
structured interviews were conducted at time 1 (Appendix VV). Two nursing staff on each unit
were randomly selected and invited to participate in a 20 minute interview. The questions that
were developed were based on the Pennsylvania Nursing Homes Document (Eaton, 1997) and the Environmental Complexity Scale (O’Brien-Pallas, Irvine, Peereboom, & Murray, 1997). The differences between the comments from the nursing staff working on the two units were striking as were the similarities between the staff from each unit. Both staff on each unit had very similar views of the culture and values that prevailed on their respective units. The comments made by the nursing staff are summarized in Appendix WW.

Nursing staff on the intervention unit reported that this was a difficult unit on which to work as there was little management support provided to them. One nursing staff member on the unit made it particularly challenging for many careproviders and they were frustrated that their Unit Manager had never addressed this issue. There was little evidence of team work and there were challenging situations during the day like being short staffed and running out of supplies. On the comparison unit, the careproviders were more relaxed, had few environmental disruptions, and felt supported by their unit manager. In contrast to the intervention unit, the charge nurse and unit manager pitched in when help was required. The careproviders had fun at work and felt they worked extremely well as a team.

To further understand group differences, Cook and Campbell (1979) indicate that the selection process must be taken into consideration and not simply the pretest scores. The intervention unit was chosen through a process of elimination of other potential sites and the comparison unit was chosen as it was most similar to the intervention unit in terms of resident demographic characteristics and the skill mix of nursing staff.

The presence of such selection differences is what differentiates nonequivalent group designs from randomized designs (Cook & Campbell, 1979). The difference in the unit culture, in
the characteristics of the residents, in the characteristics of the careproviders and charge nurses, are critical selection differences that could affect the response of the participants to the intervention. These baseline differences between groups therefore, warranted a change in research questions and analyses.

**New Research Questions and Analytical Strategy**

The use of analysis of covariance (ANCOVA) to equalize the groups could not be justified as there were too many known differences between the groups, and the possibility existed that there might be other variables which had not yet been uncovered that could affect post-test scores. Therefore, the research questions were changed to allow for within group comparisons pre and post intervention rather than between group comparisons.

The primary research questions that focused on the resident-careprovider relationship, conceptualized as a holding relationship became:

1. Do residents on the intervention unit perceive themselves to be more involved in holding relationships following the REPC?
2. Do family members whose relatives are residents on the intervention unit perceive their relatives are more involved in holding relationships following the REPC?
3. Do careproviders on the intervention unit demonstrate more behaviors associated with holding relationships following the REPC?

The secondary research questions that focused on the secondary outcomes believed to be influenced by the development of a holding relationship became:

4. What is the influence of the REPC on the residents’ physical status?
5. What is the influence of the REPC on the careproviders’ perception of having a close
relationship with their residents and on their ability to express empathy?

6. What is the influence of the REPC on the careproviders' perception of having a holding relationship with their charge nurses and unit manager?

Paired t tests were used to examine changes in the resident, family member and careprovider outcome variables over time within each of the intervention and the comparison units. If data did not have a normal distribution, the non-parametric Wilcoxon matched signed rank test was used. Comparisons of before and after categorical data were done using McNemar’s test, an adaptation of chi square, for use with repeated measures at the nominal level (Munro, 1997). An analysis of covariance was used to determine if the post tests scores between the intervention and comparison groups differed significantly on the primary outcomes. The purpose of the ANCOVA was not to equalize the groups but to understand if the intervention subjects’ mean scores caught up to the comparison subjects’ mean scores at post test, after accounting for the difference at pre test.

Primary Research Questions

Primary Research Question # 1: Residents

The primary resident research question was: Do residents on the intervention unit perceive themselves to be more involved in holding relationships following the REPC? Holding relationship data had been collected using the Careprovider-Resident Relationship (CR) scale and the Careprovider Visual Analogue Scale (CVAS). Twenty-one residents completed the CR scale on the intervention unit at both times 1 and 2, and there were no missing data from these residents. Five residents on the intervention unit and three on the comparison unit did not complete the CVAS because these residents had difficulty either understanding the scale or the
concept of close careprovider-resident relationships. As shown on Table 18, the CR score increased significantly, $t(20) = 2.88, p = .009$. No differences in the residents’ perception of being involved in a close relationship with their careproviders (the CVAS) were found.

While the intervention and comparison groups were not compared with each other in terms of post-intervention scores, it was of interest to see how the comparison group performed. No statistically significant differences were found for the comparison group on either scale.

Table 18

<table>
<thead>
<tr>
<th>Pre and Post Intervention Comparisons of Residents’ Perceptions of Holding Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Careprovider-Resident Relationship Scale (CR)</strong>**</td>
</tr>
<tr>
<td>Pre - Intervention</td>
</tr>
<tr>
<td>Post - Intervention</td>
</tr>
<tr>
<td>Mean of differences Post-Pre*</td>
</tr>
<tr>
<td><strong>Careprovider Visual Analogue Scale (CVAS)</strong>**</td>
</tr>
<tr>
<td>Pre-Intervention</td>
</tr>
<tr>
<td>Post-Intervention</td>
</tr>
<tr>
<td>Mean of differences Post-Pre*</td>
</tr>
</tbody>
</table>

Note: $M$ = mean; $SD$ = standard deviation

* Paired samples t-test used to compare outcome scale over time.

** Maximum Mean Scale scores: CR Relationship = 30; CVAS = 100. Higher scale scores indicate higher levels of empathy and reliability of the careproviders and close relationships with careproviders.

The residents who completed the CVAS on the intervention unit were given the opportunity to comment on why they rated their relationships as they did on the visual analogue...
scale post intervention. Sixteen residents chose to answer and their comments were recorded. Eight residents stated they were in close relationships with their nurses and some of their comments included: “She would get me ready for special occasions and make sure I look good”, “When I needed help, they helped me”, “They go out of their way to please me”, “The nurse has my best interests at heart”, “They treat me like a sister and I treat them like a sister.” Two residents commented that close relationships with careproviders existed because they placed few demands on nurses.

Six residents reported that close relationships were unattainable. They made the following comments: “We do not have a close relationship, because they don’t know me...they do not have time”, “I don’t have a relationships with them, because they don’t think it is important to have a relationship with me. I think nurses should have relationships with residents and it would be nice for both of us”, “Close? Don’t expect to go too deep with nurses - being friendly with each other is it. One nurse once said to me from a different facility ‘ I can live without you, but you can’t live without me’. This is the bitter truth.” For two residents, a close relationship did not exist because they were not interested in developing relationships with nurses.

Some residents had paid companions so it was important to ascertain if the intervention effect would be modified by the presence or absence of a companion. This was determined by calculating the difference between the pre and post scores on the CR relationship scale for the group with paid companions and for the group without paid companions. For the twelve residents without companions, the mean difference for CR relationship before and after the intervention was 4.8 (SD = 7.1) and for the nine residents with companions, the mean difference was 2.2 (SD =3.4). There was no statistically significant difference between these means, t (19) =
-1.00, \( p = .32 \), and therefore, there was no difference in how residents who had paid companions perceived their relationships with nursing staff relative to those without paid companions.

**Primary Research Question #2: Family members**

The primary family member research question was: Do family members whose relatives are residents on the intervention unit perceive their relatives are more involved in holding relationships following the REPC? These holding relationship data were collected with the Family Careprovider-Resident Relationship (FCR) scale and the single item Family YES/NO Relationship scale (FY/N). As shown in Table 19, on the intervention unit the family members’ mean scores increased significantly after the intervention, \( t (23) = 3.84, \ p = .001 \). For the FY/N scale 22 were able to answer yes or no to the question about a close relationship between their family member and their careproviders, but two family members did not complete the question about close relationships. Six family members answered the question with a “maybe” response. Since this was not a choice on the scale, these six comments were reviewed by the investigator and a committee member, and 100% agreement was reached to interpret the family member’s response as a yes or a no. The proportion of family members who perceived their family members to be in a close relationship increased significantly, \( z = 2.33, \ p = .02 \).

Once again, it was of interest to see if the family members of residents on the comparison unit changed their perception of the relationship between their relatives and the careproviders. No significant differences were found on the FCR or on the FY/N.
Table 19

Pre and Post Intervention Comparisons of Family Members' Perceptions of Holding Relationships

<table>
<thead>
<tr>
<th>Family Careprovider-Resident Relationship Scale (FCR)***</th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 24</td>
<td>n = 18</td>
</tr>
<tr>
<td>Pre-Intervention</td>
<td>M (SD) Range 14.9 (3.1) (10-20)</td>
<td>17.2 (2.2)(12-20)</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>M (SD) Range 17.0 (2.9) (9 - 20)</td>
<td>16.7 (1.9)(14-20)</td>
</tr>
<tr>
<td>Mean of Differences*  Post- Pre</td>
<td>2.1  p = .001</td>
<td>-0.5  p = .49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Family YES/NO Relationship scale (FY/N)***</th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 22</td>
<td>n = 18</td>
</tr>
<tr>
<td>Pre-Intervention</td>
<td>Proportions 0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>Proportions 0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Difference in Proportions **</td>
<td>0.4  p = .02</td>
<td>-0.2  p = .18</td>
</tr>
</tbody>
</table>

Note: M = mean; SD = standard deviation

* Paired samples t-test used to compare outcome over time.
** McNemar test used to compare proportions over time.
*** Maximum Mean Scale scores: FCR Relationship = 30; FY/N = 1. Higher scale scores indicate higher levels of empathy and reliability of the careprovider. Higher proportions indicate a greater number of close relationships.

Following the intervention, family members who participated were given the opportunity to comment on their perceptions of relationships between their relatives and the careproviders on the unit. Twenty-two family members in the intervention group chose to explain their ratings on the FY/N scale. Ten family members stated that their perception of close relationships between their relative and the careprovider depended mainly on the careproviders' and the residents' characteristics. Family members reported that close relationships exist because of the following
nurse characteristics: "When they ask the nurse to do something they do it", "Looks after her, keeps juice in her fridge, helps dress her up for special occasions", "The nurse is in tune with her", "They also know her intricacies and have gotten to know her over time." Several family members reported that relationships developed because of the characteristics of their relatives: "He feels the nurses are wonderful, but he is an easy person to get along with".

Six family members were not sure if close careprovider-resident relationships existed. Examples of family members' comments illustrate the difficulty in evaluating this relationship for some; "My parents are uncomplicated...mom is pleased but is this close?", "Not sure, they tend to be close at times... her brother died and some were upset for her, so at times it appears so", "Their relationship is as close as you can get. Would you hug a porcupine?" "She antagonizes people a lot and nurses are patient with her. She is upset with those around her, but she lives in a monotonous environment so she gets cabin fever."

Finally, six family members reported that close careprovider-resident relationships were difficult to attain because of language barriers, paid companions, lack of interest from their relative in becoming involved in a relationship, and because they felt their relative was incapable of being in a relationship. Their comments included: "There is no relationship because of the language barrier, the nurses don't know her", "No relationship exists because she has a sitter.", "My mother is not that kind of a person as she is not outgoing, looking for companionship.", "My mother is incapable of having a close relationship; she has really deteriorated. I am not sure she has a close relationship with me".

Some family members hired paid companions for their relatives, so it was important to determine if their perceptions of the intervention effect would be modified by the presence of
these companions. This was investigated by calculating the difference between the pre and post scores on the FCR relationship scale for the group of residents with paid companions and for the group without paid companions. For the 13 family members whose residents did not have paid companions, the mean increase in their perception of a relationship was 2.5 (SD =3.2) while for the 11 family members whose residents had paid companions, the mean increase was 1.6 (SD =2.0). There was no statistically significant difference between the means, t (22) = .81, p = .42. Therefore, the intervention effect was not modified by the presence or absence of a companion.

**Primary Research Question # 3: Careproviders**

This primary research question was: Do careproviders on the intervention unit demonstrate more behaviors associated with holding relationships following the REPC? The holding relationship between the careprovider and the resident was conceptualized as careproviders providing empathic and reliable care in the practice setting, and careproviders assigned continuously to the same residents which were measured with two different instruments, the Careprovider Interaction Behavior Scale (CIBS) and the Continuity Index (CI), respectively.

A total of 28 careprovider interactions on the intervention unit were observed both in the pre and post intervention periods utilising the CIBS. Twelve careproviders on the intervention unit were observed interacting with residents and therefore, on average, each careprovider was observed with two residents, and two careproviders were observed with three residents, before and after the intervention. On the comparison unit initially there were 21 observations of the careproviders' interactional behaviors. Two careproviders were unable to provide information at time 2 because of a maternity leave and a transfer, and therefore, there were only 7 careproviders and 15 observations recorded at both times 1 and 2. On the intervention unit, the careproviders'
holding behaviors (CIBS) increased significantly, \( t(27) = 3.25, p = .003 \). As well, on the intervention unit there was a significant improvement in providing continuity of care assignment, \( t(27) = 11.6, p < .001 \). When examined, no differences for the comparison unit were realized (Table 20).

Table 20

**Pre and Post Intervention Comparisons of the Careproviders’ Ability to Provide Holding Relationships**

<table>
<thead>
<tr>
<th>Careprovider Interactional Behavior Scale (CIBS)**</th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 12 careproviders</td>
<td>n = 7 careproviders</td>
</tr>
<tr>
<td></td>
<td>28 interactions</td>
<td>15 interactions</td>
</tr>
<tr>
<td>Pre-Intervention</td>
<td>( M ) (SD) Range</td>
<td>5.3 (1.1) (2.6-7.0)</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>( M ) (SD) Range</td>
<td>6.1 (.93) (3.1-7.0)</td>
</tr>
<tr>
<td>Mean of Differences Post-Pre*</td>
<td></td>
<td>0.8 p = .003</td>
</tr>
<tr>
<td>Continuity Index**</td>
<td>Intervention</td>
<td>Comparison</td>
</tr>
<tr>
<td></td>
<td>n = 28</td>
<td>n = 15</td>
</tr>
<tr>
<td>Pre-Intervention</td>
<td>( M ) (SD) Range</td>
<td>.5 (.2) (0.2-1.0)</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>( M ) (SD) Range</td>
<td>1.0</td>
</tr>
<tr>
<td>Mean of Differences Post-Pre*</td>
<td></td>
<td>0.5 p &lt; .001</td>
</tr>
</tbody>
</table>

Note: \( M \) = mean; SD = standard deviation

* Paired samples \( t \)-test used to compare outcome scale over time

** Maximum Mean Scale scores: CIBS = 7; Continuity Index = 1. Higher scale scores indicate higher levels of observed empathy and reliable behaviors of careproviders and continuity

Despite the fact that all careproviders were providing continuity of care at time 2, during the course of the intervention, there was resistance from some of the nursing staff, both RNs and
careproviders, in relation to the prospect of providing care on a continuous basis to the same residents. To identify if nursing staffs’ perceptions of providing continuity in care would change over time, a survey was introduced to all the nursing staff on the intervention unit; 22 completed the scale. Prior to the change to continuity in care, 14% were opposed, 59% were undecided, and 27% were in favor of the continuous assignment model. Following a seven month trial of the model, 4% were opposed, 16% were still undecided, 45% were in favor, and the remaining 35% were very much in favor of this change. A statistically significant increase was found following the trial of permanent assignments, $t (21) = 5.4, p < .001$. Therefore, nursing staff favored the assignments that involved continuity at time 2.

Following the completion of the intervention at time 2, nursing staff were asked to comment on their perceptions of the new assignment. Five said that they were still ‘undecided’ even after trying this model for seven months because they saw both positive and negative aspects to continuity of assignment. The positive factors involved getting to know the residents over time and knowing what to do for the resident. However, one main factor offset this effect, and that was the need for a break from certain residents. One staff member mentioned two other negative factors; one involved her perception that residents get tired of the same nursing staff over time and need a break from them, and her other concern was that only by changing assignments could all nursing staff truly appreciate each others’ workload.

Seven nursing staff were “in favor” of the continuity of care assignments. The factors included getting to know the residents’ likes, dislikes and moods, and once knowing this, the work was completed quicker as the careproviders became more efficient. One staff member commented that continuity assisted in enhancing relationships and building rapport with her
residents. For the seven nursing staff who were "very much in favor" of continuity, their comments included an additional focus, namely, the benefits for the residents. They mentioned that residents in time came to know who looked after them and they got used to each other, which helped them to get along with each other. Nursing staff also felt that residents now knew what to expect in their day, since they had the same staff member, which led to fewer episodes of frustration for the resident. One nursing staff member spoke about how continuity assisted in knowing the residents' routines and because of this knowledge, there was more time to "do the little extras". For another, this knowing led to them being "more organized and less rushed with each resident".

Nursing staff were asked to comment on whether or not they felt they needed a break from the residents they cared for on a continuous basis. Ten out of the 19 (55%) nursing staff members said a break once in a while was necessary because sometimes caring for residents with behavioral problems every day was challenging.

It was also of interest to analyze if the careproviders cared differently for residents who had paid companions. Therefore, an analysis was conducted to determine if the careprovider intervention effect would be modified by the presence or absence of a paid companion. Nine residents who were observed on the intervention unit had companions. The mean difference for the CIBS before and after the intervention was .4 (SD = 1.5) for this group of residents and for the 15 residents who did not have paid companions, the mean of the pre-post difference was 1.0 (SD = 1.2). There was not a statistically significant difference between the means, t (22) = 1.00, p = .28, but the very small size cannot be dismissed as the reason.
Secondary Research Questions

Secondary Research Question # 4: Residents

In order to answer research question # 4 related to the influence of the REPC on the residents' physical status, reports of the number of falls and pressure sores that occurred for all residents who participated in the study were extracted from the quality assurance reports that each unit manager submits to administration on a quarterly basis. According to the quality assurance reports, for the 33 residents on the intervention unit at time 1, which was during the month of Sept 1998, there were three falls and at time 2, in June of 1999, there were four. On the comparison unit, for the 31 residents during the same periods, the number of falls decreased from 12 to 8. On the intervention unit one pressure sore was observed at both times 1 and 2, and on the comparison unit, one pressure sore was observed at time 1 and four at time 2. To determine if these numbers were an actual reflection of the normal trends on these units a more comprehensive review of the quarterly incident reports was undertaken. On average from April 1998 to Jan 2000, 6 patients fell per month on the intervention unit while on the comparison unit 15 residents fell. Therefore, the fall rates during the data collection points were a reflection of the normal trends. The main difference between these two units is that on the intervention unit the majority of the residents are unable to walk while on the comparison unit almost all of the residents walk and therefore, the possibility of falls is greater. With regard to pressure sores during these same intervals, on average, two residents on both the treatment and comparison units had pressure sores per month. Therefore, as indicated from the trends in the quarterly reports, there was no change in the residents' physical status after the intervention which was a positive finding given that the careproviders were asked to focus on the relationship.
Secondary Research Question # 5: Careproviders

This secondary research question asked: What is the influence of the REPC on the careproviders’ perception of having a close relationship with their residents and on their ability to express empathy? The careproviders’ perception of a close relationship was captured with the Resident Visual Analogue Scale (RVAS), and the careproviders’ ability to express themselves empathically was measured with the Staff-Patient Interaction Response Scale (SPIR)(Table 21).

Each time the careprovider was observed with a resident they were asked to complete a separate RVAS and since there were 28 observed interactions on the intervention unit there were 28 RVAS responses.

Table 21

Pre and Post Intervention Comparisons of Careproviders’ Perceptions of Close Relationships with Residents and Their Ability to Express Themselves Empathically.

<table>
<thead>
<tr>
<th>Resident Visual Analogue Scale (RVAS)**</th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Intervention</td>
<td>M (SD) Range</td>
<td>n = 28</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>M (SD) Range</td>
<td>79.4 (20.5)(17-100)</td>
</tr>
<tr>
<td>Mean of Differences Post-Pre*</td>
<td>-0.6</td>
<td>p = .90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff-Patient Interaction Response Scale (SPIR)**</th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Intervention</td>
<td>M (SD) Range</td>
<td>n = 12</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>M (SD) Range</td>
<td>14.6 (7) (4 - 25)</td>
</tr>
<tr>
<td>Mean of Differences Post-Pre*</td>
<td>-2.4</td>
<td>p = .21</td>
</tr>
</tbody>
</table>

Note: M = mean; SD = standard deviation

* Paired samples t-test used to compare outcome scale over time.

** Maximum Mean Scale scores: RVAS = 100; SPIR = 40. Higher scale scores indicate closer relationships with residents and higher levels of expressed empathy.
There were no statistically significant differences found for the intervention group from time 1 to 2 on the RVAS, t(27) = -0.16, p = .87, or on the SPIR, t(11) = -0.3, p = .21. The responses of the careproviders to the SPIR tended to be superficial or questioning (no care or solution) rather than reflective of concern for the residents’ feelings.

After the careproviders had completed the RVAS, they were given the opportunity to discuss why they rated their relationships as they did. All 12 careproviders chose to comment on their relationships with specific residents post intervention and 20 comments were recorded. The following were factors contributing to close relationships: the resident’s ability to converse with the careprovider about various topics including each others’ families, stories from the resident’s past, and about private affairs; an understanding from the resident that careproviders were trying to do their best; an appreciation of the careproviders’ efforts; and getting along with each other, as evidenced by not insulting the careprovider. For two of the respondents, there was a close connection with the resident which was unexplainable. These careproviders stated, “she drives me crazy, but for some reason she is one of my favorites,” and “I do not know why we are close, but she will take her pills for me and not for the others”.

Careproviders spoke about the reality that their relationship with residents was both positive and negative at different times that they were together. One careprovider stated, “I have a love and annoying relationship with her; love, because I can reason with her and we can talk about her children and she asks me about my son, and annoying, because at other times you can’t reason with her”. Another careprovider stated “I like him, he communicates with me and tells me about his past, but he is incontinent of stool, and continually asks for his medication, which makes him challenging at times.” Another said, “we have a good relationship because we speak the
same language, but at times she forgets and is very demanding”.

Finally some careproviders felt they did not have close relationships with residents. Factors included: the belief that the resident having a paid companion interfered with getting close to the resident; inability to communicate with the resident; and the resident not understanding the multiple demands on their time as certain residents wanted everything done right away. One careprovider’s comment reflected her frustration in trying to make a resident content and never reaching that goal. “I try very hard, but she is never happy, and therefore I can’t get close to her. I go to her first and get her up, and it is never early enough...I show her two dresses to choose from and then she changes her mind once it is on”.

Secondary Research Question # 6: Careproviders

This research question asked: What is the influence of the REPC on the careproviders’ perception of having a holding relationship with their charge nurses and unit manager? The careproviders perceptions of holding relationships with their supervisors were measured with the Unit Manager Relationship Scale (UMR) and the Charge Nurse Relationship Scale (CNR). The increase in careproviders’ perceived involvement in holding relationships with their charge nurses approached statistical significance on the intervention unit, $t(11) = -2.14, p = .06$. No significant differences were obtained with the unit manager, $t(11) = 0.32, p = .75$, as shown in Table 22. When examined, no differences for the comparison unit were realized.
Table 22

Pre and Post Intervention Comparisons of Careproviders’ Perceptions of a Holding Relationship with Their Supervisors.

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit Manager</strong></td>
<td>n = 12</td>
<td>n = 7</td>
</tr>
<tr>
<td><strong>Scale (UMR)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Intervention</td>
<td>M (SD) Range</td>
<td>24.9 (4.4) (13-29)</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>M (SD) Range</td>
<td>24.6 (4.6) (16-30)</td>
</tr>
<tr>
<td>Mean of Differences Post-Pre*</td>
<td>0.3 p = .78</td>
<td>0.6 p = .94</td>
</tr>
</tbody>
</table>

| **Charge Nurse**     | Intervention | Comparison |
| **Scale (CNR)**      | n = 12       | n = 7      |
| Pre-Intervention     | M (SD) Range | 24.3 (4.4) (13-29) | 27.4 (2.7) (23-30) |
| Post-Intervention    | M (SD) Range | 27.9 (2.2) (23-30) | 26.6 (3.1) (21-30) |
| Mean of Differences Post-Pre* | 3.6 p = .06 | -0.8 p = .58 |

Note: M = mean; SD = standard deviation

* Paired sample t-tests used to compare intervention outcomes over time. Wilcoxon matched pairs signed ranks test used to compare comparison outcomes over time.

** Maximum Mean Scale scores: UMR Scale = 30; CNR Scale = 30. Higher scale scores indicate higher levels of UM support, CN support.

Time 2 Comparison of Groups on Primary Outcomes

It was of interest to determine if there were differences between the intervention and comparison groups at time 2. An analysis of covariance was conducted to remove the pre-test sources of variation from the post test scores for the outcomes that were significantly different at time 1. Thus, the following question could be addressed: After controlling for the pretest scores do the post tests scores between groups differ significantly on the following outcomes: (a) careproviders’ perceptions of holding relationships with residents, (b) on the family members’
perceptions of holding relationship between careproviders and their relatives, and (c) on the careproviders' behaviors that are associated with holding relationships? Table 23 contains the adjusted mean scores for the two groups (comparison and intervention) on each of the dependent variables. After controlling for the effects of the pretest scores, there were no difference between the intervention and comparison group mean scores on any outcome.

Table 23

**Analysis of Covariance: Post-test Adjusted Means and Standard Deviations (SD) for Intervention and Comparison Subjects**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Intervention</th>
<th>Comparison</th>
<th>F (df), p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample Size (n)</td>
<td>M (SD)</td>
<td>Sample Size (n)</td>
</tr>
<tr>
<td>Careprovider-Resident</td>
<td>n = 21</td>
<td>24.6 (4.0)</td>
<td>n = 23</td>
</tr>
<tr>
<td>Relationship*</td>
<td>n = 24</td>
<td>17.5 (2.7)</td>
<td>n = 18</td>
</tr>
<tr>
<td>Family Careprovider-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident Relationship*</td>
<td>n = 28</td>
<td>6.2 (0.9)</td>
<td>n = 15</td>
</tr>
<tr>
<td>Careprovider Interactional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behaviors*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. M = Mean; SD = Standard Deviation
*Covariate = scores at pretest

In the following section, prior to summarizing the results of the study, the integrity of the intervention will be discussed.

**The Integrity of the Intervention**

Even though a thoughtful intervention plan was laid out, "no plan can ensure that the intervention is actually implemented as designed" (Sidani & Braden, 1998, p. 160). The following
issues emerged during the implementation which were threats to the integrity of the intervention. The issues were related to the multiple psychological costs associated with this change, the difficulty in engaging the participants in creating the vision for the unit and in the process of change (Beer, 1988) (Appendix LL).

**Integrity of the Careprovider Intervention**

**Attendance at the Intervention.** For this study, out of the 12 careproviders who consented to participate, 10 attended all five educational sessions and the remaining two attended four of the sessions. Even though attendance at the careprovider intervention was not a requirement for the success of the program for charge nurses, they were invited to attend the sessions. The evening charge nurses attended all five of the sessions, while the day charge nurses attended one session each. As well, eight nursing staff who did not want to complete questionnaires for the study volunteered to attend the sessions and, of those eight, five attended all of the sessions. Since the study was an attempt to change the milieu on the unit, the invitation to attend the sessions was extended to all nursing staff on the unit. Even though the attendance rate was high for the careproviders attending the sessions, it was very difficult to get the careproviders on days to attend the sessions for the full duration due to their busy workloads. The sessions were held during the best possible times on days, according to the careproviders, around 14:40; however, most staff found giving up time for the sessions very difficult. On average, therefore, most careproviders on days received 20 minutes per session, but about 40% consistently received only 15 minutes. On evenings, the charge nurse suggested that the sessions be held at 15:15 after report and she actively encouraged attendance and covered the unit while the careproviders attended them. Thus, the careproviders on evenings received the full strength
of the intervention.

**Non-compliance of staff with the intervention activities.** There were psychological costs involved in participating in this study which led to the non-compliance of staff with some of the activities. For some nursing staff, a major cost was the fear that the research study would lead to more work. Initially there was resistance from the nursing staff to changing the work assignments. Most of the resistance came from the nursing staff on days which caused a one month delay and, hence, the intervention took seven months to complete. To try to understand the level of dissatisfaction about trialing the new assignment, all nursing staff were asked to complete a questionnaire about their perceptions of continuity of careprovider. The results indicated that over half thought it might be beneficial. In confidence, nursing staff came to the investigator and explained that an RN on days was known for changing the assignment so that she could have a lighter load. This nurse made it very clear that she was not willing to try the new assignment even though most of the nurses on days thought having some say over their assignment would be good. In contrast, nursing staff on evenings were willing to try the new method of assignment almost immediately. Thus, evening nurses began the new assignment and agreed to evaluate the assignment in six weeks time. After the nursing staff on evenings tried the continuity of assignment for two weeks, the unit manager decided that the nursing staff on days would also trial the new assignment model. Her decision was based on the evidence from the questionnaire that most nursing staff were not really opposed to the idea. As well, the new assignment appeared to be beneficial for the evening staff.

Another concern with the continuity component was that two residents were not chosen by any nurse. On evenings, the RN saw it as her role to work with these residents since they were
seen as a challenge by other staff. On the day shift, the RNs refused to try to work with these residents. One RN said, “I have worked for too long to get an ulcer now”. The investigator spoke with the residents who were not selected and one in particular said she would like a staff member “who likes music and art” so that they would have something to talk about during care. The investigator then went back to the careproviders and one HCA, who had the same interests, was chosen. Unfortunately, that person only worked part time. Another full time HCA agreed to care for her under the proviso that she could have a break from her periodically.

**The Intervention’s level of complexity.** The intervention called for the development of a vision statement to guide the change, as outlined by Beer (1988). Getting input from all nursing staff on the new vision created a challenge. Therefore, in the end, the new vision for care on the unit, (i.e., the model for the unit), was developed by the investigator with some assistance from the unit manager. As such, it did not generate any commitment from the RNs or careproviders on the intervention unit. They did not participate in creating it and they did not own it. In hindsight, it became clear that the new vision should have been drafted with more assistance from the nursing staff. The plan for achieving the vision (i.e., the intervention), was shared with all the nursing staff so they were clear on what was to unfold and a monthly newsletter was developed to keep the momentum going and lines of communication open. This communication strategy worked well and feedback from the staff regarding these newsletters was positive.

Twenty-one resident profiles were completed by 17 nursing staff. RNs were invited to participate in this activity as well. Many careproviders had never asked residents questions of this nature before and they found it awkward. There was also a concern regarding the writing skills of some of the careproviders. For these persons, the investigator went with the careprovider and
together the profiles were completed. It was also interesting to note that the RN on evenings actively encouraged and supported the careproviders in completing their profiles and did two herself, but the RNs on days did not complete profiles for any of their residents nor did they encourage others to complete their profiles. Following the completion of the profiles, nursing staff were asked to share them with other nursing staff and then share them with members of the health care team. Of the 17 nursing staff that completed profiles for their residents, eight participated in this part of the intervention. There were several reasons for this. First, the health care team meetings were scheduled on Wednesdays at 14:30 and the part time staff never worked on a Wednesday and the evening nurses did not come in early enough to attend the meetings.

The complexity of the intervention also increased when the multi-disciplinary staff became involved in the intervention. First, some nursing staff were ambivalent about sharing the profiles with the recreational therapist, social worker and all the other nursing staff as they had never had the opportunity to present in front of others before. Second, even though these meetings were a near perfect opportunity to identify requests for changes to practice or daily routines made by the residents in the course of developing profiles, these requests were rarely honoured. For example, several female residents expressed a desire to get to know their neighbours and the nursing staff developed this into an idea for a weekly evening social tea. The team member responsible for this type of activity acknowledged that it was a good idea but made no commitment to it and the evening tea never came to fruition. There are two lessons in this. Taking responsibility for ensuring the quality of life of residents on a unit should fall on each team member and an intervention that focuses on residents’ quality of life should be an interdisciplinary one.
Integrity of the Supervisor Intervention

Attendance at the Intervention. The registered nurses on evenings attended all sessions as did the unit manager. The two registered nurses on days attended the first two meetings after much persuasion. Over the months to follow they were not able to meet with the researcher as they were always busy. Hence, the dose of the intervention for the two key charge nurses on days was quite low relative to the participation of the registered nurses on evenings.

The level of staff commitment. The RNs on days did not feel they had time to discuss supportive measures when they themselves were not supported. Trying to engender commitment to the project and then change the registered nurses' supportive behaviors was difficult. The ineffectiveness of the supportive component may be related in part to "boundary" issues in long-term care organizations such as the role boundaries that exist between careproviders and RNs and the boundaries between health team members (Weisbord, 1976). Results from this study suggest that there are clear boundaries between the roles of careproviders and the RNs and that these boundaries hindered work efficiency, satisfaction and their ability to be supportive. In this long-term care facility, numerous comments were made and actions taken by some registered nurses that devalued the careproviders' efforts and led to a lack of teamwork. For example, the RNs often made decisions without the careproviders' input. The existence of these boundaries has not changed much since Klus and Thoreson (cited in Monahan and McCarthy, 1992) wrote in 1980: "The distance of the boundary between the aide and the supervisor is more than just social, economic, and professional - it is a perceptual gap, too...must an aide feel inferior because of the functions performed?" (pg.6). The extent to which the change agent can identify and assist with increasing the harmony between the groups may aid the success of a change project.
Summary of Results

The original analytic strategy could not be followed because of the nonequivalent status on the intervention and comparison units of the residents' abilities, the perceptions of the residents and family members of the careprovider-resident holding relationships and the careproviders' holding behaviors. Therefore, the research questions and analysis were changed to allow for within group comparisons pre and post intervention rather than between group comparisons.

Results of the resident primary outcome included: 1) a statistically significant increase in the residents' perceptions of being in a holding relationship over time, \( t(20) = 2.88, p = .009 \), and 2) no significant difference regarding their perception of closer relationships with their careproviders over time, \( t(15) = 0.15, p = .88 \). Results of the family member primary outcome included: 3) a statistically significant increase in the family members' perceptions of their relatives being in holding relationships over time, \( t(23) = 3.84, p = .001 \), and 4) more relatives perceiving the residents were in close careprovider-resident relationships over time, \( z = 2.33, p = .02 \).

Results of the careprovider primary outcome included: 5) statistically significant increases in the careproviders' holding behaviors over time, \( t(27) = 3.25, p = .003 \), and 6) in their ability to provide continuity over time, \( t(27) = 11.6, p < .001 \). A statistically significant increase was found in the number of nursing staff who were in favor of the model over time, \( t(21) = 5.4, p < .001 \).

No statistically significant findings were obtained for the comparison groups for any of the primary outcomes.

There were no statistically significant findings for the secondary research questions in this study. The residents' physical status remained intact which can be viewed as a positive outcome as there was a concern that careproviders might not attend to the physical body if they were
focused more on the relationship. Neither the careproviders’ perception of a close relationship with residents nor the careproviders’ level of expressed empathy changed. No changes were found for the final research question, the careproviders’ perception of being in a holding relationship with their unit manager and with their charge nurse.

Careproviders, residents, and family members were provided with an opportunity to explain why they perceived close careprovider-resident relationships existed or why they did not. There were similarities between residents’ and family members’ responses that led them to believe they were in close relationships, such as the careprovider is available when required. There were differences between residents’ and family members’ perceptions of why relationships do not exist as residents felt that a lack of interest and time of careproviders impeded the development of relationships. In contrast family members said it was the resident characteristics that prevented connections from forming. The factors that family members suggested hindered relationships were almost identical to the list generated by the careproviders, reasons such as language barriers, and residents with challenging behaviors. And finally, careproviders felt close relationships were attainable if there was an ability to converse and get along with the resident, be appreciated for their efforts, and have the understanding from the resident that they were trying their best. The implications of these results will be discussed in the next chapter.
Chapter 5. Discussion

Introduction

The chapter contains the discussion of the results followed by an examination of the limitations and strengths of the study. Finally, issues related to the theoretical framework which was selected for the study are examined.

The Influence of the Relationship Enhancing Program of Care (REPC) on the Careproviders’ Ability to Provide a Holding Relationship for Residents

This study attempted to answer the question: “What is the influence of a relationship enhancing program of care (REPC) on the relationships between residents and their careproviders over time?” There is preliminary evidence to support the claim that the REPC does influence holding relationships between careproviders and residents. A statistically significant change in both the residents’ and the family members’ perceptions of careproviders being able to provide a holding relationship over time was found. The REPC that focused on continuity of careprovider assignment, interactional skills, and a supportive environment influenced the careproviders’ behaviors. Careproviders can become more aware and responsive to the needs of particular residents if they are taught how to, if they are with residents on a consistent basis, and if they are encouraged and supported in their effort to do so. This finding is consistent with those of other studies using continuity assignments, enhancing interactions or supportive environments with nursing home residents. Cox et al. (1991) and Kihlgren et al. (1993) found that residents reported they had more choice and control, and more opportunities for making decisions, Teresi et al. (1993a) found residents were more satisfied, and Montegar et al. (1977) found an increase in staff-resident interactions. The findings in the REPC study confirm what other researchers have
demonstrated (Cox et al.; McAiney, 1998; Patchner, 1987; Teresi et al.), more than just a
continuity model is required to enhance positive outcomes for residents. This study extends
previous work by not only including the perceptions of the careproviders and residents to the
intervention utilizing reliable and valid measures, but also by including the evaluation of the
change by family members.

Not only did residents and family members perceive an increase in careproviders’ ability to
provide a holding relationship over time but an increase in these reliable and empathic behaviors
was observed. Data from the Careprovider Interaction Behavior Scale (CIBS) indicate
participation in the intervention resulted in significant increases in the careproviders’ observable
empathic and reliable behaviors. This direct observation provides additional support for the
primary outcome that the REPC had an impact on the development of holding relationships for
residents. Careproviders’ interactions were more focused on the person than the task, altered
their pace of care when required, and stayed with the resident during the care episode following
the intervention. There was a statistically significant difference in the careproviders’ interactional
holding behaviors for these residents. The ability to enhance nursing staffs’ interactional
behaviors following an interactional intervention confirmed results obtained in earlier studies
(Williams & Tappen, 1999; McCallion et al., 1999). However, even though the results from these
studies were similar, the REPC study was different in that the intervention was delivered during
careproviders’ work hours and it was developed for the nursing staff who spend the most time
with residents, i.e., the careproviders. The REPC study was also different in that the interactional
scale used to measure this outcome had a level of reliability and validity that had not been
established in previous work. While work needs to be continued in this area, these results
contribute to the beginning psychometrics of interactional measures.

In order to enhance the holding relationship, the theory called for a higher level of continuity between the resident and careprovider. Following the intervention, a statistically significant increase in continuity along with the other components of the REPC was found as staff consistently cared for the same residents. The increase in continuity may have influenced the careproviders interactional behaviors which is consistent with what Athlin and Norberg (1987) found: following a permanent assignment model to feed residents, nursing staffs’ interactional behaviors improved. Staff were better able to interpret even subtle cues from residents and responded appropriately by adjusting their behavior to that of the resident. Best (1998) and Netten (1993) made similar observations and conclusions, careproviders that provided continuity were more familiar with residents’ personal histories which helped them interact more effectively with residents. The REPC study confirmed the findings from these qualitative studies but instead quantitatively captured the improved interactional behaviors of the careproviders.

Consistent with Winnicott’s relationship theory (1960) it was found that holding relationships can be created by careproviders who are reliable, empathic and consistent in approach. Careproviders demonstrated their capacity to “hold” the resident. Such holding involved physical holding (i.e., gently caring for persons during AM care as indicated from the CIBS), and also emotional holding (i.e., being there for the resident when needed as indicated from the CR scale). What became apparent is that the intervention was geared to creating careproviders who were reliable, empathic and consistent in their approach, and were able to establish holding relationships for their residents.

It is worth speculating on what part of the intervention was most influential in contributing
to the change. The similar results from the comparison unit which did not have a continuity of careprovider challenge the effect of the permanent assignment component as the main contributor to the change. However, it was discovered in subsequent meetings with the unit manager on the comparison unit, that she attended morning report daily and provided information to nursing staff about what different residents desired and what had upset them over the previous days. This aided in the provision of consistency in care. It may be that consistency in approach and knowing the likes and dislikes of the residents on the comparison unit happened through the unit manager’s role modeling and because she actively shared information about the residents’ lives with her staff. Having said this, on the intervention unit, the permanent assignment model was valued and appreciated following the intervention. The majority of nursing staff were more favorably disposed toward the assignment; thus, this component was probably influential in the change of the careproviders’ behaviors. Nursing staff acknowledged the benefits associated with the continuity of care component. These included: knowing the residents’ likes, dislikes and moods over time; building rapport with residents; knowing what to expect in the day; knowing the residents’ routines and because of this knowledge being able to work more efficiently; and having more time to “do the little extras”.

The low participation rate of the supervisors (i.e., both the nurse manager and the registered nurses) in the intervention and the non-significant change in most of the supervisors’ supportive behaviors, raise questions about this element of the model as the most important component. One RN on evenings encouraged the careproviders who worked with her to participate in all aspects of the study but the effect of this supervisory support was diminished by the RNs on days as they did not participate in the program and did not encourage others to do so.
The investigator did her part to encourage the unit manager to support staff but there were many competing priorities for her time. On the comparison unit, the unit manager and the registered nurses were very supportive of the staff for their efforts in individualizing care. The unit manager in particular took an active role in being available to careproviders if required and at the same time managed the fiscal responsibilities of the unit.

The interactional component involved the session on interacting with others, and on the development of resident profiles and subsequent sharing of them with others on the health care team. The careproviders appeared to have enjoyed this session and some were amazed at how little they knew the residents. Yet there were hurdles to implementing some of the residents’ preferences so frustration was experienced by the careprovider at times. It might be argued that only one component of the intervention at a time should have been evaluated. However, the multi-pronged intervention was guided by a theory that proposed a “trickle down” effect of support and care from supervisors to careproviders to residents and that all components together had a better chance of enhancing relationships than any one component on its own (Winnicott, 1970). Therefore, rather than proposing which component was most influential, it is likely each component contributed some effect and it is premature to redefine the REPC after only one study.

**The Influence of the Relationship Enhancing Program of Care (REPC) on Close Relationships**

The next question that was asked was, “Does the REPC lead to a close relationship between careprovider and resident over time?” Perspectives were sought from residents, family members and careproviders. The analyses indicated no significant change in the establishment of a close relationship from either the residents’ or careproviders’ perspective, but it was significantly different for the family members. There are several possible explanations for this
discrepancy in results. The most probable reason is that the proportion of family members who initially believed there was a close relationship was only 50%. Therefore, the family members' scores had more scope to grow and achieve statistical significance. A second reason is that the scales that were used to measure these close relationships were different for the family members as compared to the residents and careproviders. Family members were asked to respond to a dichotomous item scale (FY/N) while the resident and careprovider responded using a visual analogue scale (VAS). This difference in tools existed because the family members were interviewed over the phone and the VAS was difficult to administer. In this study, some residents struggled to understand the concept of 'close relationships' let alone quantify the amount on a VAS. In contrast, family members were asked on a dichotomous item measure (FY/N) whether they felt a relationship existed. This scale might have been more appropriate to measure this abstract concept of a 'close relationship' for all groups. Polit and Hungler (1995) state that all things being equal, a simple instrument is more desirable than a complex instrument inasmuch as complicated measures run a greater risk of having errors.

The analyses demonstrated no significant changes in the establishment of closer resident-careprovider relationships for residents or careproviders following the intervention which was contrary to the original expectation. In the course of considering the results, it became obvious that the holding relationship, as conceptualized by Winnicott (1960), was the primary finding of the REPC study and not the development of close resident-careprovider relationships. Furthermore, the differences between Winnicott's holding relationship and a close relationship became clearer. A common sense understanding of a close relationship is one that is based on mutual participation by both parties whereas for the holding relationship this is not the case. For a
holding relationship to be established, the careprovider is required to exhibit reliability, consistency and empathy but it does not demand anything of the resident. The resident in a holding relationship may reciprocate but is not required to do so. Despite Winnicott’s view that holding relationships are not necessarily reciprocal, some residents in this study felt that having reliable and empathic careproviders led to close careprovider-resident relationships. Therefore it is possible that for some residents experiencing careproviders as more reliable and empathic is the initial outcome of the intervention, whereas feeling close to the careprovider may be a subsequent outcome. Support for this proposition comes from the studies by Caris-Verhallen et al. (1998;1999). These correlational studies show that certain careprovider behaviors are helpful in the establishment of careprovider-resident relationships. The behaviors in their studies were similar to the interactional behaviors that were observed in this study. Specific verbal utterances that were listed as effective for the establishment of relationships included personal talk, jokes, sharing concern, warmth, and interest (Caris-Verhallen et al.,1998). Specific non-verbal behaviors include patient-directed eye gazing, affirmative head nodding, smiling, forward leaning and affective touch (Caris-Verhallen et al.,1999). The associations made between these careprovider behaviors and the development of relationships require further causal testing before conclusions can be drawn. As well, in this study the intervention may not have been sustained long enough to effect a change in the perception of a close careprovider-resident relationship. But for some residents and careproviders, time together may not ever be enough to allow them to become close.

Based on the qualitative comments generated by the residents and careproviders, it is possible that more than the development of a holding relationship is needed to build close
careprovider-resident relationships. Three factors were identified by residents that influenced the development of close relationships: time, the intentions of the careproviders, and the interests of the residents. Decreased funding to long-term care facilities over the years means fewer nursing staff care for a greater number of patients. In this study, residents spoke about the need for connectedness with staff but mentioned inadequate staffing and workload as barriers to nurses creating time for meaningful one-to-one relationships. Nurses in this study also recognized that time is critical and lamented the barriers that inadequate staffing patterns created for sufficient time to be devoted to being with residents. One charge nurse in this study said “establishing relationships with residents could be seen as a workload issue for some careproviders as they cannot find the time required to be with residents for extended periods”. Glass (1992) concurs and suggests that understaffed shifts must struggle to accomplish even the basic daily tasks and time for psychosocial interactions with residents are almost nonexistent. This same situation was found by Armstrong-Esther et al. (1986, 1994). Yet, it is important to recognize that the nature of long term care is one in which the careprovider and resident are together for long periods of time, usually years, and this longevity and multiple exposures to one another clearly must influence the development of relationships between the two despite the staffing dilemma. This complex situation requires further study.

Three residents reported they were not interested in a close relationship with nursing staff suggesting the need to respect residents’ wishes is of paramount importance. The majority of the residents, however, said they were interested in relationships, but a few mentioned that even if they were interested in becoming involved in a close relationship, the ultimate decision is left up to the careprovider. For instance one resident stated, “I think nurses should have relationships with
residents and it would be nice for both of us but they don’t think it is important to have a relationship with me”. These findings support those by Huss et al. (1988) who found that regrettably, there were some residents who did not feel they had anyone to confide in which is unfortunate as having a confidante was related to residents’ higher life satisfaction scores. The power dimension inherent in relationships with careproviders was also reported by Nussbaum (1991) who found that residents would welcome having relationships with careproviders; however, residents waited for a lead from health care aides to inform them that a relationship was possible. The residents did not feel it was their place to initiate a personal relationship but if a member of the staff made relational overtures there was every reason for them to reciprocate with friendly behavior.

Most of the past research on the development of careprovider-resident relationships in long-term care is based on case study reports and anecdotal evidence from the careproviders’ perspective (Best, 1998; Coker et al., 1998; Kihlgren et al., 1993; Patchner, 1987). The limitations of such reports include lack of control of confounding variables and the tendency to report only positive outcomes. This study attempted to challenge the anecdotal evidence that continuity, effective interactions or supportive environments enhance closer careprovider-resident relationships from the careproviders’ perspective. However, no statistically significant changes were found in the development of closer relationships from their perspective. There were several explanations given for close relationships not occurring from the careproviders’ perspective and they differed from the reasons given by the residents. In fact their reasons were strikingly similar to those expressed by the family members. Factors that negatively influenced the development of relationships with residents included: inability to communicate with residents; paid companions
interfering with careproviders getting close to the residents; and residents not understanding the multiple demands on their time. The identification of factors influencing the development of close relationships adds to the growing body of research literature on the complex nature of relationships. Characteristics of residents such as their cognitive status (Armstrong-Esther & Browne, 1986; Clark & Bowling, 1990) and their social interactional skills (Nolan et al., 1995), and characteristics of the work environment (Salmon, 1993; Thomas, 1994), played a significant part in the failure of interactions and relationships.

The comments made by family members and careproviders that suggested paid companions may interfere with relationships warrants further attention. It is uncertain how the presence of a third person affects the development of a careprovider-resident relationship as it is possible that this person, i.e., the companion, may inhibit the intimacy and confidentiality that occurs in dyadic interactions. It may also make communication dynamics more complex and time-consuming. Relationships between careproviders and paid companions were periodically stressed during the time the intervention was implemented. As a result, a meeting was held between companions, careproviders and the manager to discuss the role of the companion on the unit. It was made clear that staff at the Centre had the overall responsibility for the client. Relationships were so strained between one careprovider and companion, that the careprovider asked to be removed from the care of the resident. This conflict must inadvertently effect the relationship between the careprovider and resident in question. Interestingly, even though qualitatively the concern that companions make a difference in relationships was made by the careproviders, quantitatively it was not found to be a modifier. However, this discrepancy could be due to the small sample of residents that had companions and hence, the presence of family
members who visit frequently may also impact on the careprovider-resident relationship and this too, requires further inquiry.

Of equal interest, were the reasons that careproviders felt they were in close relationships with residents. Factors reported included: the resident’s ability to get along and converse with the careprovider about various topics including each others’ families, stories from the residents’ past, and about private affairs; and an understanding and appreciation from residents that careproviders were trying to do their best. These findings are similar to those in a study by Nussbaum (1991). He examined the conversation between elders and careproviders and found that those nursing staff who reported at least one ‘close’ relationship with a resident, had more conversations about each others’ families and personal matters. Furthermore, their overall conversations appeared more personal. Nussbaum concludes by proposing the talk within the interaction reveals the nature and the closeness of the relationship and suggests that researchers not only focus on the institutional level (i.e., skill mix, care models, number of personnel), when evaluating quality of care but on the relational level.

The comment that careproviders need to be appreciated by residents in order to develop close relationships is consistent with other studies that have looked at nursing aides’ job satisfaction. Monahan and McCarthy (1992) and Robertson et al. (1994) asked aides what they liked about their jobs and the answer that ranked number one was ‘being appreciated’. Aides wanted to be valued and they wanted appreciation for their efforts in order to help maintain their morale. This is of concern for there are a number of residents that cannot communicate their appreciation to careproviders and this may negatively influence the possibility of meaningful relationships with careproviders. Thus, it is of paramount importance that the supervisors take on
the responsibility of supporting their careproviders when they make efforts to know the individual resident and develop meaningful relationships with them.

A question that this study raises is “What should relationships between careproviders and residents look like?” Various types of relationships have been proposed between nursing staff and residents: therapeutic, surrogate, friendly, professional, personal, familial. It may be that the needs of the residents should dictate the type of relationship that is required between the two. For some who are troubled or depressed a more therapeutic relationship may be required which may necessitate the expertise of a registered nurse, while for others who have lost all or most of their friends and relatives, a more personal relationship would be preferred. Still others may have ties with friends and families and may benefit from a friendly type of relationship. The term ‘meaningful relationship’ may be more useful as the interpretation depends on what is best suited for a particular resident. Careproviders will then be called upon to become aware of the meaning of the relationship for each of the residents they care for.

How to create these meaningful relationships still remains unclear. In this study careproviders did not receive specific direction on how to develop meaningful relationships with residents which may account for this outcome not being affected by the intervention. Winnicott’s (1960) theory is not helpful for understanding how meaningful relationships develop because an assumption of Winnicott’s holding relationship between infants and mothers is that there is already an emotional loving connection in existence between the two which is not the case between careprovider and resident. In fact, the opposite may be more true. Another theory may be required to understand the process of developing meaningful careprovider-resident relationships. Little still is known about how to enhance this relationship. Yet, an observation
from this study provides some evidence that the continuity component of the relationship program could be organized differently so that the possibility of a meaningful relationship developing could be increased. One resident who was not selected by nursing staff for the continuity assignment component of the intervention was approached by the investigator to determine if she had a preference for a particular careprovider. She said that she wanted a careprovider with common interests, specifically someone with an appreciation for music, to take care of her. Creating opportunities for dyads with common ground to be together may assist with the development of meaningful relationships. As well, strategies such as allowing both residents and careproviders to have a least some say in care assignments may increase the chances of relationships developing as certain individuals “click” better with some than others.

A question worth pursuing is whether a meaningful careprovider-resident relationship is a realistic outcome in long term care environments. Leaders in gerontological nursing believe a meaningful relationship is worth striving for; in fact they espouse that these relationships should be the hallmark of good geriatric nursing care (Caris-Verhallen et al., 1999; Kayser-Jones, 1989; Taft et al., 1993). The interaction between the resident and the careprovider and the subsequent bond that develops is where the resident places importance (Kayser-Jones, 1989). But, is this a realistic expectation for the health care aide in the practice setting? Challenges to permanent assignment models have been expressed by careproviders in the articles reviewed, including concerns about over-involvement with residents and feeling too upset when a resident dies because relationships have been formed (Patchner, 1989; Teresi et al., 1993a). The results of this study were similar. Nursing staff spoke about distancing themselves from residents to protect themselves. Is it possible to teach careproviders how to form these attachments and then step out
when it is necessary? If the crux of quality nursing care is meaningful relationships then models of care need to be devised such as the relationship enhancing program of care. All nursing personnel have a role in either supporting or enhancing these relationships, and should extend support to the careprovider following the loss of a resident. From the perspective of the investigator, meaningful relationships should be the standard of excellence and there should be no tolerance for anything less. Therefore, assisting careproviders to learn how to create holding relationships for residents may be one way to enhance the possibility of meaningful relationships developing, always contingent on the wishes of the resident.

There was a concern that if careproviders were focusing on the development of a holding relationship for residents, the residents’ physical care could suffer. Therefore, the number of falls and pressure sores of residents in the study was monitored. There were no changes in the physical status of the residents following the intervention. The number of falls and pressure sores for residents in the study were similar on the unit before and after the intervention. This could be related to the fact that after the same careprovider cares for the same resident over time she/he gets to know the person and this ‘knowing’ may prevent adverse events. Similar outcomes were found in a study by Campbell (1985). Following the implementation of a continuity of careprovider model, the physical integrity of the residents was the same or improved for the majority of the residents. Considering there were 35 residents on the intervention unit in this study and there were only four falls and one resident with a pressure sore post intervention, the numbers reflect a low incidence of these types of untoward events. More importantly, this may reflect the fact that two clinical nurse specialists are employed at this facility to co-ordinate prevention programs for falls and pressure sores. Nonetheless, careproviders were still able to
maintain the physical care needs of the resident while focusing on the development of the holding relationship for residents.

**The Influence of the Relationship Enhancing Program of Care (REPC) on Supervisor Outcomes**

The question posed here was “Were the supervisors on the intervention unit able to provide a holding relationship for their careproviders over time?” Non-significant results were obtained for both groups of supervisors, the unit manager and the charge nurses (i.e., registered nurses).

**Unit Manager**

Careproviders in this study did not perceive a difference in how their unit manager supported them post intervention. There could be a rather straightforward explanation for this non-significant finding. The dose of the intervention was too weak to have caused an intervention effect. Three, 20 minute sessions with a unit manager is likely unrealistic to enhance the supportive capacities of any individual. Further, even with good intentions, few monthly follow up meetings with the investigator were kept and hence, only 75% of the intervention was delivered. It is difficult to draw any conclusions about the failure of this intervention on the supportive capacities of the unit manager as there was only one manager; so this aspect of the study more resembles a case study then a trial. Observations and comments made by the staff indicate that the intervention unit was a difficult unit to work on and the unit manager was overwhelmed by competing priorities so that she was not sure which she should do first. It is quite possible given the unit manager’s range of responsibilities in the health care system, such as covering two or more units, there is no time for mentoring others or participating in research activities (Pringle, 2000). The unit manager had good intentions; for example, she led the profile
sharing rounds admirably, which occurred weekly on the unit while the investigator was on the unit. However, after the investigator left the unit, the sessions failed to continue as the unit manager informed the investigator "other priorities took precedence".

The results of this study raise the following question, "what should the unit managers’ responsibilities be in long-term care environments if we believe a trickle down effect is necessary for excellent care?" Based on the theoretical model, it was proposed that the manager-careprovider relationship mirror the relationship between careprovider and resident. Managers were called on to be reliable and empathic to their staff. One content expert in this study challenged these behaviors as unrealistic expectations for unit managers as they fall beyond their scope of practice. Another content expert suggested that successful implementation of these behaviors required a change in ‘mind set’ as being dependable was an important role for the careprovider to have but she had never before thought about its relevance from a front-line worker’s perspective. Having said this, she realized it was a pertinent variable to measure when appraising the relationship. Interestingly, other investigators agree with both Winnicott (1970) and this content expert, because they propose that characteristics of a good work environment includes a unit manager who makes staff feel they are worthwhile and who attempts to meet the staff’s personal needs. Glass (1992) suggests the two hallmarks that differentiate excellent long-term care facilities from ordinary organizations are that staff know management cares about them and staff are allowed to be their own unique selves. Similar attributes were described by Firth et al. (1986) who developed a 100 item questionnaire to examine the nature of effective support from a superior in psychiatric settings. These investigators found that personal respect, empathic attention, and absence of interpersonal defensiveness appeared to be important factors defining a
supportive supervisor. These are the same attributes that were evaluated by the unit manager tool that was developed using the concepts from Winnicott's relationship theory. One attribute that was not measured with the tool but may be useful for future study is the effect of continuity of leadership on the unit. Frequent leadership changes which happen in today's environment may impact on the careprovider-unit manager relationship.

**Charge Nurses**

There was a trend toward an intervention effect following the REPC in the charge nurses' ability to provide a holding relationship for careproviders. The non-significant results could be due to at least three factors. First, the charge nurses (i.e., RNs) on evenings, made attempts to support careproviders by taking on challenging residents and providing positive feedback to careproviders. However this effect was moderated by the RNs on days who did not want to become involved in the supportive component of the intervention. The RNs on days only received about 40% of the dose of the supportive intervention and this was after much persuasion. Even though the RNs had consented to participate in the study, the intervention was seen as a major threat to their control and despite the fact that they were informed of the study's progress and plan, the investigator had difficulty engaging them in the study.

Second, the fact that these results did not achieve statistical significance may have been related to other confounding variables that influence the registered nurses' abilities to provide a supportive environment, such as their commitment to the organization, their visibility in the environment and how much support they receive from their unit managers. Results from the REPC study confirm previous research as there were many factors that were found to affect the supportive environment (Montegar et al., 1977; Kovach & Krejci, 1998). More descriptive work
needs to occur to understand the multitude of factors that might influence the registered nurses’ abilities to be supportive so that strategies can be put into place to reduce inhibiting factors.

Further, registered nurses have not been educated to be leaders nor mentors in these long-term care environments. So providing an intervention to teach them to be leaders in these environments may require more than two, thirty minute sessions. There was only one study found which implemented and evaluated a change in supervisors’ practice related to increasing their supportive capacities. Montegar et al. provided an intervention for supervisors that lasted four days and focused on the supervisors’ supportive actions. Positive changes over time were found in the supervisors’ supportive behaviors.

Thirdly, the numbers of careproviders were so small and hence the capacity to demonstrate statistical significance was very low. This is a common problem in long-term care because staff numbers are low on any one unit so multiple units must be used.

The role and responsibility of the RN in these environments needs to be addressed. Given that the unit manager is not visible on the unit, charge nurses define, direct and regulate nursing work. Typically, careproviders act completely under the direction of the nurse. Therefore, careproviders cannot change the timing of a bed bath without the RN’s approval. If careproviders are truly going to assist residents in meeting their wishes, they will require more decision making latitude as they have the fullest view of the residents’ lives. To this end, the RNs will require a shift in their focus to one where mentoring and supporting careproviders takes precedence, while relinquishing some decision making control. Careproviders need to be recognized as extremely important members of the team and their input needs to be valued. If we truly believe we can have environments that focus on close meaningful relationships between careproviders and
residents, then we need systems in place to guide RNs so they can mentor careproviders in these
environments. It is clear from this study that a negative environment can be detrimental to
careproviders. As well, it highlights the converse: a positive environment can be equally beneficial
to careproviders.

**Comparison Unit**

One notable difference between the comparison and intervention units was the residents’
characteristics. Residents in the intervention group had statistically significantly more disengaging
behaviors and greater physical disabilities. These behaviors were identified by careproviders on
the intervention unit as potential factors for negatively affecting their ability to develop close
relationships with residents. As well, one could speculate that if the residents were less impaired
the careproviders may not need to work so hard to engage their residents and subsequently form
relationships. The question that comes to mind then is, “If this intervention worked on this unit,
with residents who exhibited disengaging behaviors, with RNs who were not always supportive, is
it likely to be successful on almost any other long-term care unit?”

Finally, one is left speculating, given the positive feedback from the initial nursing staff
interviews, from the residents’, family members’, and careproviders’ pre-test scores, if the
comparison unit was in fact extraordinary. It is possible that the intervention units pre-test scores
represent the average for most long-term care units and the comparison unit was above the mean.
Evidence that the unit manager actively supported her nursing staff, attempted to get to know the
residents on the unit and encouraged her staff to do the same, while seen as a source of
contamination, may also represent the standard of care most long-term care unit are trying to
achieve (Pennsylvania Nursing Homes Document, Eaton, 1997). Only with replication of this
study on additional long-term care units will this speculation be validated.

**Study Limitations**

Several weaknesses that limit the generalizability of the study findings need to be considered when interpreting the results of the study. First, only a small number of nursing staff participated in the study which reduces the power of the statistical analysis. The relatively low participation rate at Time 1 limits the generalizability of the study results. A climate of uncertainty about research was a factor contributing to participation patterns. Second, a randomized selection of nursing staff was not considered, the intervention precluded it as it was an attempt to change the culture on the unit. Randomization of residents was also not done as it would have been impossible to study resident outcomes if the staff implemented both the new and usual care approaches during the same measurement period. Randomization of units was not considered as there were several units not available because of other research studies going on in the centre. A comparison unit was chosen, and as it turned out, it was different in several significant ways from the intervention unit. Providing the intervention on more than one unit was also considered but it seemed prudent to evaluate the intervention on one unit before proceeding to a trial involving several nursing units.

A number of factors threatened the internal validity of the study. The main threat was the possibility of regression to the mean. The comparison group outperformed the intervention group on the main outcomes of the study at baseline; these differences were statistically significant. Following the intervention, there were no significant differences between the two groups, yet the pre and post group means for the intervention group were significantly different for the main outcomes. To assess the likelihood of regression to the mean, it was important to explore why
low-scoring groups were assigned to a particular treatment (Cook & Campbell, 1979, p. 110). As discussed earlier, the intervention unit was selected based on a process of elimination. What was gleamed later on from the patient care advocate for the facility was that the intervention unit had a history of poor performance as confirmed by the number of resident and family complaints brought to the attention of the advocate. From September 1996 to August of 1998, two years prior to the study, the families and residents had brought 27 issues forth to the advocate while on the comparison unit 16 issues had been brought forth. These complaints were about the nursing care and focused on either interpersonal communication, physical care, or social-emotional issues. This is evidence that their performance on the pretest scores was not artificially low but rather reflected a history of poor performance.

Another factor threatening validity was local history (i.e., selection x history). It is difficult to rule this threat out completely, but no unit specific policy changes or practice changes that might have affected the outcomes of the study were made on either unit during the course of the study. Field notes were kept during the course of the intervention and, following a review of those notes, it was concluded that no planned event, other than the intervention, affected the intervention group but not the control group, or vice versa.

Factors jeopardizing the external validity of the study included the potential for the Hawthorne effect and experimenter effects. The subjects, both nursing staff and residents, may have behaved in a particular way because they were aware of their participation in the study. A common problem in studying institutionalized elders is the reluctance of some residents to reveal their feelings about certain nursing staff for fear of repercussions if they express criticism, or to express socially acceptable answers rather than their true feelings. Alternative methods and
sources to collect information about these relationships, therefore, were devised. For example, the assessment of the relationship was collected from different sources: the family members, the residents, and an observer, using different methods, observational and self-report. A comparison group also assisted with minimizing this threat. It is unlikely that the reactions to being a research participant would have been different between the careproviders in the intervention and comparison groups.

Performance of the subjects also may be affected by the emotional investment and skills of the investigator in delivering the intervention and her skills in facilitating its adoption. It is impossible to discern whether some of the changes in the intervention subjects could be attributed to the attention and commitment conveyed by the investigator to the careproviders during the intervention or the relationship enhancing program of care. To decrease the experimenter effect threat the investigator hired a research assistant to interview and observe careproviders at both data collection intervals.

**Study Strengths**

While the study had limitations, it also had a number of strengths. A theoretical foundation was used to develop the intervention and the measures. The concepts were clearly defined, the focus of the investigation was clear, and a theoretical interpretation of the results was possible. There were aspects of the design of the study that strengthened its validity. The response rate for all data collection measures was 76% pre intervention. The research assistant was blind to the study design and hypotheses and the unit designation as comparison or intervention, and was pretrained in methods of observation and interviewing for data collection. All measures were gathered at the same time and by the same individual. Nursing staff were requested not to discuss
the intervention and its implementation outside the unit to lessen the threat of treatment diffusion. Further, the nursing staffing office did not assign careproviders working on the comparison unit to work on the intervention unit and vice versa. The dependent variables for the study were measured with quantitative tools with attention to reliability and validity. Multiple sources and methods were used to measure the outcome criterion of holding relationships. A pilot test prior to the intervention brought to light potential threats to the data collection procedure which were then minimized during the main trial. The investigator who delivered the intervention made sure all the topic areas had been completed, in order to implement the careprovider intervention consistently and as designed. All of these planned design strategies served to reduce error, increase the effect size and subsequently increase the power of the study (Cohen, 1988).

Finally, the between group and ANCOVA analysis assisted in providing some explanatory power as it served to identify an outcome that Cook and Campbell (1979) maintain is generally interpretable as an intervention effect (p. 109). The comparison subjects initially outperformed the intervention subjects and the difference between experimentals and comparisons is greater at the pretest than the post-test. Cook and Campbell suggest that "this is a particularly interesting outcome since it is the one desired when organizations introduce compensatory inputs to increase the performance of groups when they do not seem up to par" (p. 109). In a way this is what happened in this study, a unit which did not seem up to par, caught up with the comparison group. The intervention effect is even more plausible because the threat to the regression to the mean was partially ruled out because of the two year history of poor performance on the unit. The inclusion of the comparison group results further assisted in ruling out threats to internal validity such as history, maturation and testing.
Theoretical Implications of the Study Findings

The theoretical framework proposed that if a care provider is reliable, empathic and consistent when interacting with a resident, and if a supportive environment is available, a holding relationship will be established for the resident. To facilitate care being delivered consistently, a continuity of care provider assignment is required. Supervisors support care providers in their efforts to be more empathic and reliable in practice by modeling these capacities and by establishing continuity of care provider assignments. Winnicott (1970) and empirical evidence further suggested that the development of this holding relationship will lead to secondary outcomes for the residents and care providers.

Testing of the research questions, as well as the qualitative data, confirmed some of the proposed relationships and suggested possible revisions to the theoretical framework. As proposed, a care provider who was available on a consistent basis and was reliable and empathic established a holding relationship for the resident. The results of testing the relationship between the REPC and the creation of a holding relationship are fairly strong; the establishment of a holding relationship was found across several different sources of measurement. Specifically, both residents and family members found care providers more empathic and reliable over the course of the intervention. This gave preliminary evidence to the establishment of a holding relationship for residents. Further evidence came from the change in the care providers' behaviors which indicated that their interactions with residents were more reliable and empathic and from their ability to provide continuity of care for their selected residents.

The results of the testing also suggested the need to distinguish a holding relationship from a close relationship. Initially it was assumed that residents who were in a holding relationship
would also feel like they were in a close relationship. Creating holding relationships for residents may enhance the possibility of close careprovider-resident relationships developing but this requires further testing. It became clear based on the descriptive data that for a close relationship to exist more is required than careproviders being reliable, empathic and consistent in their approach. Factors such as language barriers, common interests and experiences, and the way work is organized, may facilitate the development of close relationships. It is also possible that the REPC may not have been of sufficient duration to affect changes in close careprovider-resident relationships. Finally, the term 'close' careprovider-resident relationship was seen as problematic and hence the term 'meaningful' careprovider-resident relationship was substituted as the interpretation depends on what is best suited for a particular resident.

The responsibility of the supervisors to provide a holding relationship for careproviders was also tested empirically and was not supported. This is an area that requires further inquiry as there is paucity of research on how the relationship between supervisors and careproviders can be enhanced.
Chapter 6: Summary, Conclusions and Recommendations for Research, Theory Development, Education, and Practice

The final chapter provides an overall summary of the study, conclusions, and recommendations for research, theory development, education and practice.

Summary

Meaningful relationships between careproviders and residents are desirable from the residents’, careproviders’ and family members’ perspectives. Yet a gap in the research literature exists on how these relationships can be enhanced in the clinical setting. The question investigated in this study was: “What is the influence of a relationship enhancing program of care (REPC), based on Winnicott’s theory, on the relationships between residents and their careproviders?” The primary purpose of the study was to examine the influence of the REPC on resident-careprovider relationships from the perspective of the residents and their family members and on the behaviors of their careproviders. The secondary purpose of the study was to examine the influence of the REPC on residents’ physical status, on careproviders’ perceptions of their relationships with their residents and their supervisors, and on careproviders’ levels of expressed empathy. In addition, residents’, family members’ and careproviders’ views about factors that assisted and prevented the establishment of close careprovider-resident relationships were elicited.

The design used was a pre and post comparison on two long term care units (one intervention and one comparison unit). The original research questions called for a between group analysis; however, at pretest, the means of the three primary research questions were statistically significantly higher on the comparison unit than on the intervention unit. The residents’ and family members’ perceptions of the holding relationship between residents and
careproviders, and the careproviders' holding behaviors were higher at baseline for the comparison unit. The original analytic strategy could not be followed because of the non-equivalent groups and hence the research questions and analysis were changed to allow for a within group comparison over time. Data on pre intervention measures were collected prior to the intervention, and nine months later, post intervention measures were taken. Paired t tests were used to compare the mean group differences for residents, family members and careproviders pre and post intervention on the intervention unit and separately on the comparison unit.

The intervention unit received a relationship enhancing program over a seven month period. In order to promote these relationships the intervention had three interrelated elements: (a) a continuity of care provider model in which the careproviders have control over which residents are assigned to them, (b) the acquisition of skills and knowledge required by the careproviders to enhance interpersonal relationships, and (c) support to the careproviders from their nursing supervisors to assist them in maintaining effective careprovider-resident relationships.

Two separate interventions were developed, the careproviders (health care aides and registered practical nurses) received the relationship enhancing skills component and participated in the reassignment strategy. The supervisors on the same unit (unit managers and charge nurses) received the supportive intervention with the intention that the supportive strategies would be utilized with the careproviders. The REPC was facilitated by the investigator and the process of implementing the intervention was guided by Beer's (1988) formula for change.

The participation rate of careproviders in the intervention was excellent. Eighty percent of
careproviders on the unit attended all five sessions. These sessions were also attended by careproviders who chose not to complete the questionnaires. Careproviders on evenings and days attended the 20 minute sessions on the days they worked. Following the five formal sessions, sharing of resident profiles (a key component of the strategy), occurred in weekly interdisciplinary meetings that were well attended by all nursing staff. However, fewer than 50% of the supervisors participated in the supportive intervention. The investigator had a difficult time engaging some of the charge nurses in the study and therefore, the integrity of the supervisory intervention was compromised.

There were three primary research questions in this study; one primary question for each participant group. The careproviders' ability to establish a holding relationship was operationalized as their ability to be reliable and empathic with residents. To gain a better understanding of the careprovider-resident relationship, participants were also asked to comment on another scale on the existence of a close relationship and provide some qualitative feedback. The resident primary finding included a statistically significant increase in the residents' perceptions that their careproviders were able to provide a holding relationship but no significant difference regarding their perception of close relationships with their careproviders. The family members' primary finding included a statistically significant increase in the family members' perceptions of their relatives being in holding relationships with their careproviders, and their relative being in close careprovider-resident relationships. The careproviders' primary finding included a statistically significant improvement in the careproviders' ability to provide a holding relationship and an improvement in their ability to provide continuity of care assignment. No statistically significant differences were obtained for the comparison group for any of the primary
outcomes.

There were no statistically significant findings for the secondary outcomes in this study: the residents’ physical status, the careproviders’ perception of a relationship with residents and the careproviders’ level of expressed empathy. No changes were found for the careproviders’ perception of being in a holding relationship with their unit manager and with their charge nurse.

As stated earlier, an opportunity was provided to careproviders, residents and family members to explain why they perceived close careprovider-resident relationships existed or why they did not. There were similarities between residents’ and family members’ responses that led them to believe they were in close relationships including that the careprovider was available when required. There were differences between residents’ and family members’ perceptions of why relationships do not exist. Residents felt that a lack of interest and time of careproviders impeded the development of relationships. In contrast family members said it was the residents’ characteristics that prevented connections from forming. The factors that family members suggested hindered relationships were almost identical to the list generated by the careproviders, reasons such as language barriers and residents with challenging behaviors. And finally, careproviders felt close relationships were attainable if there was an ability to converse and get along with the resident, be appreciated for their efforts, and have the understanding from the resident that they were trying their best.

Despite the careproviders’ ability to provide a holding relationship for residents, the REPC did not facilitate changes in closer careprovider-resident relationships from the careproviders’ and residents’ perceptions. Winnicott’s work on holding relationships assisted in explaining this finding in that even though the careprovider establishes a holding relationship for a resident, a
reciprocal relationship between the two may not necessarily occur. Some residents in this study commented that having reliable careproviders enabled them to reciprocate and led to closer relationships but this was not the case for all. The term 'meaningful relationships' was substituted for 'close relationships' and from a conceptual basis, holding relationships and meaningful relationships need to be distinguished in future research.

Conclusions

The following conclusions can be drawn from the study results.

Holding Relationship Established for the Resident

Providing continuity of careprovider, ensuring careproviders have effective interactional skills, and supporting them for their efforts can have a positive effect on their ability to develop holding relationships for their residents, measured as the reliability, empathy and consistency of the careprovider. Long-term care organizations can promote holding relationships for residents by investing in formal training. Winnicott's relationship theory provided the theoretical explanation for this relationship.

Meaningful Careprovider-Resident Relationship

It is premature to advance conclusions about the effect of the REPC on close relationships. The different participant groups yielded inconsistent results. Careproviders and residents found that the REPC did not, in and of itself, influence close careprovider-resident relationships, whereas family members perceived it did. The differences in their perceptions may have been related to the different instruments used to measure this phenomenon and hence, these scales require further development and refinement. A possible explanation of why close relationships were not developed following the intervention is based on Winnicott's work on
relationships. Holding relationships do not necessarily always lead to reciprocal relationships. As well the term ‘close’ may be problematic and hence ‘meaningful’ relationships based on the residents’ needs may be more appropriate. In the future when examining the effect of REPC on meaningful careprovider-resident relationships, research needs to take into account other factors that may contribute to the development of relationships, such as resident, careprovider and organizational characteristics. A meaningful relationship is a highly contextual variable that may have different meanings for different individuals. Developing new theories may assist with the identification of how meaningful relationships are achieved.

**Secondary Resident Outcomes**

There was conclusive evidence that the residents’ physical status remained intact with the introduction of a program of care that focused on the psychological aspects of care. This was consistent with a study by Campbell (1985).

**Secondary Careprovider Outcomes**

No conclusions can be advanced concerning the influence of REPC on the careproviders’ level of expressed empathy. However, there was strong support for the outcome that the nursing staff favored the permanent assignment model following the REPC.

**Holding Relationship Established for the Careprovider**

There was inconclusive evidence that a holding relationship for the careprovider could be created by the unit manager or charge nurse following the REPC, despite a strong theoretical foundation. Further, variables that may impede the development of this casual relationship may include individual differences (e.g., commitment to the organization) and organizational conditions (e.g., time constraints and availability).
**Recommendations**

A series of recommendations are advanced based on the study results. They are organized in terms of research, theory development, education and practice.

**Research**

Four future research areas are recommended for further inquiry based on the results of this study.

1) *Further research be conducted on understanding and then measuring the quality of careprovider-resident relationships and the influence of these relationships on secondary resident and careprovider outcomes. Attention to the factors mediating and influencing the careprovider-resident relationship must also be investigated.*

It became clear during the conduct of this study that understanding the dynamics of careprovider-resident relationships and subsequently the assessment of these relationships is grossly underdeveloped. This seriously limits the ability to assess the effectiveness of interventions designed to improve relationships. Comprehending the dynamics of the relationship building process is a potentially fruitful line of research. Future research about the enhancement of relationships should consider the inclusion of qualitative data from an ethnographic perspective which could provide data on the variability of individual responses to the development of relationships. Additionally, this inductive approach may also generate future theoretical models required to guide our understanding of relationship building.

This study and others have brought to light the reality that multiple factors influence the development of meaningful relationships between residents and careproviders. Further exploration of these factors is required. These types of studies may assist with identifying other
factors both influencing and discouraging the development of resident-careprovider relationships. Once identified, these factors would be a useful starting point for future scale development.

Measures that were developed for this study require further reliability and validity testing with larger sample sizes to continue to enhance their psychometric properties. Continued testing of these holding relationship measures is essential because if we believe relationships are central to nursing practice, they must be articulated and measured. If not, they will remain an invisible component of nursing and, unfortunately, so will their effect on resident outcomes.

Further efforts need to focus on identifying the unique contribution that holding relationships have on residents. Furthermore, more work needs to be done on understanding the effects of establishing these relationships with residents from the careproviders' perspective such as outcomes related to job satisfaction and retention.

2 An increasing proportion of elderly persons (currently about 57%) are cognitively impaired (Canadian Study of Health & Aging, 1994) and, therefore, understanding and measurement of careprovider-resident relationships and replication of the Relationship Enhancing Program of Care for this population are required.

Comprehending the dynamics of the relationship between persons with dementia and their careproviders is another potential area for research. Additionally, the development of measures are essential as most evaluation methods of relationships involve interview and self report measures which are not applicable for residents who have dementia living in long-term care. The observation scale that was developed for this study may be sufficient to capture the quality of relationships between residents with dementia and their careproviders; however, further testing of this measure is required before this proposition can be validated.
This REPC also needs to be replicated for persons with Alzheimer Disease with particular attention being paid to the effect of the holding relationship on the residents' behaviors. Future hypothesis testing may predict that quality relationships between careproviders and residents with dementia decrease disruptive behaviors.

3 Subsequent studies include an examination of structural, process and organizational variables that might enhance or impede the success of REPC.

The results indicate that the REPC is effective in university affiliated nursing homes. Future testing of this model should include different skill mixes and careprovider-resident ratios, more diverse ethnic groups, at non-university affiliated nursing homes. Further testing of the model should include longer intervention trials with a longer supportive component. It is difficult to discern whether the change on the intervention unit was attributable to the attention the investigator paid to the careproviders or the REPC. The next study should provide similar amounts of interaction between investigator and staff on both the intervention and comparison units.

4. Effective supportive/management strategies to assist nursing staff in the work they do be identified and tested.

Lack of knowledge about effective management strategies for improving nursing home quality was recently identified as one of the highest priority areas for long-term care (Binstock & Spector, 1997). As in this REPC study, the management practices on the unit were typically very traditional, with a clear hierarchial structure and chain of command, from the health care aide, to the licensed practical nurse to the registered nurse to the unit manager. Thomas (as cited in Yeatts & Seward, 2000) notes that “nursing homes often try to promote warm, nurturing bonds
between staff and residents while maintaining a paramilitary command structure" (p.358). Tightly restricting the aides’ work with rules and regulations can be expected to spill over to the treatment of residents. This was evident in this study and there is a need to design more effective strategies for managing people and to understand the influencing factors that deter registered staff from supporting careproviders. In this study there was only one unit manager and six registered nurses in the intervention and hence, the supportive component should be replicated with more supervisors to identify if this element effects staff’s ability to build relationships with residents. While the “trickle down” effect of support (holding relationship for nursing staff) intuitively makes sense, empirical validation is required.

**Theory Development**

One recommendation is put forward in the area of theory development.

1. **Winnicott’s concept of a holding relationship be applied to the interdisciplinary team in long-term care.**

   Major interdisciplinary theory in gerontology is required (Binstock, 2000) and there is preliminary evidence that Winnicott’s theory can be applied as an interdisciplinary theory (Barnard, 1988). Possibly this points the way to considering the merits of an entirely different model, a model of care where all members of the team work on creating holding relationships. This would involve all members being empathic, reliable and consistent in their approach with each other and with the residents for whom they care. Efforts to develop holding relationships from the perspective of all disciplines is predicted to positively affect the well being of nursing home residents. All interdisciplinary staff working with nursing home residents need to give thought to ways the environment and institutional policies can be shaped to create and maximize
holding relationships. Interdisciplinary collaboration among all disciplines must be maintained to assure that elderly persons' quality of life is promoted.

**Education**

One recommendation is made for the future education of registered nurses.

1. *Students in undergraduate programs receive more gerontological nursing content in their education to prepare them for the changing demographics of Canada's population.*

The study findings have implications for the future education of all registered nurses. Baumbusch and Goldenberg (2000) have published a review on the current status of gerontological content in Canadian degree programs in nursing, and argue that gerontological nursing become a core component of undergraduate programs of study. They suggest that the development of gerontological nursing education has not kept pace with the need. In Canada, only 7.4% of students' clinical hours were spent in a gerontological setting and only one-half of the universities integrated gerontological nursing throughout the program. Given this lack of gerontological nursing content and clinical experience, it is no wonder that RNs in these environments are not aware of how to mentor and support aides, as they do not have the required expertise to do so.

**Practice**

One recommendation for practice based on the findings was put forward.

1. *Careproviders, registered nurses and unit managers who work in long-term care participate in continuing education to promote quality relationships in these environments.*
Although aides spend the most time with elderly residents, they receive the least amount of education in facilities (McCallion et al., 1999). The REPC is a low cost program that can be presented within existing staff and resources. The results of this study provided preliminary evidence that REPC is an effective program for helping careproviders interact more effectively with nursing home residents. The program was instrumental in making careproviders aware of the general social and psychological needs of the patient. However, education of careproviders is not enough. Much work-related education has little impact on the quality of nursing home care without substantial change in management systems (Yeatt & Steward, 2000). Asking a careprovider to be more empathic and reliable when their supervisors are not sets a double standard. Only a few supervisors have been prepared to manage and support people. Providing in house education to supervisors is also a requirement for the leaders in these long-term care environments.

2 Administrators in long-term care organizations ensure the development of standards that focus on the residents' quality of life, such as the development of quality staff-resident relationships, and take responsibility for ensuring this objective is achieved.

Clear standards for centres need to be established that involve developing meaningful relationships and then administrators have to maintain them. Despite the reports that link quality of life for elderly persons with meaningful relationships with careproviders, organizational constraints referred to by careproviders in their qualitative comments in this study impeded the development of these relationships. These bureaucratic obstacles to building relationships need to be identified and eliminated (Whittemore, 2000). For example, in this study careproviders spoke
about not having enough time to spend getting to know the resident because they were busy
locating supplies, transporting residents and completing housekeeping tasks, which all add up to
time spent away from the resident. Finally, careful attention must be paid to staff ratios. It will be
impossible for nursing staff to develop relationships with residents if they have high
resident/careprovider ratios.

Administrators in all departments, not just nursing, need to take responsibility for the
quality of life of residents. This obligation should fall on each team member’s shoulders. In the
future, interventions that focus on quality of life should involve all team members. The
commitment of the interdisciplinary team may have been strengthened had their involvement been
sought from the start.

**Final Thoughts**

The take-home message from this relatively small sample of nursing home residents,
families and careproviders suggests a holding relationship can be developed. There is beginning
evidence to support the use of the REPC model as an effective approach to optimizing the
residents’ quality of life. Caregiving relationships involve all kinds of social interaction during the
course of which the patient’s sense of self-worth can either be enhanced or thwarted (Agich, 1990). As Kastenbaum (1983) writes, “the person who is a patient only temporarily can adjust to
the unfamiliar and unlovely hospital routines knowing this is only an interlude. Some comfort and
individuality is sacrificed. By contrast the geriatric milieu is a permanent arrangement” (p. 25).
Therefore there is a need to develop this milieu so that it accentuates careprovider-resident
relationships and develops a systematic and encompassing framework of positive expectations on
the part of all nursing personnel involved. A relationship enhancing program of care may be one
means to this end.
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Appendices

Appendix A  The Initial Careprovider-Resident Relationship(CR) Scale

Below are listed a variety of ways that one person could feel or behave in relation to another person. Please consider each statement with respect to whether you think it is true in your present relationship with your main careprovider __________________(state name of careprovider). Circle the number that best reflects your thoughts.

1. _________________ treats me as an individual.
   Very little  Somewhat  Very well
   1  2  3

2. _________________ is responsive to my needs
   Very little  Somewhat  Very well
   1  2  3

3. _________________ understands me
   Very little  Somewhat  Very well
   1  2  3

4. _________________ is dependable
   Very little  Somewhat  Very well
   1  2  3

5. _________________ has my best interests at heart
   Very little  Somewhat  Very well
   1  2  3

6 _________________ tolerates my being mean, nasty or unpleasant towards her/him by not responding that way to me
   Very little  Somewhat  Very well
   1  2  3
Appendix B  The Initial Family Careprovider-Resident Relationship Scale (FCR) and the Family Yes/No Scale

A. Below are listed a variety of ways that one person could feel or behave in relation to another person. Please consider each statement with respect to whether you think it is true in your family member’s present relationship with their main careprovider ________________ (state name of careprovider). Circle the number that best reflects your thoughts.

1. ____________ treats your family member as an individual.
   
   Very little  Somewhat  Very well
   1           2           3

2. ____________ is responsive to your family member’s needs
   
   Very little  Somewhat  Very well
   1           2           3

3. ____________ is dependable
   
   Very little  Somewhat  Very well
   1           2           3

4. ____________ understands your family member
   
   Very little  Somewhat  Very well
   1           2           3

5. ____________ has your family member’s best interests at heart
   
   Very little  Somewhat  Very well
   1           2           3

6 ____________ tolerates your family member being mean, nasty or unpleasant towards her/him by not responding that way back to them
   
   Very little  Somewhat  Very well
   1           2           3

B. Would you say that your family member has a close careprovider-resident relationship with this careprovider? Yes or No.
Appendix C  The Initial Resident Visual Analogue Scale

How would you rate your relationship with __________ (state the resident’s initial)

On this paper is a line which measures your perception of the quality of the relationship you are in with __________. The left end represents that you are involved in an involved relationship with this resident and the right end represents that you are not involved in a relationship with this resident. Place a mark through this line at the point you feel best reflects the quality of your relationship.

Close,  _________________________________ Not Close,  _________________________________
Involved  _________________________________ Not Involved  _________________________________
Relationship  _________________________________ Relationship  _________________________________
Appendix D  The Initial Unit Manager Relationship Scale (UMR)

Below are listed a variety of ways that one person could feel or behave in relation to another person. Please consider each statement with respect to whether you think it is true in your present relationship with the unit manager that you work with.  

Circle the number that best reflects your thoughts.

<table>
<thead>
<tr>
<th></th>
<th>Very little</th>
<th>Somewhat</th>
<th>Very well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. treats me as an individual.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. is responsive to my needs</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. is dependable</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. understands me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. has my best interests at heart</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. tolerates my being mean, nasty or unpleasant towards her/him by not responding that way to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix E  The Initial Charge Nurse Relationship Scale (CNR)

Below are listed a variety of ways that one person could feel or behave in relation to another person. Please consider each statement with respect to whether you think it is true in your present relationship with the charge nurse that you work with________________
Circle the number that best reflects your thoughts.

1. ___________________ treats me as an individual.

   Very little  Somewhat  Very well
   1           2           3

2. ___________________ is responsive to my needs

   Very little  Somewhat  Very well
   1           2           3

3. ___________________ is dependable

   Very little  Somewhat  Very well
   1           2           3

4. ___________________ understands me

   Very little  Somewhat  Very well
   1           2           3

5. ___________________ has my best interests at heart

   Very little  Somewhat  Very well
   1           2           3

6. ___________________ tolerates my being mean, nasty or unpleasant towards her/him by not responding that way to me

   Very little  Somewhat  Very well
   1           2           3
Appendix F  Careprovider Interactional Behavior Scale (Form 1)

Date______  Time______  Unit______  RCode______

<table>
<thead>
<tr>
<th>Staying with resident</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Not staying with resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>(echoing of the resident's sounds, close proximity, various forms of eye contact, use of body language, and various forms of touch)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Altering pace of care if required.</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Not altering pace of care when required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizing the resident's rhythm and adapting to it and altering the pace of care (being sensitive to the resident's response)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Focus care beyond the task</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Task focused</th>
</tr>
</thead>
<tbody>
<tr>
<td>(attentive to the resident and their responses, not persisting with the task at hand if the resident expresses resistance)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The meaning of the scale:
Negative
1 = consistently; the whole time
2 = frequently; the behaviour was interrupted
3 = occasionally
4 = neutral
Positive
5 = occasionally
6 = frequently; the behaviour was interrupted
7 = consistently; the whole time

It is a bipolar scale and therefore each item has its opposite definitional meaning. This measure will be taken after the first five minutes, 10 minutes and 15 minutes into the interaction.
Appendix G  Content Codes for Careprovider Interactional Behavior Scale

Staying with the resident
The nurse stays with the resident during the care episode

Examples of actions
* close proximity
* various forms of eye contact, may include making eye contact at eye level
* various forms of touch that are comfortable for the resident
* doesn't matter how much agitation happens, it is accepted
* gentle approach
* demonstrates a comfort level with resident, dancing, clapping, joking
* showing acceptance with resident's touch
* do not impede the resident's actions
* knowing and acceptance of each other
* use of a soft voice
* maintains privacy
* sitting beside person on the bed
* bending and sitting to lower self

Altering the pace of care if required
Recognizes the person's rhythm and adapts to it.

Examples of actions:
* hesitates in care when necessary, pauses, stops and maybe tries another approach
* is flexible and adaptable
* immediate response to agitation or distress of any kind
* pause when task is completed
* taking time, not rushing through care
* care delivered in rhythm with resident
* varied responses dependent on resident's lead

Focus care beyond the task
Attentive to the resident and his/her responses.

Examples of actions:
* acknowledges resident's subjective experiences
* give resident verbal reassurance throughout care
* orientate resident to task (nurse lifts arms when she wants resident to do so or gestures them to come here)
* verbally addresses the resident
* resident allowed to participate, put resident in control
* asks questions about the person or his family
* responsive to the resident's questions and behaviors.
* trying to make conversation while making eye contact.
### Appendix H  Careprovider Interactional Behavior Scale (Form # 2)

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Unit</th>
<th>RCcode</th>
<th>CCcode</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Careprovider Behaviors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staying with resident</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(echoing of the resident's sounds, close proximity, various forms of eye contact, use of body language, and various forms of touch)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Altering pace of care if required.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognizing the resident's rhythm and adapting to it and altering the pace of care (being sensitive to the resident's response)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus care beyond the task</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(attentive to the resident and their responses, not persisting with the task at hand if the resident expresses resistance)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix I  Demographic Sheet for Content Validity Experts

I would appreciate some information about your educational background and your experience:

EDUCATION

Please indicate your highest level of education obtained
BScN       
MScN       
Masters Other_________________
Ph.D. Nursing____   
Ph.D. Other ________________

EXPERIENCE

1. Current position title__________________________________________________________
2. Previous Experience
   # of Years
   Please indicate your past experience and your number of years in those areas
   Academic____  
   Nursing Management____  
   Clinician _______  
   Researcher____  
   Consultant______  
   Other________________

Thank you!
Appendix J  Cover Letter to Content Validity Questionnaires

Dear .......(Relationship or Managerial experts)

Thank you for agreeing to participate in the evaluation of two new instruments designed to measure the careprovider-resident relationship (or unit manager-careprovider relationship) in long term care environments. This evaluation is for the purpose of establishing content validity of the instruments and constitutes Phase One of my research study. The evaluation will be conducted using a questionnaire. Your help is invaluable in helping me move ahead with my research.

Please find enclosed: (1) an Introduction to the Evaluator, (2) a copy of the scales, and (3) a three-part questionnaire to be used for the evaluation. Please support your responses with comments and/or suggestions for changes in the space provided.

The scales will be revised based on your responses and the responses from the four other clinical experts. The revised scales will be returned to you for your responses to the changes. In Phase Two of the study, the revised scales will be distributed to careproviders and residents in a long term care facility to evaluate the interrater reliability and stability of the measure.

If you have any questions that arise during the process of this evaluation, please do not hesitate to contact me at (905) 420-1316 or my supervisor, Linda O’Brien-Pallas at 978-1967. Please notify me by phone when you have completed the evaluation to arrange a suitable time for me to pick up the completed questionnaire. If you wish to discuss your responses in person, I am available to meet with you at that time. Thank you for your willingness to provide me with your valuable time and expertise.

Sincerely, Kathy McGilton
Appendix K  Letter of Introduction to the Evaluators (Relationship Experts)

Research evidence demonstrates that personal relationships between nursing staff and patients/residents lead to better care and increased job satisfaction (Taft, Delaney, Seman & Stansell, 1993; Holtz, 1982). Reports have linked the quality of life of residents of long term care facilities with meaningful and genuine relationships with care givers (Miller & Lelieuvre, 1982; Nussbaum, Robinson, & Grew, 1985). Careproviders have described the importance of being involved in personal relationships with residents. Evidence suggests that interpersonal relationships with patients in their work situation is what makes careproviders stay at their jobs (Holtz, 1982), and are the best aspects of their jobs (Jaeger & Simmons, 1970).

Despite the mounting evidence of the need for a meaningful relationship between care provider and resident, there were no suitable instruments found to measure the phenomenon of interest. I have developed a short set of questions on Winnicott's relationship theory. The relationship between the careprovider and resident is referred to as a holding relationship, which involves everything that the careprovider does with the resident (Winnicott, 1970). The conceptual definition of the holding relationship is a relationship which is constituted by the reliability and empathy of the careprovider. Reliability is defined as the caregiver being dependable in caregiving. This involves the caregiver both protecting the individual from the unpredictable and tolerating negative feelings without retaliation. Empathy refers to the caregiver recognizing the needs of another and identifying with the wishes and particularities of the individual, through being sensitive to the person’s expression (bodily and verbal). Continuity of the careprovider and support for the careprovider are essential for contributing to the holding relationship between the careprovider and the resident. Continuity is defined as consistency of caregiver over time. Support for the careprovider is defined as a holding relationship between the careprovider and the unit manager.
A holding relationship from the resident’s perspective will be assessed by the “Careprovider- Resident Relationship (CR) Scale”, a 6 item scale measuring the careprovider’s ability to be empathic and reliable in the relationship. The careprovider empathy, which entails identifying with the wishes and particularities of the individual, recognizing the needs of another, and being sensitive to their response, is captured in items 1, 2 and 4. The reliability of the careprovider, which refers to being dependable, protecting the person from the unpredictable, and tolerating negative feelings, is captured in items 3, 5, and 6. Two sets of three response options were developed to correspond to the items. One set of options are rarely, sometimes, and always, while the other response options are very little, to somewhat to very well.

The continuity in the relationship will be measured by a continuity of care index which assesses the proportion of shifts during which the careprovider actually cares for the resident in a fixed period. Support for the careprovider will be measured by the careprovider’s perception of his/her relationship with the unit manager.

The careproviders will also assess the extent to which they believe they are in a holding relationship with specific residents. This is operationalized as a visual analogue scale with the extremes including “involved and close” and “not involved and not close”.

Valid and reliable instruments are a prerequisite to conducting further research in this area. Therefore, I have developed a questionnaire to help guide the evaluation of the content validity of the instruments. You are asked to respond to the evaluative statements to determine if (1) the contents of the instrument are measuring what the authors say they are measuring, and (2) if the presentation of the items serves the purpose of the instrument.
Appendix L  Letter of Introduction to the Evaluators (Managerial Experts)

Research evidence demonstrates that personal relationships between nursing staff and patients/residents lead to better care and increased job satisfaction (Taft, Delaney, Seman & Stansell, 1993: Holtz, 1982). Reports have linked the quality of life of residents of long term care facilities with meaningful and genuine relationships with care givers (Miller & Lelieuvre, 1982; Nussbaum, Robinson, & Grew, 1985). Careproviders have described the importance of being involved in personal relationships with residents. Evidence suggests that interpersonal relationships with patients in their work situation is what makes careproviders stay at their jobs (Holtz, 1982), and are the best aspects of their jobs (Jaeger & Simmons, 1970).

Despite the mounting evidence of the need for a meaningful relationship between care provider and resident, there were no suitable instruments found to measure the phenomenon of interest. I have developed a short set of questions on Winnicott’s relationship theory. The relationship between the careprovider and resident is referred to as a holding relationship, which involves everything that the careprovider does with the resident (Winnicott, 1970). The conceptual definition of the holding relationship is a relationship which is constituted by the reliability and empathy of the careprovider. Reliability is defined as the caregiver being dependable in caregiving. This involves the caregiver both protecting the individual from the unpredictable and tolerating negative feelings without retaliation. Empathy refers to the caregiver recognizing the needs of another and identifying with the wishes and particularities of the individual, through being sensitive to the person’s expression (bodily and verbal). Continuity of the careprovider and support for the careprovider are essential for contributing to the holding relationship between the careprovider and the resident. Continuity is defined as consistency of
caregiver over time. *Support* for the careprovider is defined as a holding relationship between the careprovider and the unit manager. In order for the direct careprovider, the health care aide, to be involved in a holding relationship with a resident, Winnicott proposes that the aide must in turn experience a holding relationship with the unit manager.

A holding relationship from the careprovider’s perspective will be assessed by the “Unit Manager Relationship (UMR) Scale”, a 6 item scale measuring the unit manager’s ability to be empathic and reliable in the relationship. The unit manager empathy, which entails identifying with the wishes and particularities of the individual, recognizing the needs of another, and being sensitive to their response, is captured in items 1, 2 and 4. The reliability of the unit manager, which refers to being dependable, protecting the person from the unpredictable, and tolerating negative feelings, is captured in items 3, 5, and 6. Two sets of three response options were developed to correspond to the items. One set of options are rarely, sometimes, and always, while the other response options are very little, to somewhat to very well.

Valid and reliable instruments are a prerequisite to conducting further research in this area. Therefore, I developed a questionnaire to help guide the evaluation of the content validity of the instrument. You are asked to respond to the evaluative statements to determine if (1) the contents of the instrument are measuring what the authors say they are measuring, and (2) if the presentation of the items serves the purpose of the instrument.
Appendix M  Content Validity Evaluation Questionnaire (Relationship Experts)

Part One
Please use the following scale to rate the relevancy of the items.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not relevant</td>
</tr>
<tr>
<td>2</td>
<td>Unable to assess relevance without item revision or item is in need of such revision that it would no longer be relevant</td>
</tr>
<tr>
<td>3</td>
<td>Relevant but needs minor revision</td>
</tr>
<tr>
<td>4</td>
<td>Very relevant and succinct</td>
</tr>
</tbody>
</table>

1.1 One domain of the relationship is empathy which is conceptually defined as identifying with the wishes and particularities of the individual, recognizing the needs of another, and being sensitive to their response

1.1 a) How relevant is the item, *treats me as an individual*, in reflecting an empathic careprovider?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Please explain why, or why not and suggest any changes

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

1.1 b) How relevant is the item, *responsive to my needs*, in reflecting an empathic careprovider?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Please explain why, or why not and suggest an changes

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Please use the following scale to rate the relevancy of the items.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not relevant</td>
</tr>
<tr>
<td>2</td>
<td>Unable to assess relevance without item revision or item is in need of such revision that it would no longer be relevant</td>
</tr>
<tr>
<td>3</td>
<td>Relevant but needs minor revision</td>
</tr>
<tr>
<td>4</td>
<td>Very relevant and succinct</td>
</tr>
</tbody>
</table>

1.1 c) How relevant is the item, understands me, in reflecting an empathic careprovider?

Please explain why, or why not and suggest an changes

1.1 d) Can you suggest additional items that are necessary to be empathic as defined by Winnicott?

2.1 One domain of the relationship is reliability which is defined as being dependable, protecting the person from the unpredictable, and tolerating rejection without retaliating.
Please use the following scale to rate the relevancy of the items

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not relevant</td>
</tr>
<tr>
<td>2</td>
<td>Unable to assess relevance without item revision or item is in need of such revision that it would no longer be relevant</td>
</tr>
<tr>
<td>3</td>
<td>Relevant but needs minor revision</td>
</tr>
<tr>
<td>4</td>
<td>Very relevant and succinct</td>
</tr>
</tbody>
</table>

2.1 a) How relevant is the item, **is dependable**, in reflecting a reliable careprovider?

1 2 3 4

Please explain why, or why not and suggest any changes

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2.1 b) How relevant is the item, **has my best interests at heart**, in reflecting a reliable careprovider?

1 2 3 4

Please explain why, or why not and suggest an changes

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2.1 c) How relevant is the item, **tolerates my being mean**, or **unpleasant toward him/her by not responding that way back to me**, in reflecting a reliable careprovider?

1 2 3 4

Please explain why, or why not and suggest an changes

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
2.1 d) Can you suggest additional items that are necessary to be reliable as defined by Winnicott?

Part Two (a)

Consider now the adequacy of the set of items as a whole and respond to the following statement:

1. a) The items are an adequate representative sampling of the all off the domains of the relationship?
Yes____ No____
b) Please explain and suggest deletions and/or additional domains to the relationship.

2 a) Are the items mutually exclusive?
Yes____ No____
b) Please explain and suggest revisions.

3 a) The order in which the items are presented is satisfactory?
Yes____ No____
b) Please explain and suggest changes.
4 a) The instructions for completing the instrument are clear and provide adequate direction?  
Yes____  No____  
b) Please explain and suggest changes or additions

5. Additional comments and suggestions are welcome

Part Two (b)
Please use the following scale to rate the appropriateness of the anchors on the visual analogue relationship scale.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not appropriate</td>
</tr>
<tr>
<td>2</td>
<td>Somewhat appropriate</td>
</tr>
<tr>
<td>3</td>
<td>Highly appropriate</td>
</tr>
</tbody>
</table>

1 a) In relation to the visual analogue scale's anchor, how appropriate is the term "involved" in reflecting a holding relationship?

1     2     3

Please explain why, or why not and suggest any changes
Please use the following scale to rate the appropriateness of the anchors on the visual analogue relationship scale.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not appropriate</td>
</tr>
<tr>
<td>2</td>
<td>Somewhat appropriate</td>
</tr>
<tr>
<td>3</td>
<td>Highly appropriate</td>
</tr>
</tbody>
</table>

1 b) In relation to the visual analogue scale’s anchor, how appropriate is the term “close” in reflecting a holding relationship?

1 2 3

Please explain why, or why not and suggest an changes

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

1 c) Additional comments and suggestions are welcome for anchors for the visual analogue scale.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Appendix N  Content Validity Evaluation Questionnaire (Managerial Experts)

Part One
Please use the following scale to rate the relevancy of the items.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not relevant</td>
</tr>
<tr>
<td>2</td>
<td>Unable to assess relevance without item revision or item is in need of such revision that it would no longer be relevant</td>
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<td>Relevant but needs minor revision</td>
</tr>
<tr>
<td>4</td>
<td>Very relevant and succinct</td>
</tr>
</tbody>
</table>

1.1 One domain of the relationship is empathy which is conceptually defined as identifying with the wishes and particularities of the individual, recognizing the needs of another, and being sensitive to their response

1.1 a) How relevant is the item, treats me as an individual, in reflecting an empathic unit manager?

   1   2   3   4

Please explain why, or why not and suggest any changes

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

1.1 b) How relevant is the item, is responsive to my needs, in reflecting an empathic unit manager?

   1   2   3   4

Please explain why, or why not and suggest any changes

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Please use the following scale to rate the relevancy of the items.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not relevant</td>
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<tr>
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<td>Relevant but needs minor revision</td>
</tr>
<tr>
<td>4</td>
<td>Very relevant and succinct</td>
</tr>
</tbody>
</table>

1.1 c) How relevant is the item, understands me, in reflecting an empathic unit manager?

Please explain why, or why not and suggest any changes

1.1 d) Can you suggest additional items that are necessary to be empathic as defined by Winnicott?

2.1 One domain of the relationship is reliability which is defined as being dependable, protecting the person from the unpredictable, and tolerating rejection without retaliating.
Please use the following scale to rate the relevancy of the items

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
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<tr>
<td>3</td>
<td>Relevant but needs minor revision</td>
</tr>
<tr>
<td>4</td>
<td>Very relevant and succinct</td>
</tr>
</tbody>
</table>

2.1 a) How relevant is the item, **is dependable**, in reflecting a reliable unit manager?

1 2 3 4

Please explain why, or why not and suggest any changes

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

2.1 b) How relevant is the item, **has my best interests at heart**, in reflecting a reliable unit manager?

1 2 3 4

Please explain why, or why not and suggest any changes

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

2.1 c) How relevant is the item, **tolerates my being mean, or unpleasant toward him/her by not responding that way back to me**, in reflecting a reliable unit manager?

1 2 3 4

Please explain why, or why not and suggest any changes

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________
2.1 d) Can you suggest additional items that are necessary to be reliable as defined by Winnicott?

Part Two (a)

Consider now the adequacy of the set of items as a whole and respond to the following statement:

1. a) The items are an adequate representative sampling of all of the domains of the relationship?
   Yes ___ No ___
   b) Please explain and suggest deletions and/or additional domains to the relationship.

2 a) Are the items mutually exclusive?
   Yes ___ No ___
   b) Please explain and suggest revisions.

3 a) The order in which the items are presented is satisfactory?
   Yes ___ No ___
   b) Please explain and suggest changes.
4 a) The instructions for completing the instrument are clear and provide adequate direction?
Yes___ No___

b) Please explain and suggest changes or additions

5. Additional comments and suggestions are welcome
Appendix O  Cover letter to the Relationship Experts With Revision to the CR & RVAS Scale

Dear __________________ (relationship expert)

I would like to thank you for your thoughtful comments in response to a scale I have developed that is focused on the resident and careprovider relationship. Based on your comments I have revised the scale and I hope that I have captured the spirit of your comments in the revised scale.

Please find enclosed: (1) a summary of the responses of the experts to the statements provided on the content validity questionnaire and (2) a copy of the revised resident-careprovider relationship scale designed to measure the relationship between residents and health care aides in long term care, and (3) the content validity evaluation questionnaire - Part 3, and (4) a demographic data sheet.

I hope that the completion of the enclosed questionnaire will complete phase one of this project. Phase two involves presenting this scale to 30 residents a long term care facility to evaluate the test-retest reliability and the internal consistency of the scale. I look forward to hearing your responses to these changes. I would be pleased if you could complete the enclosed questionnaire before May 25, 1998. Please notify me by phone when your completed questionnaire is ready for pick up. If you have any questions or concerns regarding this study, please do not hesitate to contact Dr. Linda O’Brien-Pallas at (416) 978-1967 or myself at (905) 420-1316.

Sincerely
Kathy McGilton
Appendix P  Cover letter to the Manager Experts With Revision of the UMR Scale

Dear __________ (Managerial Expert)

I would like to thank you for your thoughtful comments in response to a scale I have developed that is focused on the unit manager and careprovider relationship. Based on your comments I have revised the scale and I hope that I have captured the spirit of your comments in the revised scale.

Please find enclosed: (1) a summary of the responses of the experts to the statements provided on the content validity questionnaire and (2) a copy of the revised unit manager/careprovider relationship scale designed to measure the relationship between manager and health care aides in long term care, and (3) the content validity evaluation questionnaire - Part 3, and (4) a demographic data sheet.

I hope that the completion of the enclosed questionnaire will complete phase one of this project. Phase two involves presenting this scale to 30 careproviders in a long term care facility to evaluate the test-retest reliability and the internal consistency of the scale. I look forward to hearing your responses to these changes. I would be pleased if you could complete the enclosed questionnaire before May 25, 1998. Please notify me by phone when your completed questionnaire is ready for pick up. If you have any questions or concerns regarding this study, please do not hesitate to contact Dr. Linda O’Brien-Pallas at (416) 978-1967 or myself at (905) 420-1316.

Sincerely
Kathy McGilton
Appendix O  Content Validity Questionnaire: Part 3 (Relationship Experts)

Please indicate your agreement or disagreement with each of the following statements in relation to the foregoing Careprovider-Resident Relationship Scale. Space is provided for comments to support your responses.

**Evaluative Statements**

1. a) The items are a realistic expectation of a careprovider in a long term care institutional facility.
   Yes____  No____
   b) If not, please explain and recommend changes:

2. a) The appropriate context and specificity is now included in all of the items
   Yes____  No____
   b) If not, please explain and recommend changes:

3. a) The items are an adequate representative sampling of the collection of situations in which the careprovider is empathic? (Items 1, 2 & 3)
   Yes____  No____
   b) If not, please explain:

4. a) The items are an adequate representative sampling of the collection of situations in which the careprovider is reliable? (Items 4, 5 & 6)
   Yes____  No____
   b) If not, please explain:
5.a) The wording of each response option adequately discriminates from other options in the response set.
   Yes___ No____
b) If not, please explain and recommend changes:

6.a) The order in which the items is presented is satisfactory
   Yes___ No____
b) If not, please explain and recommend changes:

7.a) The Careprovider-Resident Relationship Scale is a measure of the careprovider’s ability to provide a holding relationship or in other words, the careprovider’s ability to be empathic and reliable in the relationship.
   Yes___ No____
b) If not, please explain:
Appendix R  Content Validity Questionnaire: Part 3 (Managerial Experts)

Please indicate your agreement or disagreement with each of the following statements in relation to the foregoing Unit Manager Relationship Scale. Space is provided for comments to support your responses.

Evaluative Statements

1.a) The items are a realistic expectation of a unit manager in a long term care institutional facility.
   Yes____  No____
   b) If not, please explain and recommend changes:

   ____________________________________________________________
   ____________________________________________________________

2.a) The appropriate context and specificity is now included in all of the items
   Yes____  No____
   b) If not, please explain and recommend changes:

   ____________________________________________________________
   ____________________________________________________________

3.a) The items are an adequate representative sampling of the collection of situations in which the unit manager is empathic? (Items 1, 2 & 3)
   Yes____  No____
   b) If not, please explain:

   ____________________________________________________________
   ____________________________________________________________

4.a) The items are an adequate representative sampling of the collection of situations in which the unit manager is reliable? (Items 4, 5 & 6)
   Yes____  No____
   b) If not, please explain:

   ____________________________________________________________
   ____________________________________________________________
5.a) The wording of each response option adequately discriminates from other options in the response set.
Yes___ No___
b) If not, please explain and recommend changes:

6.a) The order in which the items is presented is satisfactory
Yes___ No___
b) If not, please explain and recommend changes:

7.a) The Unit Manager Relationship Scale is a measure of the unit manager’s ability to provide a holding relationship or in other words, the unit manager’s ability to be empathic and reliable in the relationship.
Yes___ No___
b) If not, please explain:
### Appendix S  Careprovider-Resident Relationship Scale

A person can feel or behave in relation to another person in a variety of ways. The reality is sometimes you feel very positive about some nurses who care for you and sometimes you do not. My goal is to understand what we do well and what we don’t do so well. Please consider each statement below with respect to whether you think it is true in your present relationship with the nurse who you know the best on this unit (His/Her Initials____). This is confidential, so please try to be as honest as possible. For example, assume you told me that the nurse that look after you don’t meet your needs, that nurse will not find this information out, and therefore your care will not be effected.

Circle the number that best reflects your thoughts

<table>
<thead>
<tr>
<th>The nurse take your likes and dislikes into account when she/he is providing care.</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The nurse tries to meet your needs, for example in such ways as listening to you if you need someone to talk to and/or comforting you when something bad or unexpected happens.</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The nurse knows you well enough to recognize when you are happy, sad, mad or stressed about something.</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>You can depend on the nurse to be there for you, for example when you ask for help, and know that they will do what they promise to do.</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The nurse tries to make your day go the way you like and helps you with any unexpected changes.</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The nurse tolerates you being frustrated or irritable without responding negatively in return</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix T  Unit Manager Relationship Scale

Below are 6 statements that relate to how you feel about your unit manager. Please circle the number that reflects your relationship with your unit manager. Please be as honest as you can. Your answers are confidential and will not be shared with others you work with or with your unit manager.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>My unit manager recognizes the standards of care I try to deliver.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My unit manager tries to meet my needs in such ways as making shift changes that allow me opportunities to meet family responsibilities or training opportunities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My unit manager knows me well enough to know when I have concerns about patient care and tries to understand my point of view.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I can rely on my unit manager to be there for me when I ask for help, for example if things are not going well between myself and my coworkers or between myself and residents and/or their families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My unit manager keeps me informed of any major changes in the work environment or organization.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My unit manager tolerates me feeling frustrated or overwhelmed without responding negatively in return.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix U  Family Careprovider-Resident Relationship Scale & Family Y/N Relationship Scale

A. A person can feel or behave in relation to another person in a variety of ways. Please consider each statement below with respect to whether you think it is true about the nurse that takes care of your family member most often. This is confidential, so please try to be as honest as possible. For example, assume you told me that the nurse that looks after your family member doesn’t meet their needs, this nurse will not find this information out, and therefore your family member’s care will not be effected. Circle the number that best reflects how you feel.

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do nurses’ actions reflect that they care about your family member?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For example do nurses’ facial expressions and behaviours (eye contact, forms of touch) reflect they are treating your family member with dignity?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do nurses help your family member when he/she needs it? For example depending on the urgency of the situation they deal with it right away or inform your family member that they will be back when they are able.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do nurses alter their pace of care, by being sensitive to the resident’s response. Do nurses try to understand when something is different with your family member and do something about it?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If the main nurse who is assigned to your family member is not working, do the other nurses know how to care for your family member?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you encouraged to participate in decisions about your family member’s care? For example are you encouraged to offer suggestions regarding his/her care?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Would you say that your family member has a close careprovider-resident relationship with this careprovider? Yes or No. Please state the reasons why you think this way.
Below are 6 statements that relate to how you feel about your charge nurse. Please circle the number that reflects your relationship with your charge nurse. Please be as honest as you can. Your answers are confidential and will not be shared with others you work with. If you work with more than one charge nurse, please answer these questions in relation to the charge nurse that you work with most often.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>My charge nurse recognizes the standards of care I try to deliver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My charge nurse tries to meet my needs in such ways as informing me of what is expected of me when working with my residents and providing feedback and recognition when I meet these expectations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My charge nurse knows me well enough to know when I have concerns about patient care and tries to understand my point of view.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can rely on my charge nurse to be there for me when I ask for help, That is, she/he is approachable, for example if I need assistance with a resident, or if I need someone to talk to if things are not going well between myself and residents and/or their families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My charge nurse keeps me informed of any decisions that were made in regards to my residents, for example, information obtained from family meetings or multidisciplinary rounds.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My charge nurse tolerates me feeling frustrated or overwhelmed without responding negatively in return.</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Appendix W  The Resident Visual Analogue Scale

How would you rate your relationship with _______ (state the resident's name).

By placing a mark on the line, you can indicate how close you are with the resident in relation to your interpersonal relationship. If you feel very close to the resident, in fact you could not imagine feeling closer, then you mark the line at the very end on the right. If you don’t feel close to this resident at all, then you mark the line at the left end. If you feel something in between, then mark the line at a point that reflects how you feel.

Not At All Close,  
Nurse-Resident Relationship  

Very Close  
Nurse-Resident Relationship

Please state your reasons for your answer.

________________________________________________________________________

________________________________________________________________________
Appendix X  Information Letter to Careproviders (Pilot study)

My name is Kathy McGilton. I am the Registered Nurse enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto. My thesis supervisor is Dr. Linda O’Brien-Pallas at the University. In order to get ready to do a major study that will be my doctoral thesis, I need to test two sets of questions that I plan to use for the major study. I want to see if the questions are easily understood and can be answered by staff members such as health care aides and nurses. One set of questions relates to how careproviders feel towards residents for whom they provide care for and one set of questions relates to your unit manager.

The decision to take part in the study is completely voluntary, and you may choose to withdraw from the study at any time, for any reason. If you decide to take part in the study, there are 2 sets of questions that you will be asked to complete twice, two weeks apart. For the first question you are asked to mark on a line how close and involved you feel about caring for a specific resident. The second set of questions consists of 6 statements. You are asked to circle the answer that comes closest to how you feel. There are no right or wrong answers.

The two sets of questions will take you about 5 minutes to complete and I will ask you the questions. Your responses will be completely anonymous and will remain strictly confidential. A number has been assigned to you in order to match the results of the first questionnaires with the second.

No harm can come to you by participating and although I hope you find the questions interesting to answer, you will not benefit in any way by taking part in this. No names of individuals or institutions will be used in the final report of the study. You will be identified by a code number on the study. The code number will be known to Kathy McGilton only. It will not be known to any staff at the Centre and no one at the Centre will be able to link any specific nurse
with any of the recorded data. No one from the Centre will have access to any information provided. The results of this study will serve as a basis for continued research into the area of relationships.

I am willing to answer any questions you may wish to ask about the study. You can contact me at (xxx) xxx-xxxx, or my thesis supervisor, Dr. Linda O’Brien-Pallas at (416) 978-1967.

Sincerely,

Kathy McGilton
Appendix Y  Information Letter To Residents (Pilot Study)

**Project Title:** Question Testing Project about the Resident-Careprovider Relationship

**Investigator:** Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto. Her thesis supervisor is Dr. Linda O’Brien-Pallas at the University. Her supervisor at the Centre is Dr. xxxx. Her research assistant is xxxx.

**Information Sheet:**

During this study you will be asked to complete a set of six questions. They are in the form of statements and you are asked to indicate how much you agree or disagree with each statement. The questions are about how you feel about the nurses who care for you. You will be asked to complete these questions twice, a couple of weeks apart.

a. The questionnaire will take you 5 minutes to complete

b. Your responses will be kept confidential

c. Your name will not appear in any report of the study
d. There are no known risks to taking part in the study. You will be assigned a code number on the questionnaire, in order to match the results of the first questionnaire with the second. This number will be known to Kathy McGilton only.

e. You may not directly benefit from being in this study but by participating other people may be helped in the future.

You can withdraw at any time by phoning Kathy McGilton at (xxx) xxx-xxxx or Dr. Linda O’Brien-Pallas at (416) 978-1967; your withdrawal will not affect any care you are receiving at the Centre.
Appendix Z  Information Letter to Family Members (Pilot Study)

Project Title: Question Testing Project about the Resident-Careprovider Relationship

Investigator: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto. Her thesis supervisor is Dr. Linda O’Brien-Pallas at the University. Her supervisor at the Centre is Dr. xxxx. Her research assistant is xxxx.

Information Sheet:

During this study you will be asked to complete a set of six questions. They are in the form of statements and you are asked to indicate how much you agree or disagree with each statement. The questions are about how you feel about the nurses who care for your family member. You will be asked to complete these questions twice, a couple of weeks apart.

a. The questionnaire will take you 5 minutes to complete

b. Your responses will be kept confidential

c. Your name will not appear in any report of the study
d. There are no known risks to taking part in the study. You will be assigned a code number on the questionnaire, in order to match the results of the first questionnaire with the second. This number will be known to Kathy McGilton only.

e. Your family member may not directly benefit from being in this study but by participating other people may be helped in the future. You can withdraw at any time by phoning Kathy McGilton at (xxx) xxx-xxxx or Dr. Linda O’Brien-Pallas at (416) 978-1967; your withdrawal will not affect any care your family member is receiving at the Centre.
Appendix AA  Consent Form for Careproviders (Pilot Study)

Project Title: Evaluation of a Measure of the Resident-Careprovider Relationship and of the Unit Manager-Careprovider Relationship

Investigator: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto.

Consent form: Evaluation of Relationship Measures

I have been provided with a description of the study and any possible risks or benefits that might be associated with this study.

I have also been given an opportunity to ask questions concerning this study, and any questions that I have asked have been adequately answered.

I have been told that I can withdraw my consent and stop my participation in this study at any time and for any reason without any repercussions. I have been told that my identity will be kept confidential. No one at the Centre will have access to any information provided, including Dr. xxxx, Kathy's supervisor at the Centre. I understand the information that I have received, and I voluntarily consent to participate in this study.

___________________________________________________________  ______________
(Signature of Participant)                                      (Date)

___________________________________________________________  ______________
(Signature of Researcher)                                       (Date)
Appendix BB  Consent Form for Residents (Pilot Study)

Project Title: Question Testing Project about the Resident-Careprovider Relationship
Investigator: Kathy McGilton, a nurse, enroled in graduate studies with the Faculty of Nursing, at the University of Toronto
Consent form: Evaluation of a Resident-Careprovider Relationship Measure

I have been provided with a description of the study and any possible risks or benefits that might be associated with this study.

I have also been given an opportunity to ask questions concerning this study, and any questions that I have asked have been adequately answered.

I have been told that I can withdraw my consent and stop my participation in this study at any time and for any reason. My withdrawal will not affect the care I am receiving at the Centre. I have been told that my identity will be kept confidential. I understand the information that I have received, and I voluntarily consent to participate in this study.

(Signature of Participant)   (Date)
(Signature of Researcher/Research Assistant)   (Date)
Appendix CC: Consent Form for Family Members (Pilot Study)

Project Title: Question Testing Project about the Resident-Careprovider Relationship

Investigator: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto

Consent Form: Evaluation of a Resident-Careprovider Relationship Measure

I have been provided with a description of the study and any possible risks or benefits that might be associated with this study.

I have also been given an opportunity to ask questions concerning this study, and any questions that I have asked have been adequately answered.

I have been told that I can withdraw my consent and stop my participation in this study at any time and for any reason. My withdrawal will not affect the care that my family member is receiving. I have been told that my identity will be kept confidential. I understand the information that I have received, and I voluntarily consent to participate in this study.

(Signature of Participant)  
(Date)

(Signature of Researcher/Research Assistant)  
(Date)
Appendix DD  Resident Information Sheet

Research Study: The effects of a nursing care delivery system designed to enhance relationships on residents, family members and careproviders.

Researcher: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto. Her thesis supervisor is Dr. Linda O'Brien-Pallas at the University. Her supervisor at the Centre is Dr. xxxx.

Information Sheet: The purpose of this study is to evaluate the effects of a relationship enhancing program of care. During this study some careproviders will receive an educational program and will work with Kathy McGilton to implement the program. Some residents will received a relationship program of care while others will receive the usual approach to care. No one will receive less care than they do now. During the study, you will talk with the nurse researcher who is conducting the study to complete one form. As well, the study will involve observations of morning or afternoon care given to residents by a research assistant and the completion of a number of forms about the responses of residents to the type of care given. With this study:

a. Your responses will be recorded on one form and it is anticipated that this will take five minutes of your time.

b. Anything you say will be kept confidential
c. Your name will not appear in any report of the study

d. There are no known risks to taking part in this study.

e. You may or may not directly benefit from being in this study. However, it is felt that the study will contribute to the understanding of the effect of different types of interactions and relationships on residents' and careproviders' responses.

You can withdraw at any time by phoning Kathy McGilton at (xxx) xxx-xxxx or Dr. Linda O'Brien-Pallas (416); your withdrawal will not affect any care you are receiving at the Centre.
Appendix EE  Consent Form for Residents

Research Study: The effects of a nursing care delivery system designed to enhance relationships on residents, family members and careproviders.

Researcher: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto. Her thesis supervisor is Dr. Linda O'Brien-Pallas at the University. Her supervisor at the Centre is Dr. xxxx.

Consent Form: Evaluation of the effects of a relationship enhancing program of care

I have been provided with a description of the study and any possible risks or benefits that might be associated with this study.

I have also been given an opportunity to ask questions concerning this study, and any questions that I have asked have been adequately answered.

I have been told that I can withdraw my consent and stop my participation in this study at any time and for any reason. My withdrawal will not affect the care that my family member is receiving. I have been told that my identity will be kept confidential. I understand the information that I have been provided.
I voluntarily consent to participate in this study.

(Signature of Participant)  (Date)

(Signature of Researcher)  (Date)

If you wish to receive a copy of the final results, please provide the name and mailing address to which you would like the report sent.

Name:

Address:
Appendix FF  Resident Proxy Information Sheet

Research Study: The effects of a nursing care delivery system designed to enhance relationships on residents, family members and careproviders.

Researcher: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto. Her thesis supervisor is Dr. Linda O'Brien-Pallas at the University. Her supervisor at the Centre is Dr.xxxx.

Information Sheet: The purpose of this study is to evaluate the effects of a relationship enhancing program of care. During this study some careproviders will receive an educational program and will work with Kathy McGilton to implement the program. Some residents will received a relationship program of care while others will receive the usual approach to care. No one will receive less care than they do now. The study will involve observations of morning or afternoon care given to residents by a research assistant and the completion of a number of forms about the responses of residents to the type of care given. With this study:

a. Your family member's responses will be recorded on one form.

b. Any information about _________ (resident) will be kept confidential

c. _________ (resident) name will not appear in any report of the study

d. There are no known risks to ________ (resident) for taking part in this study.

e. _________ (resident) may or may not directly benefit from being in this
study.

You can withdraw ________ (resident) at any time by phoning Kathy McGilton at (xxx) xxx-xxxx or Dr. Linda O'Brien-Pallas (416) 978-1967; your withdrawal will not affect any care__________ (resident) is receiving at the Centre.
Appendix GG  Consent Form for Resident's Proxy

Research Study: The effects of a nursing care delivery system designed to enhance relationships on residents, family members and careproviders.

Researcher: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto. Her thesis supervisor is Dr. Linda O'Brien-Pallas at the University. Her supervisor at the Centre is Dr. xxxx.

Consent Form: Evaluation of the effects of a relationship enhancing program of care

I have been provided with a description of the study and any possible risks or benefits that might be associated with this study.

I have also been given an opportunity to ask questions concerning this study, and any questions that I have asked have been adequately answered.

I have been told that I can withdraw my consent and stop ___________ (resident) participation in this study at any time and for any reason. My withdrawal will not affect the care that ___________ (resident) is receiving. I have been told that ___________ (resident) identity will be kept confidential. I understand the information that I have been provided.
I voluntarily consent __________ (resident) to participate in this study.

________________________  _______________________
(Signature of Family Member)  (Date)

________________________  _______________________
(Signature of Researcher)  (Date)

If you wish to receive a copy of the final results, please provide the name and mailing address to which you would like the report sent.

Name: 

Address:
Appendix HH  Family Member Information Sheet

Research Study: The effects of a nursing care delivery system designed to enhance relationships on residents, family members and careproviders.

Researcher: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto. Her thesis supervisor is Dr. Linda O'Brien-Pallas at the University. Her supervisor at the Centre is Dr. xxxx.

Information Sheet: The purpose of this study is to evaluate the effects of a relationship enhancing program of care. During this study some careproviders will receive an educational program and will work with Kathy McGilton to implement the program. Some residents will received a relationship program of care while others will receive the usual approach to care. No one will receive less care than they do now. During the study, you will talk with the nurse researcher who is conducting the study to complete one form. With this study:

  a. Your responses will be recorded on one form and it is anticipated that this will take five minutes of your time.

  b. Anything you say will be kept confidential

  c. Your name will not appear in any report of the study

  d. There are no known risks to taking part in this study.

  e. You may or may not directly benefit from being in this study. However, it
is felt that the study will contribute to the understanding of the effect of different types of interactions and relationships on residents' and careproviders' responses.

You can withdraw at any time by phoning Kathy McGilton at (xxx) xxx-xxxx or Dr. Linda O'Brien-Pallas (416) 978-1967; your withdrawal will not affect any care your family member is receiving at the Centre.
Appendix II  Consent Form for Family Members

Research Study: The effects of a nursing care delivery system designed to enhance relationships on residents, family members and careproviders.

Researcher: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto. Her thesis supervisor is Dr. Linda O'Brien-Pallas at the University. Her supervisor at the Centre is Dr. xxxx.

Consent Form: Evaluation of the effects of a relationship enhancing program of care

I have been provided with a description of the study and any possible risks or benefits that might be associated with this study.

I have also been given an opportunity to ask questions concerning this study, and any questions that I have asked have been adequately answered.

I have been told that I can withdraw my consent and stop my participation in this study at any time and for any reason. My withdrawal will not affect the care that my family member is receiving. I have been told that my identity will be kept confidential. I understand the information that I have been provided.
I voluntarily consent to participate in this study.

______________________________    ___________________________
(Signature of Participant)          (Date)

______________________________    ___________________________
(Signature of Researcher)           (Date)

If you wish to receive a copy of the final results, please provide the name and mailing address to which you would like the report sent.

Name:

Address:
Appendix II  Nursing Staff Information Sheet

My name is Kathy McGilton, and I am a nurse and a doctoral student in the Faculty of Nursing at the University of Toronto. For my doctoral research I am studying the effect of a program of care designed to enhance relationships between careproviders and the residents they care for. My thesis supervisor is Dr. Linda O'Brien-Pallas at the University. My supervisor at the Centre is Dr. xxxx.

This study will involve the collection of information about the residents' diagnoses, their level of cognitive impairment, age and gender, and about careproviders' level of education, length of employment, age and gender. As well, the study will involve observations by a research assistant of the morning or evening care given to residents and the completion of a number of forms about the responses of residents to the type of care given. Some careproviders and charge nurses will receive an educational program and will work with me to implement the program. Some residents will receive a relationship enhancing program of care while others will receive the usual approach to care.

The study may not benefit residents or careproviders directly. However, it is felt that the study will contribute to the understanding of the effect of different types of interactions and relationships on residents' and careproviders' responses. I will provide you with a summary of the results within three months following the completion of the study if you wish. The anonymity of all participants in the study will be absolutely protected and there are no consequences whatsoever to participating or not participating.

I am willing to answer any questions that you may wish to ask about the study. My telephone number is (xxx) xxx-xxxx. Dr. Linda O'Brien-Pallas can be reached at (416) 978-1967.

Sincerely, Kathy McGilton
Appendix KK  Consent Form for Nursing Staff

Research Study: The effects of a nursing care delivery system designed to enhance relationships on residents, family members and careproviders.

Researcher: Kathy McGilton, a nurse, enrolled in graduate studies with the Faculty of Nursing, at the University of Toronto

Name of Subject: _________________________________

I have been provided with a description of the study and any possible risks or benefits that might be associated with this study.

I have also been given the opportunity to ask questions concerning this study, and any questions that I have asked have been adequately answered. I realize that I can contact Kathy McGilton (xxx) xxx-xxxx or Dr. Linda O'Brien-Pallas (416) 978-1967 at any time to discuss this study and my participation in it.

I voluntarily consent to participate in this study. I understand the following:

1. My participation will involve the collection, by a research assistant, of personal information and information about the type of interactions and relationships that take place with residents, with colleagues and with my unit manager, and the administration of a number of forms by a research assistant.

2. The information which I have read in the above paragraphs.

3. Any information about me will be kept confidential and anonymous and only the researchers will know that the responses are mine.

4. Any information obtained about me and which the researchers may share will not be associated with my name.
5. I can withdraw my participation in the study at any time without any repercussions.

Signature: ________________________ Date: _______________

Print Name: ________________________ Witness: ________________________

If you wish to receive a copy of the final results, please provide the name and mailing address to which you would like the report sent.
Appendix II. Framework for Change

The process of implementing the intervention was based on work by Beer (1988) who postulated the following:

Amount of change = (Dissatisfaction x Model x Process) > Costs of Change

Beer (1988) proposed that programs produce change when the elements of dissatisfaction, model and process are present in sufficient strength to overcome the multiple costs of change. There are many costs associated with a change, and they may include a loss of power, ideology, competence or identity. Based on this model for change the investigator developed the intervention to include the principles inherent in the model. Dissatisfaction involves making the change recipients aware that the current state of affairs is not acceptable. Following this stage, Beer proposed that participants should be introduced to the model for the future or the preferred vision. Processes need to be put into place so that participants acquire the required skills to achieve the new vision. It was proposed that if nursing staff become dissatisfied with the current state, have a clear vision of the future, are offered the right intervention despite the costs of change, practice will change. Beer further suggested that change momentum may be increased by working on a reduction in perceived losses.
The study is moving along...

The inservices are going well, thanks to the support from all of the nursing staff. I would like to go over some topics that we have discussed in our meetings together.

What does quality of life mean to you?
Nurses responded in the following ways: "having meaning in your life; having friends and family; knowing someone cares; having choices; good health". We spoke about how we as nurses have different definitions of quality of life in the same way that residents have their own meanings to define quality in their lives. Some nurses felt that for some residents, having choices and knowing someone cares, is probably important to them as well. Knowing what quality of life means for residents, may help us understand how we can assist them in finding happiness here.

Nurse-resident relationships
Nurses spoke about how being close with residents made them feel good about working here. Some said "you miss each other on days off; I can relate to her; I feel connected to him; you’re concerned about him; and I understand her feelings". Nursing staff also spoke about times when they did not feel connected with some residents, and how frustrating this felt. One nurse did suggest that it was unlikely that each nurse would have a close relationship with each resident as we are all different and connect with different people. Choosing which residents to work with makes sense because of this.

Nurses supporting each other
Nursing staff spoke about how important it is that nurses support one another when at work. Some felt that depending on who you work with your job is either easier or more challenging. Nursing staff were asked to think about how to support each other when working.

A Vision statement to guide the change
A vision statement is a description of what the unit should look like as we change our practice. The statement was developed by me and the unit manager with input from the RNs. "Our primary objective is to be a unit in which relationships between careproviders and residents are of paramount importance. To this end, a continuity system of care is our goal as is knowing the residents' likes and dislikes, and being dependable and empathic during the delivery of care. Knowledge of the aging process and the Jewish traditions are also key to this endeavor. We must promote a spirit of teamwork, where all nursing staff are treated with respect and are supported for their excellence in caregiving, including initiatives at enhancing relationships with residents and family members". My question to you is, can we use this statement to guide our practice? If you have any questions or comments, please feel free to speak to me.

STAY IN TOUCH
If I can be of any help, please call me. You can reach me at (xxx) xxx-xxxx.
Kathy McGilton, RN, Ph.D.(cand)
Co-ordinator of the study
Appendix NN  Completed Resident Profiles

Example 1: Profile for Miss A.

1. Is there anything you would like to do here at the Centre if you were given a chance?
   I need an instructor for the computer. I also need a volunteer to get to the computer room.

2. What kinds of choices would you like to make, that we can try to work on?
   Sometimes I would like to change what time I go to bed - especially if there is a show on that I would like to stay up and watch at night.

3. What interests do you have?
   Writing long letters and sending greeting cards

4. What would make your days more satisfying here?
   To get out of here
   I would like to walk more, maybe from my bed to the bathroom

5. Would you like your day to go differently? In what ways?
   Want to know ahead of time when appointments are, not the same day as I have already planned my day by then
   I would like to sit in the chair I have in my room for one hour a day, instead of this wheelchair (The wheelchair reminds me constantly of my disability)
   I would like a table so that I could write more comfortably.
   I would like to meet some of the ladies that live here on this unit.

What are we going to do with this information? And who is going to do it?
1. How do we get this computer instructor for Miss A?
2. How can we get Miss A to walk more?
3. Can Miss A sit in her chair once every other day?
4. How do we get a table for writing?
5. How can we arrange for Miss A to meet other residents?

Describe what works well when you care for Miss A....
   Asking her how she if feeling

Describe what this person does not like..
   Being rushed

Completed By: R., HCA
Example 2: Profile for Miss F.

1. Is there anything you would like to do here at the Centre if you were given a chance?
   I would like to go out more: to the mall and to the movie; to the park and to the exhibition

2. What kinds of choices would you like to make, that we can try to work on?
   When you call someone, they should come and help
   Like to be up early and in bed around 8:30 to 9:00

3. What interests do you have?
   Watch TV
   I like going to lectures but I would prefer if they were held during the day so that I could attend

4. What would make your days more satisfying here?
   No response

5. Would you like your day to go differently? In what ways?
   In the morning, I would like to go the dining room, but my sitter isn’t here yet and I need help with eating so this is not possible.
   I would also like to get up earlier in the morning

What are we going to do with this information? And who is going to do it?
1) Is there anyway she can go down for breakfast?
2) Is there anyway she can get up early once in a while?
3) How can we accommodate her wish to get out more?
4) What lectures are offered during the day that Miss F. may like to attend?

Describe what works well when you care for Miss F.
   Speaking to her about how her day is going

Describe what Miss F. does not like...
   To be rushed

Completed By: T., HCA
INSTRUCTIONS

Your rating of the individual’s behaviour should be based on the one-week period preceding the rating. If for some reason you think that this particular week presents an atypical picture of the person’s condition (due to an acute illness, etc.) this should be noted in the comments section of the answer sheet. Wherever applicable, make your rating on the basis of what the person is actually doing (regardless of the treatment) rather than of what you estimate he/she is capable of doing.

Be sure to read each question carefully and to answer each of the 36 items of the questionnaire. In each case, a higher score will indicate greater disability.

Resident’s Code #______________________________
Rater’s Name ________________________________
Date ________________________________
1. The person will fall from his/her bed or chair unless protected by bed rails or soft ties (day or night):

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>never</td>
</tr>
<tr>
<td>1</td>
<td>occasionally</td>
</tr>
<tr>
<td>2</td>
<td>frequently</td>
</tr>
</tbody>
</table>

2. The person helps other residents on the unit:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>frequently</td>
</tr>
<tr>
<td>1</td>
<td>occasionally</td>
</tr>
<tr>
<td>2</td>
<td>never</td>
</tr>
</tbody>
</table>

3. The person understands what you communicate to him/her (you may use speaking, writing or gesturing):

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>almost always</td>
</tr>
<tr>
<td>1</td>
<td>sometimes</td>
</tr>
<tr>
<td>2</td>
<td>almost never</td>
</tr>
</tbody>
</table>

4. The person engages in behaviour which is objectionable to others (e.g., loud or constant talking, pilfering, soiling furniture, interfering in others' affairs):

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>never</td>
</tr>
<tr>
<td>1</td>
<td>occasionally</td>
</tr>
<tr>
<td>2</td>
<td>frequently</td>
</tr>
</tbody>
</table>

5. Close supervision is necessary to protect the person (due to feebleness):

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>never</td>
</tr>
<tr>
<td>1</td>
<td>occasionally</td>
</tr>
<tr>
<td>2</td>
<td>frequently</td>
</tr>
</tbody>
</table>

6. The person keeps him/herself occupied in constructive (or useful) activities (works, reads, plays games, has hobbies, etc.):

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>never</td>
</tr>
<tr>
<td>1</td>
<td>occasionally</td>
</tr>
<tr>
<td>2</td>
<td>frequently</td>
</tr>
</tbody>
</table>

7. The person communicates in any manner (by speaking, writing or gesturing) well enough to make him/herself easily understood:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>almost always</td>
</tr>
<tr>
<td>1</td>
<td>sometimes</td>
</tr>
<tr>
<td>2</td>
<td>almost never</td>
</tr>
</tbody>
</table>

8. The person engages in repetitive vocal sounds (e.g., yelling, moaning, talking, etc.) which are directed to no one in particular:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>never</td>
</tr>
<tr>
<td>1</td>
<td>occasionally</td>
</tr>
<tr>
<td>2</td>
<td>frequently</td>
</tr>
</tbody>
</table>
9. When bathing or dressing, the person requires:
   0 - no assistance with either of the above
   1 - assistance with one of the above
   2 - assistance with both of the above

10. The person has established a good relationship with:
    0 - more than one person
    1 - one person
    2 - no other persons

11. The person responds, (in any manner) to his/her own name:
    0 - always
    1 - sometimes
    2 - never

12. The person threatens to harm others:
    0 - never
    1 - occasionally
    2 - frequently

13. With regard to walking, the person:
    0 - has no difficulty
    1 - needs some assistance (e.g., needs cane, crutches, or someone by his/her side)
    2 - is unable to walk

14. The person, without being asked, helps other people:
    0 - frequently
    1 - occasionally
    2 - never

15. The person is incontinent or urine and/or faeces (day or night):
    0 - almost never (less than once per week)
    1 - sometimes (once or twice per week)
    2 - almost always (three times per week or more often)

16. When eating, the person requires:
    0 - no assistance (feeds himself)
    1 - some assistance
    2 - considerable assistance (spoon feeding, etc.)
17. The person has a regular activity schedule:
   0-away from the home (or both at and away from home)
   1-at home only
   2-no regular schedule

18. The person is destructive of materials around him (e.g., breaks furniture, tears up magazines, sheets, clothes, etc.):
   0-never
   1-occasionally
   2-frequently

19. The person is confused (e.g., unable to find his way around the home, loses his possessions, etc.):
   0-almost never
   1-sometimes
   2-almost always

20.* The person knows the names of:
   0-more than one family member
   1-only one family member
   2-no family members

21. The person engages in apparently useless repetitive movements (e.g., pacing, rocking, wringing of hands, making random movements, etc.):
   0-never
   1-occasionally
   2-frequently

22. The person makes use of the opportunity to leave the unit:
   0-frequently
   1-occasionally
   2-never

23. If not helped by others, the person’s appearance is disorderly:
   0-never
   1-occasionally
   2-frequently

24. If the person were allowed outdoors without supervision, he/she would be able to protect him/herself from the weather or from getting lost:
   0-almost always
   1-sometimes
   2-almost never
25. The person's sleep pattern at night is:
   0-never awake
   1-occasionally awake
   2-frequently awake

   * Score 1 for this item if cannot otherwise be scored due to aphasia or muteness:

26. The person's diet consists of:
   0-regular solid meals
   1-chopped food
   2-pureed food

27. The person co-operates with caregivers:
   0-almost always
   1-sometimes
   2-almost never

28.* The person makes sense when he/she talks:
   0-almost always
   1-sometimes
   2-almost never

29. The person knows where he/she is:
   0-always
   1-sometimes
   2-never

30. The person takes his/her clothes off at the wrong time or place:
   0-never
   1-occasionally
   2-frequently

31. The person seems very restless:
   0-almost never
   1-sometimes
   2-almost always

32. The person requires safety supervision (for careless smoking, objects in the mouth, self-injury, pulling catheter, etc.):
   0-never
   1-sometimes
   2-always
33. * When talking, the person wanders off the subject:

0 - almost never
1 - sometimes
2 - almost always

34. The person has trouble remembering things:

0 - never
1 - occasionally
2 - frequently

* Score 1 for this item if it cannot otherwise be scored due to aphasia or muteness.

35. The person talks out loud to himself/herself:

0 - never
1 - occasionally
2 - frequently

36. When trying to get the person’s attention, he/she acts as if he/she is in a dream world:

0 - never
1 - occasionally
2 - frequently
Appendix PP  Resident Demographic Sheet

Resident Code:
Name:
Age:
Gender:
Length of Stay:
Medical Diagnoses:
Paid Companion: Yes or No
Appendix QQ Careprovider Visual Analogue Scale

How would you rate your interpersonal relationship with ____________________________ (write the nurse’s initials)

By placing a mark on the line, you can indicate how close you are with the nurse in relation to your interpersonal relationship. If you feel very close to the nurse, in fact you could not imagine feeling closer, then you mark the line at the very end on the right. If you don’t feel close to this nurse at all, then you mark the line at the left end. If you feel something in between, then mark the line at a point that reflects how you feel.

Not At All Close, Nurse-Resident Relationship

Very Close Nurse-Resident Relationship

What does a close nurse-resident relationship mean to you?

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________
Appendix RR  Careprovider's Demographic Profile

For each question please circle the number beside the question that best describes you or, in one case fill in the blank.

1. Which of the following reflects your highest level of education preparation?

- Health Care Aide Certification Program
- Registered Practical Nurse Program
- Diploma Program in Nursing
- Baccalaureate Degree in Nursing
- Baccalaureate Degree (other than in Nursing)
- Masters Degree in Nursing
- Masters Degree (other than in Nursing)
- Other; Please specify

2. How many years have you worked in this long term care setting?

- < 1 year
- 1-3
- 4-10
- 11-16
- 17-25
- >26.

3. What is your gender? Please circle. Male (1) or Female (2)

4. Are you currently working:

- Full time (40hrs/wk)
- Part time (20hrs/wk)
- Casual

5. Indicate your present age range:

- 19-25
- 26-35
- 36-45
- 46-55
- >55
Appendix SS  Staff-Patient Interaction Response Scale

I want you to picture Mr/Mrs ________________, whom you care for and pretend that you were talking to him or her. Mr/Mrs ____________ has Alzheimers. He has recently forgotten how to get to his room.

You walk in and the resident says the following,

"I just want to stay in bed - please."

How would you answer:

(Remember there are no right or wrong answers, we are not looking for a particular response)

"My family would worry if they knew about this."

You answer:

"Life’s not worth living. There is nothing anyone can do."

You answer:

“It’s really nice having a nurse who understands me, not like the others."

You answer:

“Please don’t ask anymore questions - don’t you ever give up?"

You answer:
I want you to picture Mr/Mrs ____________, whom you care for and pretend that you were talking to him or her. Mr/Mrs ____________ is a resident who requires assistance with all activities of daily living because of a past stroke. He has just started to refuse to go to any activities that are offered.

You walk in and the resident says the following,

"Why should I get up—there is no place to go."

How would you answer:

(Remember there are no right or wrong answers, we are not looking for a particular response)

"You're the only one who treats me like a real person, not just a job."

You answer:

"Why do you keep trying to talk to me anyway?"

You answer:

People at home are going to have trouble with this."

You answer:

You have no idea how I feel. I wish I were dead and what can you do anyway?"

You answer:
Appendix TT  SPIR Rater Form

Use the following scoring method for each response
A. Does the response person keep the discussion going?
   - If yes write “A”
   - If uncertain write “a”
   - If no leave blank
B. Does the person directly attend to the subjective perception, or experience of the person?
   - If yes write “B”
   - If uncertain write “B”
   - If no leave blank
C. Is the response tailored to the person’s specific situation i.e. is it non-generic?
   - If yes write “C”
   - If uncertain write “c”
   - If no leave blank
D. Does the response offer useful suggestions which the patient can reasonably (independently) act upon?
   - If yes write “D”
   - If uncertain write “d”
   - If no leave blank
E. Does the response express care and concern for the emotional state of the person?
   - If yes write “E”
   - If uncertain write “e”
   - If no leave blank
F. Does the response either invalidate the person’s experience, cause them to defend their position, or force personal assumptions onto the person?
   - If yes write “F”
   - If uncertain write “f”
   - If no leave blank
G. Does the response person imply that the problems are beyond anyone’s help (i.e. that’s life) reinforcing a sense of shared helplessness
   - If yes write “G”
   - If uncertain write “g”
   - If no leave blank

Once you have assigned the appropriate letters to each response transform each letter into the corresponding number (using the values listed below) to create a score.

NUMERIC SCORE

Each response automatically starts with a score of 4
A = +2, a = +1, B = +2, b = +1, C = +2, c= +1, D = +2, d= +1, E = +2, e = +1, F = *, f= -1. G = -2 g = -1, Blank = 0

* If the answer has a score with a capital F the value of the score is automatically “0” irrespective of the other letters (Examples = AbC_F_ Score = 0, aBcd _ Score = 9)

SPIR Score = Total numeric scores for each sentence
Appendix UU  Careproviders' Perceptions of the Permanent Assignment Model

Please circle the number that most closely indicates how you feel about a permanent assignment model of care. (Being with the same resident every day you work).

Very Opposed  Opposed  Undecided  In Favour  Very Much in Favour
1 2 3 4 5

Please comment why you feel this way:

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

Do you feel you need a break from certain residents once in a while? Why?

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
Appendix V: Interview Guide for Nursing Staff

1. What is unique to this unit that is not evident on other units that you have worked on?

2. Are you encouraged to attend educational sessions?

3. Does the care you provide on this unit focus on the autonomy and dignity of the resident? Can you give me some examples?

4. Does the manager spend a lot of time with staff? Are staffs' emotional needs met with regards to caring for these residents and their families?

5. Is the manager’s door open and the atmosphere in the office welcoming, gentle and humorous?

6. Does each family know who the main nurse is?

7. Do you learn about the residents' life stories when they are admitted?

8. Do nurses deliver care in a rigid fashion here? Or do residents have a say in their care?

9. Do you have many residents or family members that you find challenging to work with?

10. How often do residents have unanticipated behavioral, cognitive or physical changes?

11. Do you have a problem with the supplies on this unit?

12. Are their concerns regarding environmental safety?

13. Do you have relief staff often? How often?

14. Do you have many unanticipated disruptions in work flow?

15. Does staff pull together as a team?

16. Do you have time in your day to complete an assessment of your residents?

17. How supported do you feel by your unit manager?

18. How frequently do you work short staffed?

19. Are there too many non-direct care tasks to be done? Can you give me some examples?
## Appendix WW  Responses to the Interview Questions Utilized to Uncover the Reasons for Non- Equivalent Groups

<table>
<thead>
<tr>
<th>Themes</th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniqueness of the unit</td>
<td>One RN in charge controlled the assignments and her colleagues believed she always had the lightest residents</td>
<td>Good team spirit</td>
</tr>
<tr>
<td>Continuing education</td>
<td>Attendance of sessions was encouraged, especially for the RNs</td>
<td>Attendance at sessions was encouraged for all as was going back to school.</td>
</tr>
<tr>
<td>The Focus of care</td>
<td>Some residents were offered choices but it was a case by case decision. The life stories of residents are unknown as this is the Social Workers' domain</td>
<td>The focus was to maintain the residents’ autonomy. Staff were encouraged to read about the residents’ life stories on the weekend</td>
</tr>
<tr>
<td>Management philosophy</td>
<td>Closed door policy. The emotional needs of the staff were not met. The UM did not seem to notice the negative effect of the one RN</td>
<td>Open door policy. Staff meet with the UM regularly and call a meeting when they need one</td>
</tr>
<tr>
<td>Delivery of care</td>
<td>Care is delivered in a rigid fashion, but some residents’ have a say on how their day will go.</td>
<td>Care is flexible, residents have a say in their day</td>
</tr>
<tr>
<td>Unanticipated behavioral or cognitive changes of the residents</td>
<td>Unanticipated changes in residents occurred on a daily basis</td>
<td>Very few unanticipated changes in residents</td>
</tr>
<tr>
<td>Unit Supplies</td>
<td>Never enough supplies, such as towels</td>
<td>Enough supplies, but residents don’t have enough clothes</td>
</tr>
<tr>
<td>Relief staff</td>
<td>Relief staff are used twice weekly and are not encouraged to read the care plan</td>
<td>Relief staff is almost never used.</td>
</tr>
<tr>
<td>Team Work</td>
<td>Some nurses are very difficult to work with. East and West sides are staffed with different nurses and they do not help each other out.</td>
<td>Work well as a team, help each other out</td>
</tr>
<tr>
<td>Work short staffed</td>
<td>Weekly</td>
<td>Short staffed infrequently</td>
</tr>
</tbody>
</table>