

**THE INFLUENCE OF CARE PROVIDER ACCESS
TO STRUCTURAL EMPOWERMENT
ON INDIVIDUALIZED CARE
IN LONG TERM CARE FACILITIES**

by

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ABSTRACT

This thesis explores the relationship between care provider access to structural empowerment and the provision of individualized care in long-term care (LTC) facilities. Structural equation models (SEM) were computed to examine the relationship between access to empowerment structures (i.e., informal power, formal power, information, support, resources, and opportunity structures) and the provision of individualized care by RNs/LPNs ($n = 242$) and care aides ($n = 326$) recruited from three British Columbia health regions. Invariance analyses were subsequently undertaken to compare SEM models between groups. Access to structural empowerment had a statistically significant, positive effect on the provision of individualized care for both groups (though not statistically different between groups). Findings from this study suggest that improving the provision of individualized care in LTC facilities can be enhanced when RNs, LPNs, and care aides have appreciable access to empowerment structures.

Keywords: Individualized care; Empowerment; Long-term care; Organizational Behaviour; Quality Improvement

Subject Terms: Nursing—Caregivers; Long-term care—methods; Staff empowerment—Geriatric nursing

This thesis is dedicated to
the managers and professional caregivers
who work in long-term care facilities.

Thank you
for the important and invaluable services
that you provide to our elderly.

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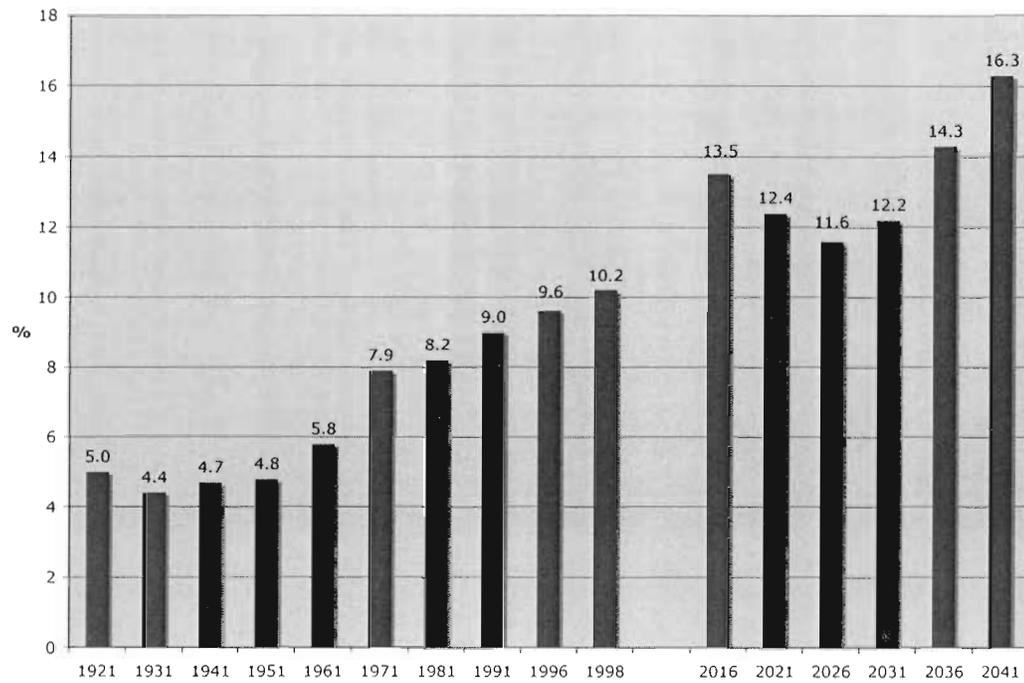
CHAPTER 1: INTRODUCTION

1.1 Background

1.1.1 Population Aging and the Provision of Long-Term Care

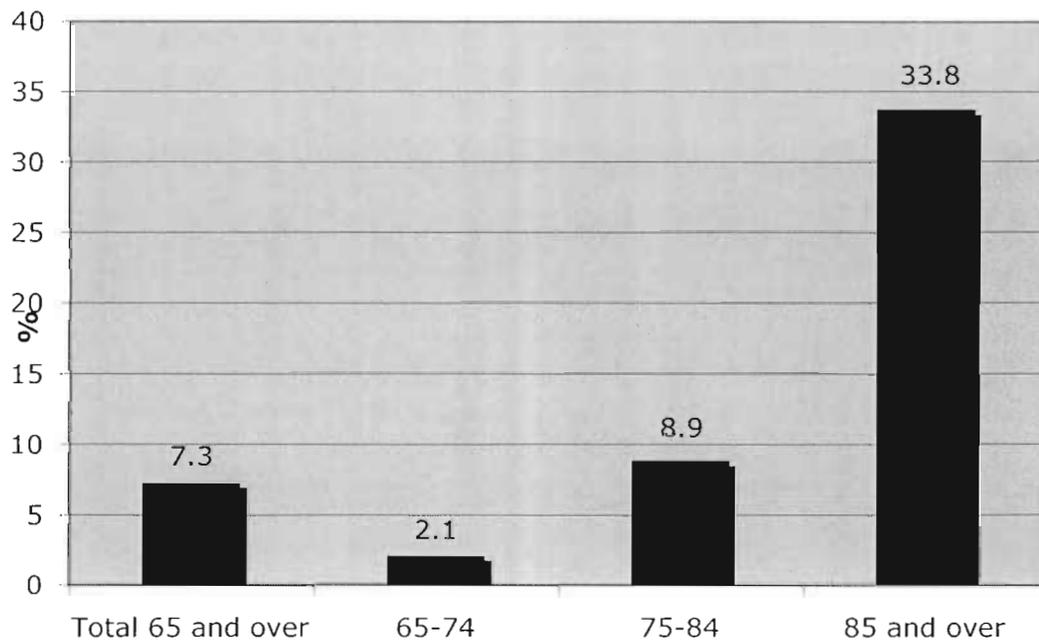
Canada, along with most of the Western world, is experiencing the effects of population aging, defined as the extent to which a population's age structure is distributed in the older cohorts as a consequence in increased life expectancy and decreased fertility rates (McPherson, 2004). According to Statistics Canada (2002a, cited in McPherson, 2004), it is expected that by the year 2031 the number of individuals over 64 years of age in Canada will increase from 13% to 25% of the Canadian population. Given this rapid increase, the number of older adults living in long-term care (LTC) facilities can also be expected to rise dramatically. This is especially likely since the population over 84 years is the fastest growing age group in Canada (see Table 1.1) and it is this group that is most likely to require long-term care (see Table 1.2).

Table 1-1 Population aged 85 and over as a percentage of all seniors



Data Source: Statistic Canada, 2006

Table 1.2: Percentage of the population living in an institution by age in 1996.



Data Source: Statistic Canada, 2006

In 1996, the actual number of individuals residing in LTC facilities in Canada was reported to be 240,000 (National Advisory Council on Aging, 1999). It is estimated that approximately 25% of elderly individuals in Canada will reside in a LTC facility at some point during their lives (Conn, 2002). Therefore, projections suggest that the number of individuals who require care in LTC facilities will triple or even quadruple by the year 2031 (Conn, 2002). It is clear that adopting and implementing management initiatives and models of care that effectively enable formal caregivers to provide high quality, individualized care within LTC facilities has never been more important.

1.1.2 Meeting the Needs of the Residents: The Provision of Individualized Care in Long-term Care Settings

Historically, the medical model has dominated the provision of care in LTC settings. Within this medical (or biomedical) model, the focus of healthcare is getting the patient to take the prescribed treatment or to carry out whatever behaviour is required of them by professionals (Crow, 2004). Furthermore, Crow (2004, p 22) states that “the philosophy of this approach is captured by the term 'compliance', which implies the need for obedience on the part of the patient (i.e., patient recipient of care), and assumes a marked power differential in favour of the professional in the patient/professional practitioner relationship.” The dominance of this model has therefore ensured that the care within these facilities has been provider driven (i.e., care that is organized based on care provider routines with a primary focus on achieving medical goals). Recently, however, there has been a slight paradigm shift away from the medical model

towards social models of care that are more person-centred, holistic in nature, and aimed specifically at increasing the provision of individualized care (i.e., care that is based on the individual care recipient's needs and preferences with a primary focus on a holistic approach to wellness). This shift has largely been operationalized through the development and implementation of management initiatives that are often referred to as culture-change models (e.g., Wellspring, Eden Alternative, Person-Centred Care in LTC settings). However, systematic evaluation of the effectiveness of these models on resident outcomes in LTC facilities has provided mixed results (Stone, Reinhard, Bowers, Zimmerman, Phillips, & Hawes et al. 2002; Ransom, 2000; Coleman, Looney, O'Brien, Ziegler, Pastorino, & Turner 2002). For example, Stone and colleagues (2002) found no improvement in quantitative clinical outcomes when evaluating the effectiveness of the Wellspring model, and Coleman and colleagues (2002) found no beneficial effects for residents' functional status and rate of infection when evaluating the effectiveness of the Eden Alternative.

It should also be noted that research has often focused more on managers' expectations and philosophies of care in conjunction with an examination of facility policies and procedures (i.e., paper compliance) rather than engaging in a detailed examination of the actual delivery of care (Davis, 1991; Chappell, Reid, & Gish, 2006). A discernable limitation of existing studies is that they are unable to ensure that the care provided in LTC facilities is congruent with the philosophy espoused by the administrator. This point is underscored by Zimmerman and colleagues (1997) who reported that, except with respect to restraint use, weak

relationships exist between espoused administrative philosophy and the observed care in LTC settings.

1.1.3 Enabling the Provision of Individualized Care: Meeting the Needs of the Care Aides in LTC Settings

Care aides (also referred to as nursing assistants, nurses aides, and personal care attendants) provide between 80% and 90% of direct resident care and thus play a central role in determining whether or not individualized care is provided (Kane, 1994). Consequently, when attempting to best meet the needs of residents we must also look at how to best meet the needs of care aides so as to consistently enable them to provide quality, individualized care. Looking at ways to support these formal caregivers may be especially important since they are generally minimally educated, often minority women, who are poorly trained and invariably poorly compensated (Blair & Glaister, 2005). In addition, care aides typically have great responsibilities yet lack both authority and autonomy (Stone & Yamada, 1998). This was emphasized by Kane (1994, p. 71) who stated that care aides “often have at least one thing in common with their clientele: perceived and actual lack of power.” Research indicates that issues such as insufficient reward and pay incentives, limited promotional opportunities, long hours, and the absence of independent decision making and autonomy, combined with work that is characterized as being depressing and physically exhausting are causal factors for high turnover rates of care aides in LTC facilities (Cohen-Mansfield, 1997).

Alternatively, Bowers, Esmond, and Jacobson (2003) found that it was not necessarily the hard work or poor pay that caused turnover; rather, it was the way in which care aides were treated by their employers (i.e., feeling dismissed or insignificant due to organizational policy and practices). Due to these and other variables, annual turn-over rates of care aides in LTC facilities within the United States usually range from 40% to 75% with some reaching 500% (Cohen-Mansfield, 1997; Konetzka, Stearns, Konrad, Magaziner, & Zimmerman, 2005; McDonald, 1994). Unfortunately, statistics regarding turn-over rates of care aides in Canada are not readily available; however, statistics pertaining to the shortage of care aides have received attention on both national and global levels (Stone, 2001).

Given these staggering statistics, several studies have been conducted to review programs aimed at decreasing care aide turnover rates in LTC. For instance, Banaszak-Holl and Hines (1986) found that nursing homes in which the nursing staff accepted the aides' advice or simply discussed care plans with care aides reported turnover rates 30% lower than those in which this did not occur. In addition, LTC facilities, which included care aides in the care conferences, reported turnover rates 50% lower than facilities without this practice. Moreover, several studies have found that including care aides in the process of developing and implementing interventions has been the most powerful predictor of the success and maintenance of those interventions (Hawkins et al., 1992; Schnelle, Neuman, & Fogarty, 1990).

When reviewing the literature to further determine how managers might best provide support to front-line caregivers, the literature frequently indicates that demonstrative interactions between administrators and care aides are most important. This is underscored with findings published in *Nursing Home Exemplars of Quality* by Tellis-Nayak (1988). This book identified the common features of eight 'model' nursing homes, all of which were recipients of the coveted Six Star Award from the Quality Incentive Program (QUIP) in the US. The most prominent feature of each of these homes was an administrator who 1) nourishes employees egos (e.g., providing consistent and persistent praise); 2) constantly rewards achievement; 3) assists with front-line caregiving when needed; 4) offers temporary financial assistance to care aides when needed; and 5) spends time directly with residents, family members, and *all* levels of staff. The recommendation to administrators to adopt *each* of these characteristics was reiterated by Bowker (1982) in his book *Humanizing Institutions for the Aged*. Furthermore, the management style of the organization has been identified as the most important predictor of higher job satisfaction and lower turnover rates for care aides (Tellis-Nayak, 1988; Waxman, Carner, & Berkenstock, 1984). It has also been found that when administrators fail to attend to caregivers' needs, they passively foster cold and impersonal feelings and interactions between caregivers and residents (Sheridan, White, & Fairchild, 1992).

Finally, Stone (2003) informs us that the nature of the interpersonal relationship between caregiver and resident could be considered to be a 'barometer' of the quality of care and quality of life provided in the facility. If this is the case, then it

may be that the most direct way to establish lasting cultural change and effective individualized care is to focus on the quality of the relationships among staff, residents and family members, and to ensure that each conveys a caring and respectful attitude towards the other. Rader and Semradek (2003) concluded that the best way to ensure that front-line caregivers respect residents' rights and listen to residents' preferences is for managers to ensure that front-line caregivers are respected and that their decision making roles are supported. This was reiterated by Tellus-Nayak (2007) who found that supportive managers who create a person-centred workplace enable caregivers to actively increase the provision of person-centred care they provide, thereby, increasing the quality of life of the residents they serve.

1.1.4 Care Provider Access to Structural Empowerment and the Provision of Individualized Care in LTC Settings

The traditional hierarchical medical model ensures that staff with the highest education, salary, and position remain furthest from direct contact with residents. As a result, those in LTC facilities with the least resident contact have the most control in determining care decisions. Care aides, on the other hand, provide between 80% and 90% of all care given to residents in LTC facilities, yet receive the least amount of training, the lowest pay in healthcare, and are rarely consulted when care decisions are being made and implemented (Kane, 1994; Stone, 2001; Stone & Yamada, 1998; Blair & Glaister, 2005). Currently, care aides possess the greatest ability to enable or impede resident autonomy through the consistent provision of individualized care while, at the same time,

they are afforded the least amount of autonomy within the organization. When asked what they most need and want, care aides repeatedly state that they want to be respected, to be recognized and rewarded for high quality care, and to be included in the care plan development process and care conferences (Deutschman, 2001; McGilton, 2002). When viewed from the perspective of Kanter's theory of empowerment (1979) it seems clear that each of these requests is directly related to a lack of access to *empowerment structures* (i.e., access to informal power, formal power, information, support, resources, and opportunity structures) in LTC facilities.

Furthermore, when LTC facilities attempt to implement organizational policies aimed at increasing or improving the provision of individualized care without addressing issues related to care aide access to structural empowerment, care aides often experience a heightened sense of role incongruity. Role incongruity can lead to a significant increase in turnover, resistance to and undermining of change, and decreased organizational commitment—each of which has been found to be negatively associated with resident outcomes (Anderson, Issel, & McDaniel, 2003; Barry, Brannon, & Mor, 2005; Stone, 2001). This finding is echoed by Bowers, Esmond, and Jacobson (2003, p.39) who found that care aides commonly identified the “gulf they saw between organizational rhetoric and organizational policy, rather than the policies themselves” as the reason they left their jobs.

Finally, it is important to note that, within LTC facilities, care aides are most often directly supervised by RNs and LPNs within well-defined care teams. As the

immediate managers of the care aides, they may both directly and indirectly influence the provision of individualized care. According to Kanter (1979), managers who have access to organizational empowerment structures (i.e., access to information, support, resources, and opportunity structures) are more likely to be highly motivated and, in turn, be better able to motivate subordinates. Furthermore, Kanter states that empowered managers tend to relinquish the need to control subordinates and are therefore better able to gain their respect and cooperation. Finally, empowered managers view subordinates' talents and skills as resources rather than threats and therefore encourage subordinates to function with more independence by enabling adequate access to support, resources, and information (Kanter, 1979). Alternatively, Kanter (1979) states that disempowered managers and supervisors tend to engage in overly close supervision, make decisions based on rule-mindedness and engage in petty, dictatorial managerial styles. Consequently, a subordinate's ability to access empowerment structures within an organization seems largely dependent upon his/her supervisor's and manager's ability to access empowerment structures. It is therefore reasonable to conclude that the goal of improving the provision of individualized care in LTC facilities can never be fully achieved unless RNs, LPNs, and care aides all have adequate access to empowerment structures within LTC facilities.

1.2 Purpose of Research and Research Questions

The primary purpose of this thesis was to explore the potential relationship between care provider access to structural empowerment and the provision of

individualized care in LTC facilities. The research questions include the following:

1) Does the implementation of a specific model of care in LTC facilities influence care providers' access to structural empowerment and the provision of individualized care in LTC facilities?; 2) Do RNs, LPNs, and care aides describe themselves as having access to structural empowerment in LTC facilities?; 3) Do certain observable variables (i.e., opportunity, support, resources, information, formal power and informal power) have a stronger association than others regarding RNs, LPNs and care aides' perceptions of access to structural empowerment?; 4) Is there a difference between RNs and LPNs' reported access to structural empowerment and care aides' reported access to structural empowerment in LTC facilities?; 5) Is there a direct association between RNs, LPNs and care aides' access to structural empowerment and the reported provision of individualized care in LTC facilities?; and 6) If a direct association exists, is the relationship between access to structural empowerment and the reported provision of individualized care different for RNs and LPNs as compared to care aides?.

It is hoped that findings from this study will foster an increased understanding of organizational behaviour that can impact supervisory and front-line care staffs' ability to provide individualized care within LTC facilities. Subsequently, support for the study hypotheses could lead to the development of system-wide quality improvement initiatives that specifically enhance care provider access to structural empowerment and positively influence the provision of individualized care.

CHAPTER 2: LITERATURE REVIEW

2.1 History of Long-Term Care Facilities

When considering the quality of life in LTC facilities, it is prudent to review the historical evolution of institutional living environments—thereby gaining a more accurate frame of reference from which to draw conclusions and propose change. A review of this history reveals societal values that have been grossly oppressive and discriminatory against individuals unable to be productive members of the paid labour force.

Prior to the Great Depression, the primary form of public support available to the destitute elderly came from within institutions (called poor houses, work houses, or almshouses) whose guiding principles were derived from the English Poor Laws, instituted in the 1600s and later revised in the 1800s to ensure that the quality of life in these institutions would be less pleasant than that experienced by the lowest working class citizens (Emodi, 1977). Therefore, only the absolute essentials necessary for minimal maintenance of the individual were provided in these institutions (Forbes, Jackson, & Kraus, 1987). Unfortunately, it seems that the English Poor Law system has exerted the greatest single influence on the evolution of LTC in Canada (Emodi, 1977).

It was in the 1920s that the first 'private hospitals' were opened for the elderly. These facilities provided little more than food, shelter and minimal nursing care, and were often run by nurses forced to supplement their income by opening up

their homes to patients (Forbes et al., 1987). According to Emodi (1977), these hospitals provided the link between poor houses and modern-day nursing homes. The fact that these homes were labelled as hospitals is poignant, especially when reviewing *the medicalization of long-term care*—a phrase used to indicate that the cultural meanings of aging and disability have been increasingly defined and maintained through social structures associated with medical professions, primarily physicians (Redfoot, 2003). It is also important to note that it was not until 1978 that the accreditation of LTC facilities was implemented (Canadian Council on Health Services Accreditation, 2005). Up to this point, no quality assurance surveys specific to LTC facilities existed; therefore, it may be safe to assume that LTC *hospitals* would have been surveyed under the same standards developed for acute care settings—the Minimum Standards for Hospitals developed by the American College of Surgeons in 1918 (Canadian Council on Health Services Accreditation, 2005). Further to this, until recently the emphasis in training of physicians and other health professionals was placed almost exclusively on curing patients within acute care settings (Forbes et al., 1987). The combined effect of having LTC facilities first evaluated based on standards developed for acute care settings and having physicians primarily trained to meet the needs of acutely ill patients may be a causal factor underpinning the culture of LTC facilities remaining so deeply entrenched in the medical model.

According to Bowker (1982, p.52), “Medical-model dominance means that the social life of the institution and the private lives of the residents are rigidly

organized to ease the achievement of medical goals". Thus, the medical model inhibits the provision of individualized care and ensures that the care received in LTC facilities remains primarily custodial in nature. Furthermore, this custodial care provided within the medical model tends to produce docility and compliance in the elderly because "docile and compliant people are far easier to care for than independent individuals" who may challenge the authority of the prescribed routine and medical professionals (Bowker, 1982, p.31). For the past decade, it has been widely acknowledged that the medical model does not adequately meet the needs of the institutionalized elderly and that a cultural change is required within LTC.

2.2 Culture Change Models in Long-Term Care

Culture has been defined as, "the combination of symbols, language, assumptions, and behaviours that overtly manifest an organization's norms and values" (del Bueno & Vincent, 1986). It is within an organization's culture that one can find the most powerful influences on the behaviour of its members. Culture includes both implicit and explicit 'contracts' that dictate what is expected of members and defines the rewards or sanctions associated with compliance or non-compliance (del Bueno & Vincent, 1986). Furthermore, cultural norms have been found to be more effective in influencing behaviour than formal control systems, such as written policies/procedures or supervisory monitoring (Gibson & Barsade, 2003).

The cultural change that has been called for in LTC is based primarily on a movement away from the hierarchal medical model towards a social model of

care that is resident-centred and individualized. Individualized care refers to an interdisciplinary approach that acknowledges residents as unique, autonomous persons and is practiced through consistent caring relationships (Chappell, Reid, & Gish, 2006). Furthermore, individualized care may be said to characterize the desired outcome of the required cultural change in LTC settings in that it takes into account resident individuality, incorporates resident participation into care plan decision-making, and ensures a more holistic approach to wellness (Happ, Williams, Strumpf, & Burger, 1996).

In the 1990s, several models of care were developed in recognition of the need for cultural change in LTC. The following is a review of four models that have each been developed and implemented to increase the provision of individualized care to residents of LTC facilities.

2.2.1 Person-Centred Care

Probably the first model to introduce the concept of individualized care in LTC facilities, and certainly a precursor and foundation upon which a multitude of others have been developed, is person-centred care. The person-centred approach originated from the work of Carl Rogers, a psychotherapist who developed the 'client-centred approach' to psychotherapy in the 1950s (Kirschenbaum, 2004). An important aspect of the client-centred approach is the therapeutic benefit of positive interpersonal interactions. The conditions that influence positive change include having a therapist who provides unconditional positive regard, is empathetic, and is genuine or congruent within the client-therapist relationship. The term *person-centred* evolved out of the work

conducted by Rogers and his colleagues at the Center for Studies of the Person in the 1970s (Kirschenbaum, 2004).

This person-centred approach was later adopted and applied to dementia care in LTC settings as described in *Dementia Reconsidered: Person Comes First* by Tom Kitwood (1997). In his book, Kitwood discusses a philosophical approach to formal caregiving that uses the residents' unique personal preferences and needs to guide caregivers, thus enabling the individualization of care plans and care routines (Boise & White, 2004). Additionally, a central feature of person-centred care is the recognition that all human life, including people with dementia, is grounded in relationships, and that people with dementia need an enriched social environment that fosters opportunities for personal growth while compensating for their impairment (Brooker, 2007). Although Kitwood's book focuses primarily on persons with dementia, it is important to note that person-centred care is a model that is also believed to benefit LTC residents without cognitive deficits.

Attempting to conduct a thorough literature review of person-centred care proves to be somewhat challenging because the key elements and philosophy of person-centred care have been described using a broad-spectrum of terms (e.g., resident-centred care, individualized care, consumer-directed care, patient-centred care, and self-directed care). Each of these terms seems to share concepts and definitions that are philosophically congruent with the term person-centred care (Talerico, O'Brien, & Swafford, 2003).

The key elements of person-centred care include 1) knowing the person as an individual; 2) providing care that is meaningful to the person in ways that respect his/her values, preferences, and needs; 3) viewing residents as bio-psychosocial beings; 4) enabling the development of consistent and trusting caregiving relationships; 5) emphasizing freedom of choice and individually-defined risk taking; 6) promoting emotional and physical comfort; and 7) involving residents' family, friends, and social networks in care decisions (Talerico et al., 2003). According to Boise and White (2004), LTC facilities that profess to deliver person-centred care should be implementing nursing routines that are individualized to each resident's unique preferences. These include enabling residents to go to bed when they like, eat what and when they prefer, bathe or shower based on personal needs and preferences, celebrate life events consistent with personal lifelong traditions, and interact with friends and family members in ways that are meaningful and important to them (Boise & White, 2004).

According to Williams (1989, as cited in Walker et al., 1999), individualized care plans developed on the basis of person-centred care focus on the specific needs of the individual by 1) ensuring that each resident is treated as an autonomous adult; 2) encouraging independence; 3) enabling freedom of movement; and 4) giving residents the right to make decisions regarding their daily lives. The implementation of such care plans is believed to produce positive results for the recipients of care. Although the previously described elements of person-centred care describe what care facilities should be striving for, the reality as to whether

or not these lofty aspirations can be implemented in real life has been challenged (Lutz & Bowers, 2000; Hagenow, 2003).

Review of the literature indicates that successful implementation of person-centred care is dependent upon whether or not the culture of the facility continues to be based on the medical model (Talerico, O'Brien, & Swafford, 2003; Walker, Gruman, & Michalski, 1999). Failure to successfully implement and sustain person-centred care has been repeatedly found in facilities that have not successfully redressed pre-existing organizational and staffing factors (Hagenow, 2003; Talerico et al., 2003).

2.2.2 Eden Alternative

The Eden Alternative was developed by William Thomas in 1992 in an effort to transform life in a New York State nursing home by addressing 'the three plagues'—residents' feelings of loneliness, helplessness, and boredom. Facilities that implement this model create what is called a 'human habitat' to enable residents to have consistent and frequent contact with plants, animals, and children (Thomas, 2003). A central tenant of this model is that it attempts to increase the provision of individualized care by removing the hierarchy of the medical model and placing more authority into the hands of the residents, the family and care aides (Barba, Tesh, & Courts, 2002; Thomas, 2003).

A review of the literature finds that the implementation of the Eden Alternative does not consistently produce the desired positive culture change nor does it consistently ensure the provision of individualized care. For example, based on their anecdotal evidence, Hinman and Heyl (2002) reported strong support of the

Eden Alternative; however, no statistically significant differences were found between Minimum Data Set (MDS) indicators for physical function, social function, mental function, emotional function, or use of restraints within their study.

Additionally, Ruckdeschel and Van Haitsma (2001) conducted a study in which the impact of the *living habitat* aspect of the Eden Alternative was examined. Baseline measures were initially taken and follow-up data were obtained six months after the implementation of the specified Eden Alternative interventions (i.e., systematic introduction of plants and animals to the environment). Regression analyses found that neither measures of satisfaction with care, boredom, loneliness, quality of care, pleasure, interest, anger, anxiety, sadness, confusion, nor very negative verbalizations were significantly affected by implementation of the Eden Alternative. The only factors found to significantly change were measures of perceived control and positive engagement. While measures of positive engagement were positively associated with the interventions, measures of control were actually found to be negatively associated with them. The authors of this study concluded that, "There is no reason to expect that an intervention involving animals and plants would have a greater effect across the board than any other well-conceived psychosocial intervention," (Ruckdeschel & Van Haitsma, 2001). Finally, Bergman-Evans (2004) conducted a study to determine whether or not the Eden Alternative actually influenced residents' feelings of loneliness, helplessness, and boredom. In this study, Bergman-Evans compared 21 cognitively intact residents from an

Edenized facility to 13 residents in a private LTC facility. This study found no change in the level of loneliness from baseline to follow-up for the Eden group; however, statistically significant differences were found between the groups on levels of boredom and helplessness.

Although some studies have produced mixed results, some studies have actually produced findings that clearly do not support the ability of the Eden Alternative to produce positive cultural change. For instance, Brooke and Drew (1999) conducted a study to determine the longitudinal effects of the Eden Alternative and found no improvements in staff turnover, ratings of self-esteem, job attitude, job satisfaction, and organizational environment. Furthermore, Coleman, Looney, O'Brien, Ziegler, Pastorino, and Turner (2002) conducted a study to examine the effects of the Eden Alternative on quality of life of nursing home residents by comparing an Edenized facility to a control facility from the same organization. Coleman and her colleagues found that a year after the implementation, the Eden site had significantly greater proportions of residents who had fallen within the past 30 days as well as higher proportions of residents experiencing nutritional problems (it should be noted, however, that these results are likely due to the increased choice that is afforded to residents who live in Edenized facilities, e.g., freedom of movement and freedom of choice regarding nutritional intake). Additionally, it was found that the Eden site reported higher staff turnover rates than the control facility.

Finally, proponents of the Eden Alternative indicate that it is only recommended for facilities with minimal problems, open communication, good team work, and

full support of administration (Sampsell, 2003; Texas Long Term Care Institute, 2005). It is fair to state that these qualities would be required of any organization to successfully implement cultural change; however, if these are actual *prerequisites* to successful implementation of the model, it seems that the LTC facilities most in need of change may be the least able to benefit from its implementation. Even William Thomas has acknowledged that, “The Eden Alternative frequently fails to take root in an organization that embraces the philosophy” (2003, p. 144). It is perhaps because of the many unsuccessful attempts to implement the Eden Alternative in its entirety that it has subsequently been reported that Thomas has decided that most nursing homes are actually too ‘broken’ to be fixed (Hayeden, 2004). As a result, in 2003 Thomas developed the Green House Project—an initiative that replaces the large, institutional nursing home with small, family-style homes in which 8 to 10 individuals in need of skilled nursing care reside.

2.2.3 Gentlecare

Gentlecare is a resident-centred approach to dementia care developed by Moyra Jones. It was adopted, adapted, and disseminated by the British Columbia Ministry of Health in the early 1990s and has been sporadically implemented across the province since that time (Gnaedinger, 2003). The Gentlecare system is based on staff education and consultation, and consists of seven training modules (Jones, 1996). Central features of the Gentlecare model include the recognized importance of 1) assessments to create individualized care plans; 2) lowering resident-staff ratios; 3) staff education; 4) permanent staff assignments;

5) adaptation of the physical environment; and 6) including family members in the care team (Jones, 1996). Unfortunately, a review of the literature indicates that there are currently no published studies evaluating the Gentlecare model.

2.2.4 Wellspring Innovation Solutions for Integrated Health Care

The Wellspring Innovative Solutions for Integrated Health Care (Wellspring) model was developed in 1994 by a consortium of 11 independent, freestanding, not-for-profit nursing homes located in Wisconsin, USA. Together, these nursing homes formed an alliance and created Wellspring as a proactive response to the seemingly universal trends of decreasing reimbursement, limitations in human resources, increases in acuity of resident healthcare needs, and increases in consumer demand for quality care (Kehoe & Van Heesch, 2003; Stone, Reinhard, Bowers, Zimmerman, Hawes, Fielding, & Jacobson, 2002). This alliance was originally formed in an effort to decrease staff turnover and remain competitive by successfully adapting to a managed care environment. According to Stone and colleagues (2002), the primary purposes of the Wellspring model were to make LTC facilities better places to live for residents *and* better places to work for staff. Improving the living environment was to be accomplished by improving clinical care. Improving the working environment was to be accomplished by providing employees the skills they needed to do their jobs, enabling front-line caregivers to voice how their work should best be performed, and enabling and encouraging all staff to work as a team to advance common goals.

The Wellspring model is designed to improve the quality of care for residents while simultaneously prompting cultural change. What sets this model apart is its explicit focus on *both* improved clinical quality of care for the residents while simultaneously addressing environmental and cultural changes for the staff who care for them (Stone et al., 2002). Wellspring provides a model which not only defines the need for increased recognition of front-line staff, but specifically describes ways to ensure that their input is valued and utilized.

Review of the study by Stone and her colleagues (2002) indicates the greatest obstacles to Wellspring implementation apparently occur when 'nonalignment' is found between decision making processes related to the Wellspring care resource teams and decision making authority by facility administrators. The result of this nonalignment has been found to undermine implementation and foster frustration among front-line staff. As a result of this finding, Stone and colleagues (2002) concluded that the model currently does not provide sufficient concrete information regarding the role of administrators in the implementation of the model.

2.2.5 Summary and Conclusion

This review indicates that each of these models developed to improve provision of individualized care requires further empirical evaluation and that each possesses limitations that influence its ability to produce positive changes to the culture of LTC facilities. Furthermore, the literature indicates that, irrespective of the development of these models of care, the medical model still predominates in LTC facilities. Therefore, it is presumed that the implementation of one of the

reviewed models of care does not significantly influence care providers' reported ability to provide individualized care. This review also elucidates the challenges researchers face when attempting to operationalize and study a concept as complex as 'quality of life' and when attempting to adequately define and measure the provision of individualized care within environments as dynamic as LTC facilities.

When attempting to draw conclusions or make recommendations, it seems that what is most important is achieving the correct balance between the desired cultural change and the environmental and social realities, rather than attempting to find the ideal model. The congruence model proposed by Nadler and Tushman (1980) emphasizes this. According to these authors, organizations will be effective only to the degree that their internal components—the way tasks are organized, the informal ways that people relate to each other (e.g., culture), formal structure, policies and procedures, and the characteristics of the organization's employees—are congruent (Nadler & Tushman, 1980). Furthermore, before practice can be changed or innovative approaches implemented, organizational culture must be able to *support* the changes (Rader & Semradek, 2003). The literature consistently concludes that the deciding factor in determining whether environmental or cultural change hurts or strengthens an organization is how managers respond to and navigate those changes (Gibson & Barsade, 2003). Consequently, theories of organizational behaviour provide the theoretical foundation for this study.

2.3 Theoretical Literature

2.3.1 Culture Change in Organizations

Culture change in organizations involves a multitude of changes among many elements, which combine to reflect new patterns of values, expectations, and norms (Kanter, 1984). Therefore, culture change in organizations is not an easy process; rather, it is a demanding, complicated and difficult effort that may or may not succeed (Trice & Beyer, 1993). According to Kanter, (1984, p. 196), “A few examples of new practices here and there throughout an organization do not represent *culture change*; they need to be woven into the entire fabric of the system.” Trice and Beyer (1993), describe culture change as an inherently disequilibrating process, involving a noticeable break with the past as well as changes in both ideologies and cultural forms (e.g., symbols, rituals, rites of passage, and language). In *The Cultures of Work Organizations*, Trice and Beyer (1993) identified three types of cultural change: 1) relatively fast, revolutionary, comprehensive change; 2) subunit or subcultural change; and 3) gradual cumulative and comprehensive reshaping of culture. They also described four dimensions of change processes that help to clarify and describe the amount of change involved in a planned change in organizational culture. These dimensions of the change process include the following: 1) pervasiveness, or the proportion of the activities in an organization that will be affected by the change (e.g., number of members expected to change behaviours and how frequently the changed behaviours are expected to occur); 2) magnitude, or the distance between the old and new behaviours, expectations and understandings; 3)

innovativeness, or the degree to which the changed ideas and behaviours are unprecedented and novel; and 4) duration, or the length of time the process of change is likely to take, and how permanent the change is expected to be. According to Trice and Beyer (1993), the level of resistance or acceptance by members of the organization to the culture change is dependent upon the intensity of the pervasiveness, magnitude, innovativeness, and duration of the change.

Trice and Beyer (1993) found that people resist culture change for many specific reasons. At the individual level, people resist change due to fear of the unknown, self-interest, habit, need for security, and selective attention and retention of information. At the organizational or group level, resistance to change occurs due to different perceptions and goals, resource limitations and allocation, lack of trust and threats to power and influence (Trice & Beyer, 1993). Review of the literature also indicates that employees' perceptions of their relationship with the organization exert a significant influence on their response to organizational change (Barker & Camarata, 1998; Clampitt & Downs, 1993; Barker & Barker, 1994).

Barker and Camarata (1998) propose that organizations can only build effective relationships with their employees if certain conditions are met. They suggest that these conditions are expressed in the level of trust, commitment, organizational support and the kinds of communication embedded in each of these as experienced in the employee's work life. According to Barker and Camarata (1998), trust is said to be based upon a congruence between an

organization's statements about itself—often expressed in its mission statement—and the way managers and employees interact orally, nonverbally and in writing. Commitment can be described as the extent to which employees feel obligated or emotionally compelled to engage in activities previously agreed upon. Furthermore, commitment is displayed in the ongoing actions between an organization and its members; when employees perceive a high level of commitment from an organization, their affective attachment to that organization is enhanced, which is demonstrated by an increase in effort. Additionally, perceived organizational support is said to reinforce positive employee identification with the firm and to greatly influence employee interpretation of the intentions and motives of the firm (Barker & Camarata, 1998).

It is clear that culture change in organizations is a complex process. Consequently, it is prudent to turn to Senge's theory of organizational change to more fully understand these dynamic complexities and to gain insight as to how to successfully achieve meaningful, system-wide change.

2.3.2 Senge's Fifth Discipline: A Shift of Mind

In *The Fifth Discipline: The Art and Practice of the Learning Organization*, Senge (1990) states that "organizations learn only through individuals who learn" (p. 139). As such, organizations must enable the development of five interconnected capacities, called disciplines, in its members in order to achieve meaningful change. These core disciplines include 1) personal mastery—a strong sense of personal vision combined with a commitment to tell the truth; 2) questioning mental models—questioning subconscious, taken-for-granted beliefs that may

limit thinking about how the world works; 3) shared vision— vision that is never imposed, rather it is the amalgamation of the personal visions of members to achieve buy-in and ensure that this vision is understood and owned by all members; 4) team learning—utilizing the greater intelligence of the whole rather than individual members to create coordinated actions; 5) systems thinking— becoming aware of, and responding to, the complexities of the interconnections that create wholes.

Systems thinking encourages individuals to focus on dynamic complexities. According to Senge (1990), focusing on the dynamic complexities of organizations enables a restructuring of how we think due to our increased awareness of the possibility that obvious interventions can often produce non-obvious consequences. Senge also described the concept of *balancing systems*—systems that seek stability and maintain the status quo due to explicit and implicit resistance to change. According to Senge (1990), resistance to change inevitably arises when norms and traditional ways of doing things are threatened. He further posits that norms become entrenched because the distribution of authority, control and power is entrenched. Therefore, if organizational change is to occur, implicit norms and the power relationships within which the norms are embedded must be addressed (Senge, 1990). Kanter's theory of structural empowerment is, therefore, included as a key theory within the theoretical foundation of this study.

2.3.3 Kanter's Theory of Structural Empowerment

According to Kanter (1979), individuals' attitudes and behaviours are shaped primarily in response to their positions within an organization; therefore, socialization experiences and personality predispositions are considered to be less influential on behaviours than the situations that arise due to one's position within an organization. One of the defining features of an individual's position is the amount of access s/he has to both formal and informal power. *Formal power* is derived from positions that are relevant to key organizational goals, allow discretion, and provide recognition. *Informal power* is derived from the quality of alliances and relationships with people in the organization. Furthermore, people with formal and informal power are in positions that facilitate access to organizational empowerment structures that enable them to accomplish their work-related goals (Brown & Kanter, 1982; Kanter, 1979).

Kanter described three empowerment structures—the structure of opportunity, the structure of proportions and the structure of power. The *structure of opportunity* refers to access to new challenges, opportunities to increase knowledge and skills, and opportunities for growth and advancement within the organization. The *structure of proportions* refers to the social composition of people in approximately the same position—individuals who are an extreme minority are said to have token status and therefore lack access to sources of power (Fairhurst & Snavely, 1980; Izraeli, 1983). The *structure of power* within organizations refers to access to three lines of power—lines of supply, lines of information, and lines of support. *Lines of supply* refer to the ability to exert influence outward and thus bring needed and valued resources into one's

organizational domain. *Lines of information* pertain to timely access to information about organizational decisions and policy changes that may directly or indirectly affect one's organizational domain. *Lines of support* refer to guidance and feedback received from subordinates, peers, and supervisors to enhance effectiveness (Kanter, 1979; Laschinger, 1996).

According to Kanter (1979), having access to information, support, resources, and opportunity structures in an organization empowers individuals to contribute constructively and effectively to the attainment of the organizational goals. Furthermore, individuals who have access to these structures motivate and empower others by sharing these sources of power. Alternatively, individuals in organizations who lack access to these structures see themselves as accountable without power. This, in turn, creates feelings of frustration and failure, which leads them to attempt to decrease other's power by exerting dictatorial control over individuals below them in the organizational hierarchy. Kanter (1979) proposes that the best way to make ineffective individuals more productive is not by training or replacing them, but by making structural changes in the organization that enable them to have access to empowerment structures (e.g., access to resources, access to higher-level managers, and increased control over working conditions and flexibility). She concludes by stating that the process of getting and giving power is inextricably intertwined and that the most effective way to expand power is to share it.

When Kanter developed this theory, her primary concern was power as it relates to issues of gender in middle and upper levels of management in large

organizations (i.e., the introduction of women into traditionally male positions in the corporate workplace). It is interesting to note, however, that a review of the literature indicates that the application of Kanter's theory of structural power as an organizing framework has been limited primarily to the field of nursing. The influence of this theory on the field of nursing may be due, at least in part, to the frequent use of Laschinger's (1996) model and instruments, which operationalize nurses' experiences of power in healthcare settings based on Kanter's theory.

Studies of nurse empowerment have used Kanter's theory to explore relationships between empowerment of registered nurses (RN) in acute care settings and a wide range of outcomes including job satisfaction (Hartmann, 1982; Laschinger, 1996; Laschinger, Finegan, & Shamian, 2001), organizational commitment (Laschinger et al., 2001; McDermott, Laschinger, & Shamian, 1996; Wilson & Laschinger, 1994), organizational trust (Laschinger, Finegan, Shamian, & Casier, 2000; Laschinger et al., 2001; Laschinger & Finegan, 2005), accountability (Laschinger & Wong, 1999), decision involvement (Laschinger, Sabiston, & Kutzcher, 1997), job strain (Laschinger, Finegan, Shamian, & Wilk, 2001), innovative change (Dee & Poster, 1995), and work place behaviours (Laschinger & Sabiston, 2000). Additionally, two studies used Kanter's theory to explore issues pertaining to job satisfaction (Mullins, Nelson, Busciglio, & Weiner, 1988) and organizational commitment (Beaulieu, Shamian, Donner, & Pringle, 1997) among licensed and registered nurses in LTC facilities. Finally, one study applied Kanter's theory to explore the relationship between empowerment of nurse aides and staff stability on resident outcomes (Barry, Brannon, & Mor,

2005). Results of these studies generally support the theory and suggest that access to empowerment structures related to power and opportunity in one's position is significantly related to organizational commitment, job satisfaction, burn out, job autonomy, work effectiveness, participation in organizational decision making, and self-efficacy. Missing from the literature, however, are studies comparing RN/LPN access to empowerment structures and care aide access to empowerment structures in healthcare settings. Additionally, no research to date has been undertaken to further our understanding of the potential relationship between RN/LPN and care aide access to empowerment structures in LTC facilities and the provision of individualized care.

Kanter's theory focuses primarily on issues of power and powerlessness as they relate to minority individuals within organizations and who hold middle management positions within organizations. The focus of this study is on issues of power and powerlessness as they relate to both supervisors (e.g., Registered Nurses and Licensed Practical Nurses) and front line staff (e.g., care aides) in relation to the provision of individualized care; therefore, relevant theories that address issues of powerlessness of front line staff within organizations must also be reviewed. Consequently, Homburg, Workman and Jensen's (2000) customer-focused organizational structure are also included as part of the theoretical foundation of this study.

2.3.4 Homburg, Workman, and Jensen's Customer-Focused Organizational Structure

According to Homburg, Workman, and Jensen (2000), the defining quality of a corporation's organizational structure is derived directly from decisions about coordination of activities, culture, structure and the distribution of power. In recent years, many corporations have reshaped their organizational structures to enable core processes to become more responsive to the needs of their customers (Ford, Fottler, & Maier, 2000; Slater, 1997). Homburg and colleagues (2000, p. 467) define this customer-focused organizational structure as one "that uses groups of customers related by industry, application, usage situation, or some other nongeographic similarity as the primary basis for structuring the organization." In a customer-focused organizational structure, customer need is the primary focus of the organization's efforts; this, in turn, requires that decision-making authority within the organization becomes less centralized.

Despite the fact that being customer-focused is not a new concept, there is widespread evidence that the implementation of organizational structures that facilitate a focus on customers remains problematic (Homburg, Workman, & Jensen, 2000). Several challenges have been identified regarding the implementation of customer-focused organization strategies: 1) the provision of appropriate and effective reward systems for customer-workers (i.e., workers who are regularly in direct contact with the customers and are simultaneously responsible for the needs of both the customers and the organization); 2) the development of new skills; 3) the increased incidence of restrictive career paths for customer-workers; 4) the experience of role conflict by customer-workers due

to competing demands from the organization and customers; and 5) the increased need for autonomy, resource adequacy, feedback, and role clarity by the customer-workers (Baker, 2002). Furthermore, if these challenges are not addressed and the needs of the customer-workers are not met, then the likelihood of turnover among these workers is significantly increased (Troyer, Mueller, & Osinsky, 2000). Baker (2002, p.311), states that "It could be argued that employees in general are customers too—the customer of the corporate leader—and by accurately identifying and meeting their needs, individuals and teams no doubt feel obliged to reciprocate with commitment to corporate goals." According to Troyer, Mueller, and Osinsky (2000), one important way to meet customer-workers' needs is to decrease role incongruity through the implementation and promotion of an incentive system based on rewarding the adaptability of the customer-worker to the varying demands and needs of customers. For example, role incongruity occurs in a situation whereby management in a LTC facility rewards care aides on the basis of whether or not they have all of the residents in their care up and in the dining room for breakfast prior to 8:00 a.m., whereas resident preferences and needs may require that they leave some residents in bed to sleep longer and enable others to have their morning meal in bed. The likelihood of this type of role incongruity is high within organizations with a customer-focused organizational structure unless *both* structural and systems changes have been implemented (Homburg et al., 2000). Finally, Homburg and colleagues (2000, p. 475) indicate that, "While structural changes can be made relatively quickly, necessary changes in the systems,

skills, and culture to support a customer-focused organizational structure are longer term tasks.”

The concept of a customer-focused organizational structure in healthcare settings—referred to as both customer-directed and consumer-directed care—has recently been emphasized in the health management and healthcare literature (Batavia, 2002; Dale, Brown, Phillips, & Carlson, 2005; Eustis, 2000; Ford et al., 2000; Geron, 2000; Meterko, 1996; Polivka & Salmon, 2003; Signatur & Hollis-Sawyer, 2002). Originally, the term consumer-directed care was used as a general term to describe care that promoted consumer autonomy and choice, and was considered to be more or less equivalent to person-centred care (Geron, 2000). However, in the acute care sector (i.e., hospitals and diagnostic services) the primary focus of consumer-directed care is on the transfer of the practices of ‘best guest-services organizations’ to acute care settings and the encouragement of healthcare organizations to view their patients as ‘customers of healthcare’ (Ford et al., 2000).

In LTC, the emphasis has been almost solely on enabling elderly or disabled healthcare consumers to independently hire, train, supervise, pay and fire their own workers (Batavia, 2002; Eustis, 2000; Geron, 2000; Signatur & Hollis-Sawyer, 2002; Stone, 2000). Therefore, discussions about consumer-directed care in LTC has, thus far, excluded residents of such facilities and has, instead, been limited to home care, community-based care, and assisted living. Additionally, the needs of customer-workers is rarely, if ever, mentioned in the literature when consumer-directed care is discussed, described, or evaluated.

This is unfortunate since the original definition of consumer-directed care as well as the theoretical work by Homburg, Workman, and Jensen (2000), Baker (2002), and Troyer (2000) are each directly applicable to both the barriers to implementing individualized care in LTC facilities as well as the needs of residents and nurses aides (i.e., customer-workers).

2.3.5 Summary and Conclusions

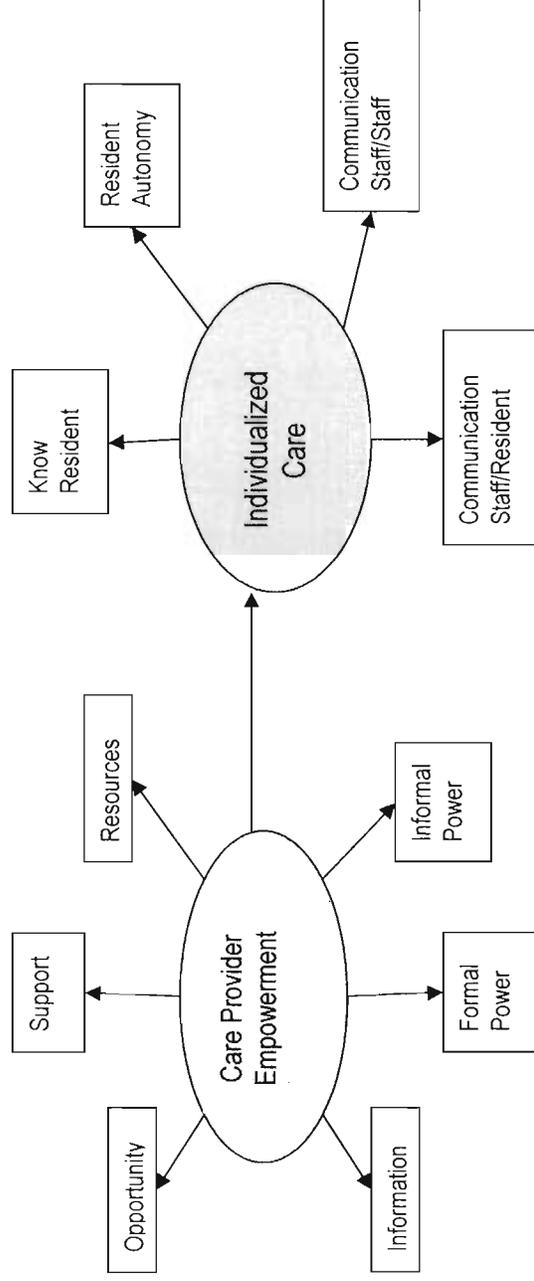
In summary, culture change in organizations is an inherently complex process, in which access to power structures is an integral factor and one in which the quality of the relationship between the organization and its employees is thought to be a precondition for successful implementation. Furthermore, it seems that if true organizational change is to succeed, systems thinking is required to address issues related to the complexities of the influence of power structures and the quality of relationships between the organization and its employees. This may be especially true when employees are customer-workers (e.g., care aides) and the organizations provide complex services (e.g., the provision of individualized care) to highly dependent customers (e.g., residents of LTC facilities). Consequently, if we are to gain better understanding of how to improve the quality of care offered to LTC residents, it seems imperative that we increase our understanding of how care staffs' access to empowerment structures influences their ability to provide individualized care.

2.4 Hypotheses Development

The following model was developed based on existing literature and depicts proposed relationships between structural empowerment in work environments and the provision of individualized care for both LPN/RNs and care aides (See Figure 2.1). The variables included in this model represent the associations that are believed to be the most important for evaluating the influence of access to structural empowerment and the provision of individualized care in LTC facilities. Additionally, the model consist of six key components (or variables) from Kanter's (1979) theory of structural empowerment (i.e., resources, support, information, opportunity, formal power and informal power). Finally, the model consists of four key components (or variables) of individualized care (i.e., knowledge of the resident, resident autonomy, communication staff-to-staff, and communication staff-to-resident). It should be acknowledged that these are just four of six different components (or domains) of individualized care that are described in the literature. The others are family involvement and the physical environment. Although clearly significant and valuable, family involvement could not be used as a measurement of individualized care in this study. Inclusion of this component would have required that family members be included as participants in this study, therefore, this was beyond the scope of this thesis. Additionally, there is currently no valid and reliable measurement of the physical environment of a LTC facility as it relates to the provision of individualized care. Therefore, for the purposes of this study, only the four components of individualized care that

pertain to staff members, their interactions with each other and with the resident are included.

Figure 2.1: A *priori* model of care provider access to structural empowerment and individualized care in long-term care facilities



Based on this model the following hypotheses are proposed:

1. Based on review of the literature, which indicates a continued predominance of the medical model in LTC facilities, there will be no difference in care providers' reported levels of access to structural empowerment irrespective of managements' implementation of a specific model of care (e.g., Eden Alternative, Gentle Care, Person-Centred Care).
2.
 - a. Consistent with existing theory, opportunity, support, resources, information, formal power and informal power will each provide unique and significant contributions to measurement of the latent variable labelled empowerment as reported by RNs and LPNs.
 - b. Consistent with existing theory, knowing the resident, resident autonomy, communication between staff, and communication between staff and resident will each provide unique and significant contributions to measurement of the latent variable labelled individualized care as reported by RNs and LPNs.
 - c. RN/LPN access to structural empowerment will have a statistically significant and positive effect on the provision of individualized care as reported by RNs and LPNs.
3.
 - a. Consistent with existing theory, opportunity, support, resources, information, formal power and informal power will each provide unique and significant contributions to measurement of the latent variable labelled empowerment as reported by care aides.

- b. Consistent with existing theory, knowing the resident, resident autonomy, communication between staff, and communication between staff and resident will each provide unique and significant contributions to measurement of the latent variable labelled individualized care as reported by care aides.
 - c. Care aide access to structural empowerment will have a statistically significant and positive effect on the provision of individualized care as reported by care aides.
4. Based on the knowledge that the majority of resident care is provided by care aides, the strength of association between access to structural empowerment and provision of individualized care will be greater for care aides than the corresponding association between RN/LPN access to structural empowerment and reported provision of individualized care.

CHAPTER 3: METHOD

3.1 Data Collection

Convenience samples of 242 RN/LPNs and 326 care aids were recruited from LTC facilities from within the Fraser Health Authority (FHA), Vancouver Coastal Health Authority (VCHA), and Vancouver Island Health Authority (VIHA). Participants were recruited over a six-month period from January 2007 to May 2007. In total, surveys were completed by participants working in 61 facilities from within the three authorities.

Senior administrators from FHA and VIHA were contacted to obtain permission and endorsement for the study prior to recruiting participants from within these regions. Once permission was obtained from FHA senior administrators, a letter describing the purposes and methods of the study was sent to managers of 75 LTC facilities within FHA to request their participation. A follow-up telephone call was made to each of these managers approximately one week following the mailing of the introductory letter. If verbal consent was obtained during the telephone call, a time and date was scheduled to meet with the manager as well as introduce the study to the staff and request their participation. A total of 19 managers from within FHA agreed to have surveys collected at their facilities.

During the initial meeting with the manager, s/he was provided with the study information document (see Appendix C) and was asked general questions about the facility such as its size, whether or not the facility is owned and operated by

the government or a private organization, staff to resident ratios, whether or not the facility had adopted and implemented a specific model of care (see Appendix B). Following this meeting, a study introductory meeting was scheduled for staff. During this introductory meeting, staff were informed of the general purposes and process of the study and about how the data and results would be used. Staff were also provided with a letter of support from the Hospital Employee's Union (see Appendix D), which likely had a positive effect upon union member recruitment. Finally, staff were informed verbally and in writing that participation in the study was voluntary and that data obtained was confidential.

Following the mail-out to all LTC facilities within the FHA, a purposeful sampling strategy was employed in the other two health authorities to ensure a sufficient number of participants for both job classification groups as well as an equal representation of the three models of care. Therefore, the only facilities included in this study from within the VCHA were private facilities that had implemented a specific model of care. Consequently, managers from these LTC facilities were contacted directly and permission was obtained from each of their board of directors rather than from the health authority. A total of 2 facilities from within the VCHA agreed to participate in the study. Additionally, the only participants recruited from within VIHA were RNs and LPNs. These participants were recruited from a total of 10 LTC facilities from within VIHA. Finally, participants were recruited during two RN educational conferences sponsored by the FHA. As a result, data was able to be obtained from staff who worked in facilities within this authority that had managers who had not enabled surveys to be completed

at their specific facilities. Data was, therefore, collected from participants who worked in 12 facilities that had managers who were either unable to participate due to scheduling conflicts or simply did not respond to the letter or the follow-up phone call and 17 facilities that had managers who had refused to participate. See Table 3.1 for facility participation rates.

The most common reason given by managers for their refusal to enable their staff to participate was a lack of time or resources. Facility demographic information was obtained (via interviews with the facility managers) for 26 of the 29 facilities whose managers either refused or were unable to participate. There were no statistically significant differences between the facilities with managers who agreed to participate and those that did not for each of the following: 1) staffing ratios during the day for RNs [$F(2, 49)=2.7, ns$], LPNs [$F(2, 49)=.80, ns$], or Care Aides [$F(2, 48)=.82, ns$]; 2) staffing ratios during the night for RNs [$F(2, 49)=1.96, ns$], LPNs [$F(2, 49)=1.95, ns$], or Care aides [$F(2, 48)=.83, ns$]; 3) total years of manager's experience [$F(2, 48)=1.83, ns$]; and 4) manager's years of experience in the current facility [$F(2, 48)=.50, ns$]. This finding provides somewhat greater confidence in the generalizability of participant responses.

Table 3.1 Facility participation rates

	Agreed to Participate	Refused to Participate	Unable to Participate or Did Not Respond
Health Authority			
• FHA	39.6%	35.4%	25%
• VIHA	100%	0%	0%
• VCHA	66.7%	33.3%	0%
Type of Facility			
• Public Not-For-Profit	82.6%	8.7%	8.7%
• Private Not-For-Profit	33.3%	40.0%	26.7%
• Private-For-Profit	31.8%	45.5%	22.7%
Type of Model (as specified by the manager)			
• Eden Alternative	50.0%	37.5%	12.5%
• Gentle Care	57.1%	28.6%	14.3%
• Person-Centred Care	100%	.0%	0%
Unionized Staff			
• Yes	59.1%	18.2%	22.7%
• No	35.7%	57.1%	7.1%
Permanent Care staff to Resident Assignment			
• Yes	35.0%	45.0%	20.0%
• No	51.7%	24.1%	24.1%

All eligible staff who agreed to participate received a survey package that contained the study information document that re-emphasized the purposes, process, and confidentiality of the study, as well as study questionnaires including a demographic questionnaire. Two counterbalanced versions of the survey packages were created. The order of presentation of the questionnaires was reversed in the two versions so that potential order effects could be assessed after the data were collected.

Consent forms were not required to be signed by participants because no personally identifying information was required; it was assumed that participants

would be more forthright in their responses if their names (via signatures) were not required for participation. Informed consent of participants was assumed when participants voluntarily filled out the study questionnaires and returned them to the primary investigator as specified in the Study Information Letter.

Additional survey packages and the researcher's contact information were left at the facilities to enable participation by staff who, due to scheduling (e.g., working later or different shifts), were unable to be present at the introductory meetings. Each survey package also contained an envelope and postage necessary to return the completed forms in case the participant was unable to complete the survey during the scheduled meetings with the study investigator. To provide an incentive for participation, each participant who completed and returned the survey package within the allotted time period was eligible for inclusion in a \$500 lottery draw. The draw was conducted three weeks after all survey packages had been received.

Approximately 75% of the survey packages were completed by staff during the study introductory meetings and the educational meetings, while 25% were completed and returned via the mail. Approximately 35% of surveys left at facilities for staff to fill out were returned to the study investigator.

3.2 Participants

A total of 568 formal care providers (RNs, LPNs, and care aides) participated in this study. The participants were categorized into two separate groups. The first group ($n=242$) was comprised of 177 RNs and 65 LPNs who work on a permanent full- or part-time basis or as a casual in an equivalent full or part-time

position. To be eligible for participation, the RNs and LPNs had to be proficient in English and employed for at least six months within his/her field.

RNs and LPNs were grouped together for this study based on two initiatives recently implemented in British Columbia. Both initiatives were implemented due to a recognized shortage in RNs throughout BC, Canada and the world (Arias, 2005). The first was the British Columbia Ministry of Health's initiative that enabled LPNs to function in a capacity that is considered full scope of practice (Harvey, Sams, Bosancic, & Brunke, 2003). The second was the implementation of strategies (such as the Collaborative Practice Model in FHA) developed specifically to replace the majority of RNs working in LTC facilities with LPNs (Greenlaw, 2003). Both initiatives were fully implemented by the time participants were recruited for this study. As a result of these initiatives, LPNs and RNs now have many similar roles and responsibilities within LTC facilities (i.e., team leaders and supervision of care aides). However, it is acknowledged that differences in experience and perceptions may still exist. Consequently, two preliminary between-groups multivariate analyses of variance were computed to investigate potential differences in empowerment and individualized care response levels between RNs and LPNs. Ten dependent variables were used: 1) IC know, 2) IC Autonomy, 3) IC staff/staff communication, 4) IC staff/resident communication, 5) Formal power, 6) Informal Power, 7) Opportunity, 8) Information, 9) Support, 10) Resources. There was a statistically significant difference between RNs and LPNs on the combined dependent variables $F(10, 230)=2.40, p<.05$. However, when the results were considered separately, only

one of the ten dependent variables reached statistical significance—Informal power $F(1, 239)=14.48, p<.005$, which reached statistical significance using a Bonferroni alpha level of .005. An inspection of the mean scores indicates that RNs reported higher levels of access to informal power ($M=61.67, SD=11.28$) than LPNs ($M=54.87, SD=11.72$). Based on this result and the implementation of the initiatives described above, it was deemed appropriate to combine the RNs and LPNs into one group. The second group was comprised of 326 care aides who work on a permanent full-time or part-time basis or as a casual in an equivalent full- or part-time position in a LTC facility. To be eligible for participation, the care aides had to be proficient in English and employed for at least six months.

3.2.1 Socio-demographic Characteristics of Participants

As shown in Table 3.2, the average age of participants in the RN/LPN group was 45.3 years ($SD = 10.67$, range 19 to 65). They had an average of 18.9 years of experience ($SD = 11.60$, range 1 to 44), and an average of 8.8 years of experience within the facility in which they were recruited ($SD = 7.55$, range 1 to 32). More than half worked on a permanent full-time basis (57.4%) and the majority had received a diploma in nursing (72.6%). The majority identified themselves as Caucasian/White/European (55.4%), though a notable proportion identified themselves as Asian/Pacific Islanders (35.5%).

Table 3.2: Descriptive characteristics of RN/LPNs

Demographic Variable	<i>n</i> = 242
Gender	
• Male	14 (5.8)
• Female	228 (94.2)
Age (years)	45.31 ± 10.67 (19 - 65)
Ethnicity (<i>n</i> = 232)	
• Aboriginal/First Nations	2 (.8)
• African/Black	2 (.8)
• Asian/Pacific Islander	86 (35.5)
• Latina/Latino	2 (.8)
• Middle Eastern/North African	2 (.8)
• Caucasian/White/European	134 (55.4)
• Mixed/Multi	4 (1.7)
Job Title	
• RN	177 (73.1)
• LPN	65 (26.9)
Years Experience in Nursing	18.9 ± 11.6 (1 - 44)
Years In Current Facility	8.7 ± 7.5 (1 - 32)
Highest Level of Education	
• Certificate	9 (3.7)
• Diploma	175 (72.6)
• BScN	56 (23.1)
• MSN	1 (.4)
Work Status	
• Full Time	139 (57.4)
• Part Time	71 (29.3)
• Casual (FT or PT equivalent)	31 (12.8)

Note. Numbers are reported with percentages in parentheses and as mean ± SD and range in parentheses.

As shown in Table 3.3, the average age of participants in the care aide group was 42.8 years ($SD = 9.15$, range 22 to 64). They had an average of 12.5 years of experience ($SD = 7.89$, range 1 to 40), and an average of 9.7 years of experience within the facility in which they were recruited ($SD = 7.02$, range 1 to 29). Just under half identified themselves as Caucasian/White/European

(42.3%), with a similar proportion identifying themselves as Asian/Pacific Islanders (39.3%). Half of the participants were employed on a permanent full-time basis (50%), while 28.5 % worked on a permanent part-time basis, and 18.7 % worked on either a full-time or part-time equivalent casual basis.

Table 3.3: Descriptive characteristics of care aides

Demographic Variable	<i>n</i> = 326
Gender (<i>n</i> = 324)	
• Male	25 (7.7)
• Female	299 (91.7)
Age (years)	42.8 ± 9.1 (22 - 64)
Ethnicity (<i>n</i> = 232)	
• Aboriginal/First Nations	6 (1.8)
• African/Black	4 (1.2)
• Asian/Pacific Islander	128 (39.3)
• Latina/Latino	13 (4)
• Middle Eastern/North African	6 (1.8)
• Caucasian/White/European	138 (42.3)
• Mixed/Multi	10 (3.1)
Years Experience in Nursing	12.4 ± 7.8 (1 - 40)
Years In Current Facility	9.7 ± 7.0 (1 - 29)
Highest Level of Education	
• High School	37 (11.3)
• Certificate	236 (72.4)
• Diploma	30 (9.2)
• BScN	3 (.9)
Work Status (<i>n</i> = 317)	
• Full Time	163 (50)
• Part Time	93 (28.5)
• Casual (FT or PT equivalent)	61 (18.7)

Note. Numbers are reported with percentages in parentheses and as mean ± SD and range in parentheses.

3.2.2 Socio-demographic Characteristics of Facilities

As shown in Table 3.4, the majority of participants worked in facilities located in urban settings (75.5%) while 23.8% worked in rural areas. Additionally, the

majority of participants worked in facilities that were public not-for-profit (52.3%) while a notable proportion worked in private-for-profit facilities (28.5%), and a smaller proportion of participants worked in private not-for-profit facilities (18.8%). The average number of residents in participating facilities was 155 ($SD = 84.07$, range 29 to 700). The vast majority of participants worked in unionized environments (80.8%). Additionally, the majority worked in facilities that provided complex care to residents (90.0%), and 40.5% of the participants worked in facilities that had a special care unit (i.e., dementia care). Finally, 52.2 % of the participants worked in facilities in which the manager stated that they had *not* implemented a specific model of care while 47.7% worked in facilities that had implemented a specific model of care. Of these latter facilities, 20.3% of participants worked in a facility in which the manager stated that the Eden Alternative had been implemented, 17.2% worked in facilities that had implemented the Gentle Care Approach, and 10.2% of the participants worked in facilities in which the manager stated that person-centred care was the adopted model of care.

Table 3.4 Descriptive characteristics of LTC facilities

Facility Location	
• Urban Settings	75.5%
• Rural Settings	23.8%
Facility Type	
• Public Not-For-Profit	52.3%
• Private-For-Profit	28.5%
• Private Not-For-Profit	18.8%
Average Number of Residents	155± 84.01 (29-700)
Unionized Environments	80.8%
Provides Complex Care	90.0%
Has Special Care Unit	40.5%
Has a Model of Care (as specified by Manager)	
• Yes	47.7%
• No	52.3%
Type of Model of Care (as specified by Manager)	
• Person-Centred Care	10.2%
• Eden Alternative	20.3%
• GentleCare	17.2%

Note. Numbers are reported with percentages in parentheses and as mean ± SD and range in parentheses.

3.3 Measurement Instruments

3.3.1 Conditions of Work Effectiveness Questionnaire

Lashinger's (1996) Condition's of Work Effectiveness Questionnaire (CWEQ), the Job Activities Scale (JAS), and the Organizational Relationships Scale (ORS) were used in this study to measure seven concepts related to Kanter's theory of structural empowerment in organizations (see Appendix B). A total empowerment score (maximum=300) was created by summing each of the subscales from the CWEQ, JAS, and ORS.

The CWEQ uses a 5-point Likert-type response key and consists of four subscales: information—8 items; support—9 items; resources—7 items; and

opportunity—7 items. The CWEQ has been used in numerous studies in healthcare settings. Generally acceptable internal consistency for responses to each subscale has been reported ranging from $.73 \leq \alpha \leq .98$ for information, $.73 \leq \alpha \leq .92$ for support, $.66 \leq \alpha \leq .91$ for resources, and $.73 \leq \alpha \leq .91$ for opportunity (Laschinger, 1996).

The JAS is a 9-item instrument using a 5-point Likert-type response key that measures staff perceptions of formal power within the work environments. Content validity of responses to the instrument has been established utilizing a panel of experts. Acceptable internal consistency of responses to the JAS scales has been reported and ranges from $.69 \leq \alpha \leq .79$ (Laschinger, 1996).

The Organizational Relationships Scale (ORS) is an 18-item instrument using a 5-point Likert-type response key that measures staff perceptions of informal power within work environments. Face validity of responses to the ORS was established through pilot testing of the instrument with a convenience sample of RNs. Internal consistency of responses to the ORS scales has been within optional parameters ranging from $.83 \leq \alpha \leq .89$.

Content validity of the CWEQ, JAS, and ORS have been established in several studies within which responses have been found to adequately and appropriately measure the seven concepts related to Kanter's theory of structural empowerment in organizations—formal power, informal power, opportunity, lines of supply, lines of information, and lines of support (Laschinger, 1996). It is important to note that these scales have yet to be validated specifically for use with care aides. Although the instruments have only been validated for use with

RNs, it was presumed that the measurement of the constructs is generalizable to other employees who are providing care to residents in healthcare settings. Furthermore, since no instruments that measure these constructs had been validated for use with care aides, it was assumed that these were the most appropriate instruments for use in this study.

3.4.2. Individualized Care

Although it is widely acknowledged that the provision of individualized care may be the most important aspect of quality of life for residents of LTC facilities, well established, psychometrically sound measures are surprisingly lacking (Beck, 1999; Chappell, Reid, & Gish, 2006). Six domains of individualized care have been identified in the literature: 1) knowing the person/resident; 2) autonomy and sense of mastery for the resident; 3) communication between staff themselves and between staff and residents; 4) family involvement; 5) connecting with others; and 6) the physical environment (Chappell et al., 2006). Chappell and colleagues (2006) recently developed a brief, multi-item measure of three of the domains of individualized care: 1) knowing the resident; 2) resident autonomy and sense of mastery; 3) communication—staff-to-staff and staff-to-resident (see Appendix C). This instrument was developed to be completed by staff who provide care to residents in LTC facilities. The derived domains of individualized care were established through a review of the literature, direct observation of care within LTC facilities over a 3-month period, and on-going consultation with an expert panel. The Individualized Care instrument is a 34-item scale using a 4-point Likert-type response key, consisting of four subscales: Know Residents (IC-

KNOW, 11 items); Resident Autonomy (IC-AUTONOMY, 11 items); Communication Staff/Staff (IC-COMMUNICATION, 10 items); and Communication Staff/Resident (IC-COMMUNICATION-SR, 3 items). Reported internal consistency of responses is acceptable ranging from $\alpha = .77$ for IC-KNOW, $\alpha = .80$ for IC-AUTONOMY, and $\alpha = .84$ for IC-COMMUNICATION. Suboptimal alpha coefficients have been obtained for IC-COMMUNICATION-SR ($\alpha = .67$). This may well be due to the small number of items ($n=3$) within this subscale. As noted by O'Rourke, Hatcher and Stepanski (2005), internal consistency of responses is underestimated when scales have fewer than eight items. While it is readily acknowledged that each of these instruments requires further testing, they currently provide the only measures of individualized care with acceptable reliability estimates.

3.3.3 Participant Demographic Questionnaire

The participant demographic questionnaire was included in the study package to obtain relevant descriptive information from participants. It was purposefully placed at the end of the package with the hope that participants would be more likely to provide personal information after they had become more fully engaged in the process of responding to the survey questions. Data were collected on participants' sex, age, years in the field, years on present unit/floor, educational level, work status, job title, facility type, and model of care to which their respective facility ascribes (if at all). The questionnaire is an adapted version of the demographic questionnaire included in the CWEQ (Laschinger, 1996) that has previously been used in multiple studies (Laschinger, 1996; Laschinger,

Sabiston, & Kutzscher, 1997; Laschinger, Wong, McMahon, & Kaufmann, 1999; Laschinger, Finegan, & Shamian, 2001).

Two of the original questions, which pertained more to acute care rather than LTC care settings, were adapted for the purpose of this study. In addition, three questions were added to obtain information about the facility's subscribed model of care, participants' job title, and whether or not participants' job description requires supervision of care staff (see Appendix B).

3.3.4 Facility Demographic Questionnaire

The final questionnaire included in this study was developed for the manager interview to obtain demographic information about each participating facility. Data were collected on variables such as location of the facility, type of facility (e.g., public not-for-profit, private-for-profit, or private not-for-profit), whether or not staff were unionized, resident/staff assignments, number of residents in facility, type of care offered in the facility, managerial experience, and whether or not a specific model of care had been implemented (see Appendix B).

3.4 Data Analysis

Data were analysed using SPSS 15.0 and the AMOS 4.0 statistical software.

Data analyses proceeded in seven phases. First, descriptive analyses were conducted, including examination of distributions of the variables and estimates of bivariate associations with measures of structural empowerment and individualized care. Second, variable correlations were analysed to assess the relationship between measurements of staff empowerment and individualized

care. Third, multivariate analyses of variance were conducted to assess between-group mean response levels. Fourth, one-way between-groups multivariate analyses of variance were conducted to compare response levels between the two counterbalanced versions of the surveys (i.e., different order of presentation of the questionnaires) to test for order effects. Fifth, 2 (RN/LPN and care aide) X 3 (Eden Alternative, GentleCare, and Person-Centred Care) ANOVAs were computed to assess differences in empowerment scores across the three specified models of care. Sixth, structural equation modelling (SEM) was conducted to evaluate *a priori* models describing the relationships between empowerment structures and individualized care. Seventh, invariance analyses were undertaken to compare patterns of response between the two SEM models (i.e., RN/LPN vs. care aides).

3.4.1 Structural Equation Model

A priori models were specified to represent the hypothesized relationships among the study variables (see Figure 3.1). Structural equation modelling (SEM) was used to test specific hypotheses because this analytic procedure enables the simultaneous examination of association between multiple dependent and independent variables. Furthermore, SEM allows for analysis of both observed and unobserved variables (represented as rectangles and ovals within SEM, respectively). Since latent or unobserved variables cannot be measured directly, they are inferred as a function of the co-variance among observed constructs (Ullman, 2001, in O'Rourke, 2005).

There is currently no universally accepted standard to evaluate the goodness-of-fit of structural equation models; therefore, it is customary, to report several statistics, as each examines different aspects of a particular model (Goffin, 1993). The most commonly used fit index is the chi-squared goodness-of-fit statistic (or likelihood ratio) which tests for significance between the estimated co-variance matrix based upon the model and the actual co-variance matrix among the variables. The chi-squared statistic tests the hypothesis that a specified model fits perfectly in the population from which data are derived (MacCallum, Browne, & Sugarawa, 1996 cited in O'Rourke 2005). Ideally, chi-squared values should be non-significant, suggesting that the model fits the data perfectly (i.e., does not differ from the population). This criterion, however, is rarely met as the result of sample-size sensitivity (O'Rourke, 2005). Nonetheless, the chi-squared statistic is traditionally reported in SEM research as a matter of convention.

In contrast, Bentler (1990) has referred to the Comparative Fit Index (CFI) as the statistic of choice for analyses of co-variance structures (of which SEM is one type). This statistic adjusts for degrees of freedom, providing a complete measure of sample co-variation. According to Hu and Bentler (1999, cited in O'Rourke, 2005), CFI values greater than 0.94 suggest a psychometrically good fit between data and hypothesized models.

Two other commonly reported statistics are the Adjusted Goodness-of-Fit Index (AGFI) and the Root Mean Square Error of Approximation (RMSEA). The AGFI applies a penalty for model complexity based upon degrees of freedom.

According to Byrne (1998), AGFI values approaching 1.0 reflect better fit and values greater than 0.89 suggest good model fit. The RMSEA is a discrepancy index, with values closer to 0.0 indicating better model fit. Similar to the AGFI, the RMSEA adjusts for degrees of freedom, and thus penalizes for model complexity. The RMSEA also considers overall error in the population. Values less than 0.09 are suggestive of adequate error of approximation, whereas values less than 0.06 suggest small error (RMSEA=0 suggests exact fit; MacCallum et al., 1996, reported in O'Rourke, 2005).

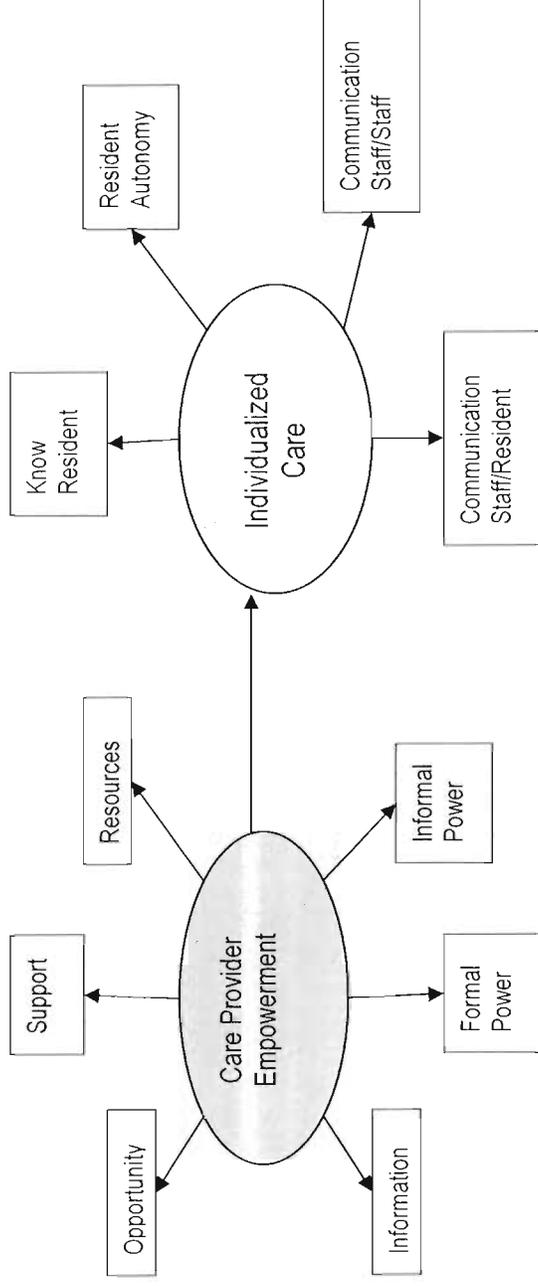
3.4.2 Invariance Analysis

Both *a priori* models were also compared to ascertain if patterns of association were invariant or equivalent (i.e. different) between the RN/LPNs and care aides (Byrne, 1998). Parameter and associated error estimates for each observed measure as well as the associations between latent variables were tested for equivalence between the two groups. To accomplish this, tests for the validity of factorial structure were conducted across both groups simultaneously, as opposed to the previous tests, which were conducted for each group separately. Parameters were, therefore, estimated for both groups at the same time and thus provided a baseline model against which all subsequently specified models were compared.

The relative contribution of observed variables to measurement of their respective latent variables was then examined. If the degrees of change from the previous solution were statistically significant, this indicated that the relative

contribution of the observed variable to the respective latent variable differed between groups.

Figure 3.1: A *priori* model of care provider access to structural empowerment and individualized care in long-term care facilities



CHAPTER 4: RESULTS

For this study, the PRELIS statistical program (Version 2; Jöreskog & Sörbom, 1996) was used to estimate values for missing data (estimated at less than 2% of usable data). As opposed to substituting mean item scores, PRELIS imputes values on the basis of like responses. According to Little and Rubin (1987), this method is preferable to substitution with item mean values that can obscure between-group differences. Visual inspection and summary statistics did not reveal a discernable pattern among missing data (i.e., not specific to a particular subscales or set of questions).

4.1 Preliminary Analyses

Prior to performing the primary analyses, descriptive statistics, correlations, and multivariate analyses of variance were computed for the variables to be included in the SEM.

4.1.1 Descriptive Information

The means, standard deviations, alpha coefficients, kurtosis and skewness values for the ten observed variables as well as the total empowerment score (i.e., the sum of the six subscales that measure structural empowerment) for RN/LPNs and care aides are reported in Tables 4.1 and 4.2, respectively. Table 4.3 provides these descriptive features and psychometric properties of the model variables for all participants. For most observed variables, distributions departed

only minimally from normality, with skewness values ranging from $-.37$ to $.32$ and kurtosis values ranging from $-.60$ to $.42$. These comparatively minor violations of normality assumptions are not viewed as problematic due to the derived sample size (i.e., $n > 200$; Tabachnick & Fidell, 1996). Response to scales had adequate to good internal consistency, with Cronbach alpha coefficients ranging from $.73 \leq \alpha \leq .96$. The one exception to this was the Staff/Resident Communication scale for the RNs and LPNs ($\alpha = .68$). This is not surprising given that this scale has only three items and is consistent with findings previously reported by Chappell and colleagues (2006). It is important to note the high internal consistency of responses for the care aides on all scales. This result indicates that, although the empowerment scales were not developed specifically for use by the care aides, they demonstrated the consistent ability to accurately interpret and respond to the questions. In fact, alpha coefficients were higher in the care aides group than in the RN/LPN group for eight of the ten scales

Table 4-1: Descriptive features and psychometric properties of model variables for RN/LPNs ($n= 242$)

Instrument	<i>M</i>	<i>SD</i>	Range	α	Kurtosis	Skewness
JAS: Formal Power	27.85	5.07	15-42	0.76	0.46	0.24
ORS: Informal Power	59.47	11.69	25-88	0.91	-0.34	0.06
CWEQ: Opportunity	23.80	4.70	10-35	0.78	0.19	0.02
CWEQ: Information	24.01	6.57	8-40	0.88	-0.41	-0.10
CWEQ: Support	27.67	6.56	11-45	0.88	-0.36	0.03
CWEQ: Resources	20.71	4.49	9-32	0.84	-0.22	0.10
Total Empowerment	183.43	30.50	91-268	0.95	0.21	0.33
IC: Know Residents	34.99	4.55	22-44	0.74	-0.45	-0.07
IC: Autonomy	34.97	6.02	18-55	0.81	0.02	0.07
IC: Staff/Staff Communication	31.17	4.53	16-40	0.82	0.25	-0.35
IC: Staff/Resident Communication	8.41	1.80	4-12	0.68	-0.45	0.16

Table 4-2: Descriptive features and psychometric properties of model variables for care aides ($n = 326$)

Instrument	<i>M</i>	<i>SD</i>	Range	α	Kurtosis	Skewness
JAS: Formal Power	26.45	6.53	10-45	0.84	0.27	0.24
ORS: Informal Power	45.39	12.99	18-90	0.92	0.04	0.32
CWEQ: Opportunity	22.89	5.73	8-35	0.85	-0.16	0.04
CWEQ: Information	23.84	7.35	8-40	0.90	-0.60	0.05
CWEQ: Support	27.01	8.01	9-45	0.90	-0.38	0.08
CWEQ: Resources	20.93	5.59	8-35	0.88	-0.29	0.11
Total Empowerment	166.38	37.86	75-283	0.96	-0.07	0.25
IC: Know Residents	34.15	5.05	16-44	0.74	-0.05	-0.18
IC: Autonomy	34.99	6.36	18-54	0.77	0.02	0.11
IC: Staff/Staff Communication	31.10	5.47	13-40	0.86	-0.44	-0.34
IC: Staff/Resident Communication	9.22	2.02	3-12	0.74	-0.35	-0.37

Table 4-3: Descriptive features and psychometric properties of model variables for all participants ($N = 568$)

Instrument	<i>M</i>	<i>SD</i>	Range	α	Kurtosis	Skewness
JAS: Formal Power	27.05	5.98	10-45	0.82	0.42	0.16
ORS: Informal Power	51.39	14.26	18-90	0.93	-0.37	0.07
CWEQ: Opportunity	23.28	5.33	8-35	0.83	0.01	-0.01
CWEQ: Information	23.91	7.02	8-40	0.89	-0.52	-0.01
CWEQ: Support	27.29	7.43	9-45	0.89	-0.29	0.04
CWEQ: Resources	20.84	5.15	8-35	0.86	-0.16	0.12
Total Empowerment	173.65	35.89	75-283	0.96	0.03	0.12
IC: Know Residents	34.51	4.86	16-44	0.74	-0.14	-0.17
IC: Autonomy	34.98	6.21	18-55	0.78	0.02	0.09
IC: Staff/Staff Communication	31.13	5.09	13-40	0.85	-0.18	-0.35
IC: Staff/Resident Communication	8.88	1.95	3-12	0.73	-0.55	-0.11

4.1.2 Variable Correlations

The relationship between measurements of staff empowerment (as measured by Conditions of Work Effectiveness Questionnaire, the Job Activities Scale, and the Organizational Relationships Scale) and individualized care (as measured by IC-

KNOW, IC-AUTONOMY, IC-COMMUNICATION-SS, and IC-COMMUNICATION-SR) was examined using Pearson product-moment correlation coefficients (see Tables 4.4 and 4.5). All correlations were in the expected positive direction and of modest magnitude. Of note was the strong, positive relationship between measurements of RNs and LPNs reported ability to enable resident autonomy and their access to support ($r = .54, p < .01$) and resources ($r = .55, p < .01$). A similar relationship is found for the care aides, where high levels of reported access to support and resources is associated with high levels of ability to enable resident autonomy ($r = .54, p < .01$ and $r = .54, p < .01$, respectively). These coefficients suggest that access to support and resources each explain 29% (i.e., coefficient squared) of the variance in care aide's measurements of their ability to enable resident autonomy and 30% of the variance among RNs and LPNs.

Table 4-4: Correlation coefficients between measures of RN/LPN empowerment and individualized care ($n = 242$)

Measures	1	2	3	4	5	6	7	8	9
(1) Formal Power									
(2) Informal Power	.05**								
(3) Opportunity	.56**	.46**							
(4) Information	.55**	.44**	.63**						
(5) Support	.57**	.49**	.61**	.70**					
(6) Resources	.50**	.35**	.41**	.51**	.60**				
(7) Know Resident	.25**	.29**	.19**	.27**	.28**	.26**			
(8) Res. Autonomy	.36**	.29**	.36**	.48**	.54**	.55**	.49**		
(9) Staff/staff Comm.	.38**	.42**	.37**	.36**	.40**	.27**	.44**	.38**	
(10) Staff/Res Comm.	.16*	.21**	.17*	.19**	.18**	.14**	.29**	.29**	.39**

** $p < .01$ * $p < .05$ **Table 4-5: Correlation coefficients between measures of care aide empowerment and individualized care ($n = 326$)**

Measures	1	2	3	4	5	6	7	8	9
(1) Formal Power									
(2) Informal Power	.60**								
(3) Opportunity	.62**	.40**							
(4) Information	.70**	.50**	.69**						
(5) Support	.74**	.53**	.67**	.75**					
(6) Resources	.65**	.49**	.48**	.59**	.74**				
(7) Know Resident	.26**	.30**	.23**	.28**	.29**	.23**			
(8) Res. Autonomy	.47**	.38**	.36**	.44**	.54**	.54**	.51**		
(9) Staff/staff Comm.	.42**	.42**	.36**	.35**	.39**	.38**	.44**	.42**	
(10) Staff/Res Comm.	.27**	.24**	.21**	.19**	.18**	.18**	.42**	.31**	.51**

** $p < .01$ * $p < .05$

4.1.3 Assessment of Between Group Mean Response Levels

Two between-groups multivariate analyses of variance were computed to assess mean response levels. The first was performed to investigate differences in empowerment response levels between RN/LPNs and care aides. The second was computed to investigate differences in individualized care response levels between RN/LPNs and care aides.

In the first analysis, seven dependent variables were examined: 1) formal power, 2) informal power, 3) opportunity, 4) information, 5) support, 6) resources, and 7) total empowerment. The independent variable was job classification (i.e., RN/LPN and care aide). There was an overall statistically significant difference between RN/LPNs and care aides [$F(6, 588)=40.90, p<.01$ Wilks' Lambda=.69; partial eta squared=.30]. When univariate results were examined separately, 3 of the 7 variables yielded significant differences—formal power [$F(1, 563) 8.02, p<.01, \text{partial eta squared}=.01$], informal power [$F(1, 563) 175.06, p<.01, \text{partial eta squared}=.24$], and total empowerment [$F(1, 563) 32.96, p<.01, \text{partial eta squared}=.05$] each reached statistical significance using a Bonferroni alpha level of .007 (adjusted to reduce the likelihood of capitalization on chance). An examination of the mean scores indicated that RN and LPNs reported marginally higher levels of formal power ($M=27.83, SD=5.07$) than care aides ($M=26.40, SD=6.49$); higher levels of informal power ($M=59.47, SD=11.71$) as compared to care aides ($M=45.42, SD=13.02$); and moderately higher levels of total empowerment ($M=183.43, SD=30.50$) as compared to care aides ($M=166.38, SD=37.86$).

In the second analysis, four dependent variables were examined: IC know resident; IC Autonomy; IC Staff-Staff Communication; and IC Staff-Resident Communication. The independent variable was again job classification (i.e., RN/LPN and care aide). There was an overall statistically significant difference between RN/LPNs and care aides [$F(4, 563)=11.26, p<.01$ Wilks' Lambda=.92; partial eta squared=.07]. When considered separately, the only difference to attain statistical significance using a Bonferroni adjusted alphas level of .01, was IC Staff-Resident Communication [$F(1, 566) 24.55, p<.01$, partial eta squared=.04]. An examination of mean scores indicated that care aides reported somewhat higher levels of IC Staff-Resident Communication ($M=9.22, SD=2.02$) than RN/LPNs ($M=8.41, SD=1.08$). See Tables 4.6 and 4.7.

Table 4-6: One-way between-groups multivariate analysis of variance—empowerment scales

Instrument	<i>M</i> RN/LPNs (<i>n</i> =241)	<i>M</i> Care Aides (<i>n</i> =324)	<i>SD</i> RN/LPNs (<i>n</i> =241)	<i>SD</i> Care Aides (<i>n</i> =324)	<i>F</i>
JAS: Formal Power	27.83	26.40	5.07	6.49	8.02**
ORS: Informal Power	59.47	45.42	11.71	13.02	175.06**
CWEQ: Opportunity	23.77	22.85	4.68	5.71	4.13
CWEQ: Information	23.97	23.77	6.55	7.31	.11
CWEQ: Support	27.67	27.01	6.56	8.01	1.06
CWEQ: Resources	20.71	20.91	4.49	5.60	.20
Total Empowerment	183.43	166.38	30.50	37.86	32.96**

** $p < .01$ **Table 4-7: One-way between-groups multivariate analysis of variance— individualized care scales**

Instrument	<i>M</i> RN/LPNs (<i>n</i> =241)	<i>M</i> Care Aides (<i>n</i> =324)	<i>SD</i> RN/LPNs (<i>n</i> =241)	<i>SD</i> Care Aides (<i>n</i> =324)	<i>F</i>
IC: Know Residents	34.99	34.15	4.55	5.05	4.09
IC: Autonomy	34.97	34.99	6.02	6.36	.002
IC: Staff/Staff Communication	31.17	31.01	4.53	5.47	.028
IC: Staff/Resident Communication	8.41	9.22	1.80	2.02	24.55*

* $p < .05$

4.1.4 Assessment of Order Effects

Two between-groups multivariate analyses of variance were computed to compare response levels between counterbalanced forms (i.e., different order of presentation of the survey questionnaires). The first was performed to investigate differences in empowerment response levels between the two orders of survey presentation. The second was computed to investigate differences in

individualized care response levels between the two orders of survey presentation.

In the first analysis, seven variables were examined: 1) formal power, 2) informal power, 3) opportunity, 4) information, 5) support, 6) resources, and 7) total empowerment. The grouping variable was survey presentation (i.e., Empowerment scales presented first and Individualized care scales presented first). No differences reached statistical significance using a Bonferroni adjusted alpha level of .007 in responses to surveys in which the structural empowerment scales were presented first as compared to those in which individualized care surveys were presented first (see Table 4.8).

Table 4.8: Assessment of order effects—empowerment scales

Instrument	<i>M</i> Empowerment Scales First (<i>n</i> =348)	<i>M</i> IC Scales First (<i>n</i> =220)	<i>SD</i> Empowerment Scales First (<i>n</i> =348)	<i>SD</i> IC Scales First (<i>n</i> =220)	<i>F</i>
JAS: Formal Power	26.96	27.18	5.87	6.18	4.51
ORS: Informal Power	52.48	49.67	14.24	14.16	5.73
CWEQ: Opportunity	22.90	23.88	5.20	5.49	.088
CWEQ: Information	23.35	24.80	6.89	7.15	1.41
CWEQ: Support	27.22	27.41	7.52	7.30	.183
CWEQ: Resources	21.04	20.51	5.20	5.05	5.26
Total Empowerment	173.98	173.13	36.42	35.10	.075

In the second analysis, four variables were examined: IC know resident; IC Autonomy; IC Staff-Staff Communication; and IC Staff-Resident Communication. The grouping variable was again survey presentation (i.e., counterbalanced forms). There were no statistically significant differences in responses to surveys

in which the structural empowerment scales were presented first as compared to those in which individualized care surveys were presented first (see Table 4.9).

Table 4.9: Assessment of order effects— individualized care scales

Instrument	<i>M</i> Empowerment Scales First (<i>n</i> =348)	<i>M</i> IC Scales First (<i>n</i> =220)	<i>SD</i> Empowerment Scales First (<i>n</i> =348)	<i>SD</i> IC Scales First (<i>n</i> =220)	<i>F</i>
IC: Know Residents	34.33	34.80	4.76	5.00	1.24
IC: Autonomy	35.00	34.94	6.32	6.05	.014
IC: Staff/Staff Communication	31.06	31.23	5.00	5.24	.138
IC: Staff/Resident Communication	8.85	8.91	1.93	2.04	.132

It can therefore be concluded that it is unlikely that order effects confounded responses to study variables. This finding provides somewhat greater confidence in participant responses.

4.2 Hypothesis Testing

4.2.1 Hypothesis 1—Model of Care

A 2 (RN/LPN and care aide) X 3 (Eden Alternative, GentleCare, and Person-centred care) ANOVA was computed to explore the impact of managerial implementation of a specific model of care on levels of staffs' reported access to structural empowerment, as measured by the total empowerment score. Total empowerment was measured by summing each of the subscales from the Condition's of Work Effectiveness Questionnaire (CWEQ), the Job Activities Scale (JAS), and the Organizational Relationships Scale (ORS). Both groups of participants (i.e., RNs/LPNs and care aides) were divided into three groups

based on the model of care that was specified by the facility manager (Group 1: Eden Alternative; Group 2: GentleCare; Group 3: Person-Centred Care). This analysis found no statistically significant differences in empowerment scores across the three groups for the RN/LPNs [$F(2, 102) = 1.21, ns$] or care aides [$F(2, 161) = .572, ns$].

To further explore the impact of the implementation of a model of care, a fourth group was added to represent facilities where no model of care had been implemented (as reported by facility managers). Empowerment scores remained statistically non-significant even after Group 4: No Model of Care was added for the RNs and LPNs. The same was not true for the care aides. When the fourth group was added there was a statistically significant difference in total empowerment scores for the care aides [$F(3, 320) = 5.4, p < .01$]. However, despite reaching statistical significance the actual difference in mean scores between the groups was relatively small. The effect size, calculated using eta squared, was .048, indicating that the amount of total variance in empowerment scores attributable to the type of model of care is negligible. Post-hoc comparisons using the Turkey HSD test indicated that the mean score for Groups 1, 2, and 3 did not differ significantly from one another. Yet, Group 1: Eden Alternative ($M=173.67, SD=36.21$) and Group 3: Person-centred Care ($M=180.90, SD=42.95$) were both significantly different ($p < .05$) from Group 4: No Model of Care ($M=158.23, SD=35.74$). The same was not true for Group 2: GentleCare ($M=171.90, SD=38.58$), which did not differ significantly from any of the other groups. It is important to note, however, that due to the moderately

large sample size in this study, quite small differences can emerge as statistically significant, even if the difference between the groups is of little practical importance; therefore, these results should be interpreted with this awareness (Pallant, 2001).

When comparative analyses were computed to determine whether formal care providers concurred with management regarding what type of model had been implemented within their respective facilities, results indicated that only 35% of care staff (both RN/LPNs and care aides) agreed with management as to which model of care had been implemented within their facility. It is important to note two things when considering this result, first, care staff were not required to use free recall when selecting the type of model implemented in the facility; rather, the actual name of each model was listed on the survey questionnaire for their selection. Second, this percentage of agreement between staff and management included when care staff agreed with management that *no* model of care had been implemented.

Based on this somewhat surprising result, several more analyses were conducted to further explore staff concurrence with management regarding the implementation of a specific model of care. The first analysis explored differences in manager/staff model of care concurrence based on the model type. Chi-squared analyses revealed fairly good levels of concurrence between managers and staff on the implementation of the Eden Alternative and Gentle Care (58.4% and 76.8% respectively) but have very low concurrence when person-centred care has been implemented (1.7%). This is likely due to the often

vague interpretation of person-centred care as a specific “model of care” and the idealized notion that *all* facilities should be providing it on some level.

The second analysis explored differences in manager/staff model of care concurrence based on the job title of the staff (i.e., RN, LPN, and care aide). Chi squared analysis revealed no statistically significant differences between the three job titles. RNs had a slightly higher level of concurrence with managers regarding the implementation of a model of care than LPNs (40.4% and 35.4% respectively) while care aides concurred with managers 32% of the time.

The third analysis explored differences in manager/staff model of care concurrence based on number of years staff worked in the facility. An independent-samples *t*-test found no significant differences between manager/staff model of care concurrence ($M=10.05$, $SD=10.21$) and manager/staff model of care non-concurrence ($M=9.21$, $SD=7.01$; $t [502]=1.08$, *ns*) based on length of care staffs' employment in the facility.

Finally, a between-groups MANOVA was performed to explore the potential influence of manager/staff model of care concurrence on staffs' reported levels of empowerment and individualized care. Ten dependent variables were used: 1) IC know, 2) IC Autonomy, 3) IC staff/staff communication, 4) IC staff/resident communication, 5) Formal power, 6) Informal Power, 7) Opportunity, 8) Information, 9) Support, 10) Resources. The independent variable was manager/staff concurrence on the implemented model of care. There was a statistically significant difference between staff who concurred with the managers and those that did not on the combined dependent variables $F(10, 538)=3.05$,

$p < .05$. When the results for the dependent variables were considered separately, three variables reached statistical significance using a Bonferroni adjusted alpha level of .005. These were *opportunity* $F(1, 547) = 10.17, p < .005$; *information* $F(1, 547) = 11.17, p < .005$; and *informal power* $F(1, 547) = 11.45, p < .005$. An inspection of the mean scores indicates that staff who concurred with managers regarding the implemented model of care reported moderately higher levels of access to informal power ($M = 54.37, SD = 13.88$) than those that didn't ($M = 50.08, SD = 14.24$), slightly higher levels of access to information ($M = 25.32, SD = 7.05$) than those that didn't ($M = 23.24, SD = 6.88$) and marginally higher levels of access to opportunity ($M = 24.33, SD = 5.30$) than those that didn't ($M = 22.83, SD = 5.22$). These results reveal the importance of ensuring that staff are aware of what model of care has been implemented in the facility and may also represent the significance of open and effective communication between managers and staff. Taken in combination, the results of all of the above analyses indicate that the implementation of a specified model of care does not significantly influence the power dynamics in LTC facilities for care staff and, therefore, support Hypothesis 1. In accordance with this finding, it was deemed appropriate to combine participant responses, irrespective of facility model of care, for the subsequent analyses.

4.2.2 Hypothesis 2—RN/LPN Model

A priori structural equation models (SEM) were computed using AMOS 4.0 (Analysis of Movement Structures; Arbuckle, 1999) first for RN/LPNs. This baseline model was computed to ascertain if observed variables significantly

contributed to measurement of their respective latent variables ($\chi^2 [df = 32] = 77.54, ns$). With 242 observations (and correction for correlation between two related pairs of error terms), statistical power was estimated to be .70 ($df = 32$; MacCallum, Browne & Sugawara, 1996). This value is somewhat lower than the recommended level of .80 (Cohen, 1992).

Power did not appear to be an estimation limitation, however, as all parameters were statistically significant (i.e., t values > 1.96) and in their hypothesized positive direction. Modification indexes suggested that none of the observed variables loaded across the latent variables as hypothesized. See Figure 4.1.

More precisely, each observed variable (i.e., opportunity, support, resources, information, formal power, and informal power) provided unique and significant contribution to measurement of the latent variable labelled Care Provider Empowerment, supporting Hypothesis 2a. For these RN/LPNs, *support* provides the largest contribution to measurement of access to structural empowerment. Additionally, each observed variable (i.e., know resident, resident autonomy, communication staff to staff, and communication staff to resident) provided unique and significant contribution to measurement of the latent variable labelled individualized care, supporting Hypothesis 2b.

Access to structural empowerment had a statistically significant positive effect on reported provision of individualized care. This strong association indicates that 48% (coefficient squared) of the observed variance in RN/LPNs' ability to provide individualized care can be explained by their access to structural empowerment within LTC facilities. This result supports Hypothesis 2c and suggests that the

goal of improving the provision of individualized care in LTC facilities can be more fully achieved by enhancing RNs' and LPNs' access to empowerment structures. It should be noted that each of the latent constructs were exceptionally well measured in this model. The large values of both the path coefficients and parameter estimates for each of the observed variables selected to measure their respective latent constructs increases the meaningfulness of the relationship found between the two latent variables.

In addition to these strong parameter estimates, observed goodness of fit indices suggest overall good model fit. For instance, the Comparative Fit Index (CFI) for the RN/LPN model was above the accepted threshold value of 0.94 (CFI=.95). The Adjusted Goodness of Fit Index was also within optimal parameters (i.e., $AGFI \geq .89$) for this RN/ LPN model (AGFI = .89). Finally, the Root Mean Square Error of Approximation (RMSEA) was less than 0.09, suggesting adequate error of approximation (RMSEA = .077).

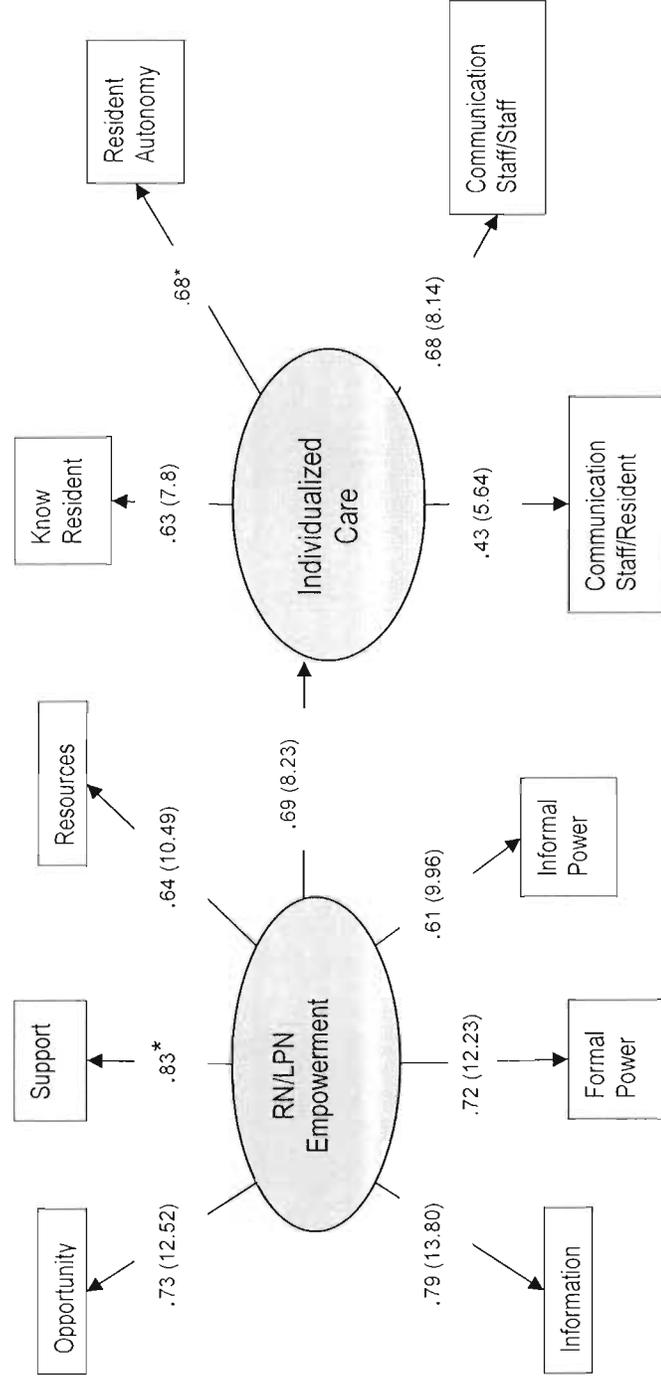
Correlation coefficients were computed to compare parameter estimates for the initial and final baseline RN/LPN models (subsequent to correction for correlated error). This large coefficient between initial and final values ($r = .97, p < .01$) suggests that correction for correlated error did not substantively affect parameter estimates. Goodness of fit indices for the RN/LPN model are presented in Table 4.10.

Table 4.10: Goodness of fit indices for baseline RN/LPN model

Model	χ^2	<i>df</i>	AGFI	CFI	RMSEA	$\Delta\chi^2$	Δdf
RN/LPN Baseline Model	112.44	34	0.85	0.91	0.09		
RN/LPN Final Model	77.54	32	0.89	0.95	0.07	34.9**	2

** Significant at the $p < .01$ level

Figure 4-8: Model of influence of RN/LPN access to structural empowerment on individualized care in long-term care facilities



Note. Parameters expressed as maximum likelihood estimates (standardized solution). Asterisks (*) denote parameters initially fixed to 1.0 for scaling and statistical identification; thus, significance levels cannot be computed for these two items. Numbers in parentheses indicate significance levels for parameter estimates (statistically significant t values > 1.96).

4.2.3 Hypothesis 3—Care Aide Model

A second baseline SEM model was computed for care aides ($\chi^2 [df = 29] = 94.84$, *ns*). Subsequent to correction for correlation between five related pairs of error terms and with 326 observations, statistical power was estimated to be at an optimal level of .81 ($df = 29$; MacCallum, Browne & Sugawara, 1996).

Similar to the previous model, all parameter estimates were positive and statistically differed from zero (i.e., t values > 1.96). Each observed variable (i.e., opportunity, support, resources, information, formal power, and informal power) provided unique and significant contribution to measurement of the latent variable labelled Care Aide Empowerment, supporting Hypothesis 3a. Of note, however, examination of modification indexes indicated that *informal power* loaded across latent variables. In other words, informal power contributed significantly to the measurement of empowerment among care aides (as hypothesized) as well as individualized care (not hypothesized). See Figure 4.2. According to Kanter (1979), *informal power* is derived from the quality of alliances and relationships with people in the organization. This finding suggests that the quality of work relationships may have a direct and meaningful influence on care aides' ability to provide individualized care.

Similar to the RN/LPN baseline model, *support* provides the greatest contribution to measurement of care aides' access to structural empowerment. Informal power provided the least contribution; however, this result should be interpreted appropriately as informal power contributes to the measurement of both latent

variables (i.e., reducing the amount of variance available to contribute to measurement of the other latent variable).

Each observed variable (i.e., know resident, resident autonomy, communication staff to staff, and communication staff to resident) also provided unique and significant contribution to measurement of the latent variable labelled individualized, supporting Hypothesis 3b.

Finally, access to structural empowerment had a statistically significant positive effect on reported provision of individualized care, supporting Hypothesis 2c. This strong association indicates that 45% (coefficient squared) of the observed variance in care aides' reported ability to provide individualized care can be explained by their access to structural empowerment. Again, this result suggests that if managers want to enhance individualized care, a primary focus should be on enabling care aides to access to empowerment structures. It should be noted that each of the latent constructs were also exceptionally well measured in this model. Again, the large values of both the path coefficients and parameter estimates for each of the observed variables selected to measure their respective latent constructs increases the meaningfulness of the relationship found between the two latent variables.

Goodness of fit indices also support the measurement properties of this baseline model. For instance, the Comparative Fit Index (CFI) was above the accepted value of 0.94 (CFI=.96) The Adjusted Goodness-of-Fit Index was also within optimal parameters (i.e., AGFI \geq .89) for the care aide model (AGFI = .89) and

the Root Mean Square Error of Approximation was less than 0.09, suggesting an adequate error of approximation (RMSEA = .084).

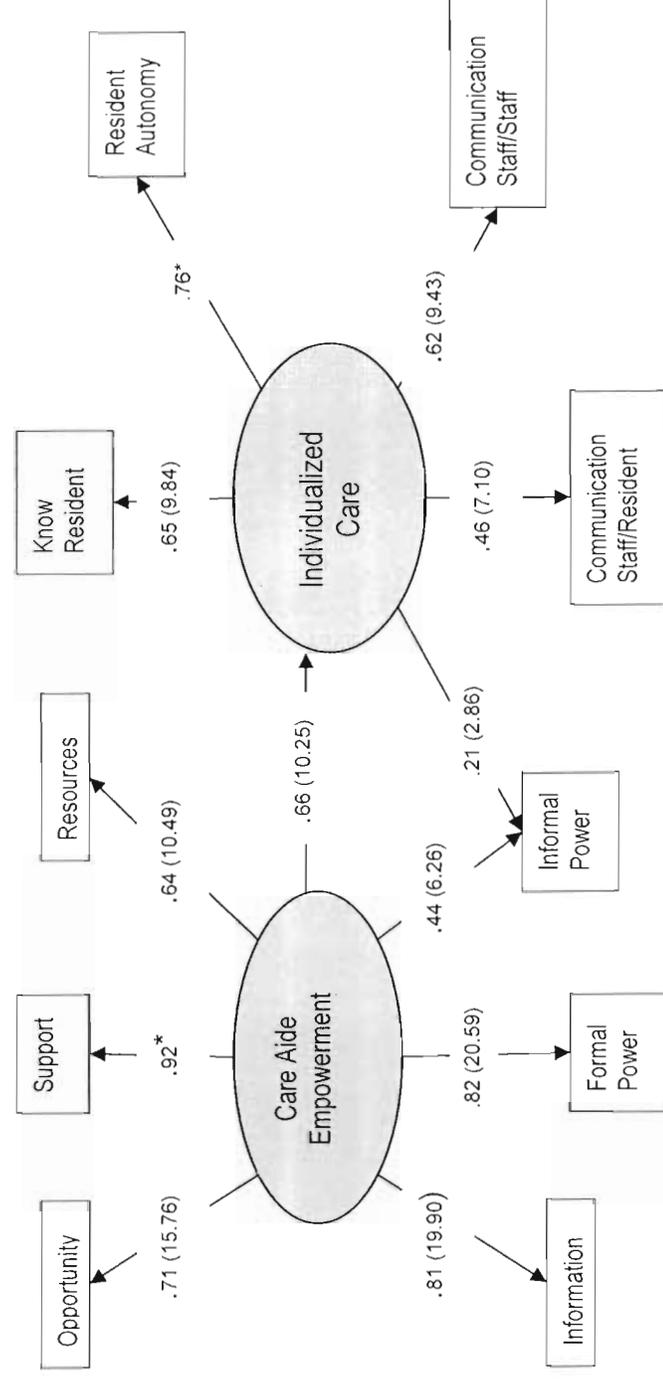
Finally, the correlation coefficient comparing baseline and corrected baseline care aide models were also computed ($r = .89, p < .01$). Although very strong, the coefficient between initial and final parameter values is somewhat lower for care aides than for RN/LPNs. This is largely attributable to the cross loading of Informal Power across latent variables. This large r value still suggests that correction for correlated error did not substantively affect parameter estimates. Goodness of fit indices for the care aide model are presented in Table 4.11.

Table 4.11: Goodness of fit indices for baseline care aide model

Model	χ^2	<i>df</i>	AGFI	CFI	RMSEA	$\Delta\chi^2$	Δdf
Care aide Baseline Model	179.41	34	0.83	0.91	0.11		
Care aide Final Model	94.84	29	0.89	0.96	0.08	84.57**	5

** Significant at the $p < .01$ level

Figure 4.2: Model of influence of care aide access to structural empowerment on individualized care in long-term care facilities



Note. Parameters expressed as maximum likelihood estimates (standardized solution). Asterisks (*) denote parameters initially fixed to 1.0 for scaling and statistical identification; thus, significance levels cannot be computed for these two items. Numbers in parentheses indicate significance levels for parameter estimates (statistically significant t values > 1.96).

4.2.4 Hypothesis 4—Model Comparisons

The two baseline SEM models were next compared to ascertain if measurement properties were equivalent or invariant (i.e., different) between RN/LPNs and care aides. The pattern of factor loadings for each observed variable as well as the associations between latent variables were tested for equivalence between groups.

Comparison of parameter estimates was undertaken as a partial test of measurement invariance in this instance due to cross-loading of informal power within the care aide model. In other words, no equality constraint was imposed on this parameter due to between group differences observed in computation of baseline models (Byrne, Shavelson, & Muthén, 1989).

Equating the remaining parameter estimates resulted in significant change from the baseline χ^2 statistic [$\Delta\chi^2$ ($\Delta df = 8$) = 12.612, $p < .05$]. The hypothesis of invariant parameter estimates was therefore not supported. Subsequent analyses were performed to determine which parameters differed. This was done by equating each parameter in succession and retaining those found to be equivalent (Byrne, 1998). As a result, patterns of response for 8 of 10 parameters were determined to be invariant (i.e., Opportunity, Support, Information, Formal power, ICKnow Resident, ICResident Autonomy, IC Staff/Staff Communication, and IC Staff/Resident Communication). In other words, there were no statistically significant differences between RN/LPNs and care aides in the way that these observed variables contributed to the measurement of their respective latent variables. However, significant differences were found for the observed variable

resources. Larger parameter estimates were observed for care aides for this variable suggesting that, *resources* contribute significantly more to measurement of empowerment for care aides than for RN/LPNs. It should be noted that invariance between parameters for *informal power* was not assessed due to the differences between the two models (e.g., cross-loading for the care aide model) See Table 4.12.

Table 4-12: Summary of Specifications and Fit Statistics for Invariance Analyses

Successive Constraints Applied	χ^2	<i>df</i>	$\Delta\chi^2$	Δdf	CFI	AGFI	RMSEA
Unconstrained Baseline Model	172.40	61	--	--	.96	.90	.057
Empowerment Constrained upon Individualized Care	173.62	62	1.22	1	.96	.90	.056
Individualized Care Variables Constrained upon Latent Variable	175.02	65	1.40	3	.96	.90	.055
Empowerment Variables							
• Opportunity	176.42	66	1.40	1	.96	.90	.054
• Information	178.46	67	2.04	1	.96	.90	.054
• Resources	182.54	68	4.08*	1	.96	.90	.055
• Formal Power	185.01	69	2.47	1	.96	.90	.055

* $p < .05$

In describing these results, it is important to note the very strong similarities between the models. This is an interesting and unexpected result given the difference between job categories (i.e., amount of education required, income, job duties, job responsibilities, relative hierarchy within LTC facilities). For instance, the strength of association between the latent constructs access to structural empowerment and provision of individualized care was not statistically greater for care aides as compared to RN/LPNs; thus, Hypothesis 4 was not

supported. Contrary to expectation, the association between latent variables was, in fact, greater for the RN/LPN model (.69) though significantly indistinguishable from the corresponding care aide parameter estimate (.66).

4.3 Summary

Irrespective of managements' implementation of a specific model of care (i.e., Eden Alternative, Gentle Care, Person-Centred Care), statistically significant differences were not found in care providers' reported levels of access to structural empowerment. Each observed variable (i.e., opportunity, support, resources, information, formal power, and informal power) provided unique and significant contribution to measurement of the latent variable labelled Care Provider Empowerment for both RN/LPNs and care aides. The observed variable *support* provides the largest contribution to measurement of access to structural empowerment for both RN/LPNs and care aides. Additionally, each observed variable (i.e., know resident, resident autonomy communication staff to staff, and communication staff to resident) provided a unique and significant contribution to the measure of the latent variable labelled individualized care. The observed variable *resident autonomy* provides the largest contribution to the measurement of individualized care for both RN/LPNs and care aides. In both instances, access to empowerment structures had a statistically significant positive effect on reported provision of individualized care. Parameter estimates indicated that close to half of the observed variance in care providers' ability to provide individualized care can be explained by their access to structural empowerment within LTC facilities.

CHAPTER 5: DISCUSSION

This study examined the relationship between formal care providers' access to structural empowerment and their reported ability to provide individualized care to residents of LTC facilities. Structural equation models reveal that care provider access to structural empowerment has a statistically significant and positive effect on the reported ability to provide individualized care as reported by RNs, LPNs and care aides.

This result lends support to Kanter's theory of structural empowerment (1979), which, when applied to this study, indicates that if care providers have access to information, support, resources, and opportunity structures in a LTC facility, then they are more empowered to contribute constructively and effectively to the achievement of the organizational goal of the provision of high quality, individualized care. This finding is also in accord with Tellis-Nayak (2007) who concluded that when the LTC workplace environment improves quality of life for the care staff, the care staff are increasingly able and willing to add quality of life to the residents.

5.1 Clinical Implications

Further examination of models developed for this study indicates that *support* provides the largest contribution to measurement of access to structural empowerment for both RN/LPNs and care aides. Given the relative significance

of this observed variable, chi-squared tests were conducted to more closely analyze this finding. Significant differences between RN/LPNs and care aides were found for the two items—"Discussion of further training or education" and "Rewards and recognition for a job well done". Analysis reveals that 39.6% of care aides indicate that they received little to no discussion of further training or education opportunities, while 26.4% of the RN and LPNs indicate the same is true for them. The significance of this result is elucidated by findings from Curry, Porter, Michaliski, and Gruman (2000) who examined the perceptions and experiences of care aides in providing individualized care, as well as by Noel, Pearce, and Metcalf (2000) who studied the effect of educational interventions on care staff turnover and absenteeism. Curry and colleagues (2000) found that a major barrier to the implementation of individualized care was care aides' perceptions of a lack of knowledge and training in alternative approaches to care. Noel and colleagues (2000) found that offering a formal, in-house education program to care aides contributed to lowering turnover rates for care aides and improved resident/family satisfaction. Finally, in keeping with the theory developed by Homburg, Workman, and Jensen (2000), if managers want to support and enable the provision of individualized care, they need to ensure that staff feel enabled to develop and learn new skills that are relevant to organizational goals.

When reviewing the item related to rewards and recognition, 54.6% of care aides indicated that they receive little to no rewards or recognition for a job well done while the same is true for 45.8% of RN/LPNs. The importance of this finding is

underscored by Pennington and Magilvy (2003), who examined the experiences of care aides in LTC facilities. Pennington and Magilvy (2003) found that issues important to care aides revolved around basic needs and motivational factors such as recognition and a sense of achievement. They concluded that, to produce positive outcomes for both care aides and residents, management practices needed to become creative in finding ways to recognize care aides and provide them with a sense of achievement. Further to this, Scalzi, Evans, Barstow, and Hostvedt (2006), who reviewed barriers and enablers to changing organizational culture in nursing homes, found that few, if any, incentives and rewards were linked to the implementation of resident-centred care. Rather, incentives in LTC facilities were often linked to competing or conflicting goals such as performance based outcomes related to the medical model—which places more emphasis on regulatory compliance than on individualized resident needs. In keeping with the theory of customer-focused organizational structure (Homburg, Workman, & Jensen 2000), it seems clear that an important way to meet care providers' needs is to decrease role incongruity through the implementation of an incentive system based on rewarding the adaptability of care providers, as demonstrated by their ability to meet the varying demands and needs of residents.

The structural equation model also indicates that, for care aides, the variable *informal power* loads across both latent variables (i.e., care aide empowerment and individualized care). This finding seems to indicate that the quality of relationships at work may have a direct and meaningful influence on care aides'

ability to provide individualized care. This is supported by Manojlovich (2007), who proposes that relational theory may have greater relevance to the development of empowerment in nursing than either workplace or motivational views of empowerment because of the unique nature of nursing's work. Additionally, Chandler (1992) indicates that empowering environments for nurses are largely dependent upon the development of reciprocal professional relationships. This view is further supported by Fletcher (2006), who asserts that nurses need to focus on relationships to build power in the workplace. Finally, results of a study by Yeatts and Cready (2007) on the consequences of empowered care aide teams in LTC facilities may be associated to the importance that care aides place on access to informal power.

Chi-squared tests were again conducted to more closely analyse responses to informal power items. It should be noted that responses to five items on this scale differed significantly between groups primarily because each pertained to the interaction between the care providers and physicians--an interaction that rarely occurs for care aides. Responses to items associated with the quality of relationships among peers indicate that RNs and LPNs generally feel more positive about their peer relationships than do care aides; however, both groups indicated a relatively high level of peer-based support. When asked whether or not they receive helpful feedback from peers, 59% of RNs and LPNs indicate that this occurs often or a lot; the same is true for 42.6% of care aides. Additionally, 52.4% of RN/LPNs and 40.8% of care aides indicate that they often exchange favours with peers. Further, 71.1% of RNs and LPNs state that they are often

sought out by peers for help with problems, and 69.4% state that they often have peers ask for their opinion on patient care issues. The percentages for care aides on the same items are significantly lower, with 48.8% stating that peers often ask for their opinion on patient care issues, and 47.3% indicate that they are often sought out by peers for help with problems.

Although chi-squared tests indicate that care providers generally feel respected and supported by their peers, the same cannot be said for the way they feel about their relationships with their immediate supervisors. Chi-squared tests reveal that 44.5% of care aides indicate that their immediate supervisor rarely, if ever, asks for their opinion. The same is true for 24.9% of RNs and LPNs. In addition, 54.1% of care aides indicated that they rarely, if ever, are sought out by their supervisor for ideas about ward management issues; 31% of RNs and LPNs indicated a similar experience. When this result is viewed from the perspective of Kanter's theory, it seems understandable that higher percentages of care aides will experience a lack of access to these empowerment structures in facilities within which RNs and LPNs also feel a lack of empowerment. According to Kanter's theory, if RNs and LPNs lack access to empowerment structures in LTC facilities, they will see themselves as being accountable without power, and this, in turn, will lead them to attempt to decrease the care aides' power (who are below them in the organizational hierarchy) by exerting *dictatorial control*. If Kanter's theory is extended to the relationship between care aides and residents, then the lack of access to structural empowerment by care aides could lead them to exert some level of dictatorial control over the residents, thereby,

adversely affecting the provision of both the quality and individualization of care. It is important to remember, however, that the opposite may also be true. Kanter's theory asserts that staff who have access to empowerment structures motivate and empower others by sharing these sources of power. This is consistent with findings reported by Bishop and Eaton (2007) who found that care aides, who had supervisors that respected and relied upon their knowledge of resident care, were more likely to express an elevated sense of responsibility toward their residents and also to experience more job satisfaction. Furthermore, Bishop and Eaton (2007) concluded that residents' satisfaction with their relationship to nursing staff was significantly related to the proportion of care aides on the residents' unit who indicated that they had a positive relationship with their supervisors. Therefore, it seems that the importance of the quality of the relationship between supervisors and staff within the organizational hierarchy of LTC facilities cannot be overstated.

Finally, results of this study indicate that there is a chasm between the perceptions of managers and formal care providers regarding models of care within their respective LTC facilities. Furthermore, this chasm is directly associated with care providers' reported access to structural empowerment. This finding is consistent with Forbes-Thompson, Gajewski, Scott-Cawiezell, and Dunton (2006) who found that there were significant differences between administrative and care providers' perceptions regarding several organizational processes that directly affect individualized care. According to Barker and Camarata (1998), discontinuity between an organization's statements about

itself—often expressed in an adopted model of care within LTC facilities—and the perceptions of how managers and staff interact will undermine any organizational attempt at building trusting and supportive relationships.

Furthermore, as found by Hagenow (2003) and Talerico and colleagues (2003), the inability to successfully redress pre-existing organizational and staffing factors based on the medical model is directly linked to failures in the successful implementation of person-centred care. Thus, it seems that the pervasiveness and persistence of medical model dominance in LTC may pose the single most challenging factor when attempting to improve both the quality of life of the residents and the quality of work life of their care providers.

5.2 Generalizability and Limitation of Findings

The findings from this study are limited in generalizability by various factors. First, only participants who worked in LTC facilities in three of five British Columbia Health Regions were included in this study. Second, differences between care providers that agreed to participate versus those who declined to take part could not be ascertained. Third, the cross-sectional nature of the data does not allow for any conclusions regarding causation nor does it enable determination of changes that might occur over time with differences in access to structural empowerment on the provision of individualized care. Finally, and perhaps most importantly, resident and family member perceptions in relation to the variables under study were not examined.

Despite its limitations, this study adds to the body of knowledge postulating that improving the quality of life for residents in LTC facilities is directly related to improving the quality of work life of their formal caregivers.

5.3 Directions for Future Research

This study provides support for the continued development and testing of models that link the LTC work environment to important organizational outcomes. The model tested in this study increases awareness of the importance of care providers' access to empowerment structures and the provision of individualized care. Future research, however, will need to explore the issue of causality between access to empowerment structures and the provision of individualized care. Of particular interest is the possibility of iterative causation between staffs' ability to provide individualized care and access to empowerment structures in LTC facilities. It may very well be that the relationship between these variables is so nuanced that a longitudinal study, which is not limited by cross sectional data, may be necessary to answer this question more fully. Additionally, research that extends the findings of this study is also needed. This could include the following: 1) evaluation of incentives and rewards that are directly linked to the implementation of resident-centred care (i.e., ones that are based on rewarding the adaptability of the care providers to the varying demands and needs of the residents); 2) an exploration of the types of educational opportunities care providers feel they most need and want; 3) evaluation of initiatives that enhance the relationship between care providers and their immediate supervisors. Finally, future research that addresses residents' and their family members' perceptions,

as they relate to the LTC work environments and organizational outcomes, is also warranted. Including family members' perceptions as they relate to the organizational goal of providing individualized care is important due to family members' unique understanding of residents' personal preferences, needs, routines, and history. Knowledge transfer of this personalized information from family members to care staff is, therefore, vitally important to the successful delivery of individualized care.

5.4 Summary and Conclusion

It is clear that we cannot bypass the quality of the care providers' work life when attempting to improve the quality of life of the residents they serve. The findings of this study suggest that an important aspect of the quality of care provider work life is access to structural empowerment. Of the empowerment structures, *support*, especially in the form of enabling access to educational opportunities and the provision of rewards and recognition for a job well done, seems to be particularly significant to formal care providers. Access to *support* also appears to be an area in which there is considerable room for improvement. Additionally, access to *informal power*, as measured by the quality of relationships in the work environment, is directly related to both the quality of work life for care providers and the quality of care they provide. Therefore, management initiatives aimed at enhancing individualized care must ensure that supervisors motivate and empower others by actively respecting, valuing, and utilizing the knowledge and skills of those with whom they work. It seems that a balanced focus of management initiatives that address the needs of both care providers and care

recipients is needed if the goal of increasing the provision and quality of individualized care in LTC facilities is to be achieved.

APPENDICES

Appendix A: Definitions and Operationalization of Terms

1. *Subordinate*: The term subordinate will not be confined to describing *employees* of an organization; rather it will be defined based on the broader concept of any individual who is “placed in or occupying a lower class of rank”, and “submissive to or controlled by authority” (Webster’s New Collegiate Dictionary, 1979, p. 1152).
2. *Individualized Care*: The term individualized care will be defined as care that reflects staff’s ability and willingness to take into account resident individuality, incorporates resident participation, and ensures a more holistic approach to wellness.
3. *Transaction costs*: For the purpose of this paper, the term transaction costs will refer to costs of searching for and finding an appropriate service organization that meets customers’ needs in relation to the following considerations: 1) physical location of the organization; 2) ability of the organization to meet customers’ individual or specialized service-related needs (e.g., secure unit for individuals with dementia, specialized wound care); 3) organization’s ability to accept new customers (e.g., open space for admittance into the facility); 4) appropriate education and training of customer-workers (e.g., specialized training to meet a variety of physical and cognitive needs of customers); and 5) status of an organization as it relates to cost for services (e.g., governmentally funded organization, not-for-profit organization, private-for-profit organizations).

4. *Mechanistic Systems*: Management systems in organizations that are characterized by specialized differentiation of functional tasks within a hierarchic structure of control, authority, and communication such that working behaviour is governed by the instructions and decisions issued by superiors (Burns & Stalker, 1994).
5. *Customer-workers*: Employees who are simultaneously responsible to both the demands of the customer as well as the demands of the organization (Troyer, Mueller, & Osinsky, 2000).
6. *Knowledge of Resident*: Refers to the staff's knowledge of the unique needs, patterns, and preferences of the resident (Happ, Williams, Strumpf, & Burger, 1996).
7. *Resident Autonomy*: Refers to the belief that independence is essential to the resident's sense of self-worth and that residents must be encouraged to continue to make decisions for themselves (Gamroth, Semradek, and Tornquist, 1995).
8. *Communication: Staff to Staff*: Refers to the ability of staff members to problem-solve between themselves to better understand the meaning behind unusual resident behaviours and in developing effective and appropriate interventions (Happ, Williams, Strumpf, & Burger, 1996).
9. *Communication: Staff to Resident*: Refers to the staff's ability to effectively communicate both verbally and non-verbally with residents who have different cognitive abilities (Coulson, 1993 as cited in Chappell, Reid, & Gish, 2006).

10. *Formal Power*: Refers to power derived from positions that are relevant to key organizational goals, allow discretion, and provide recognition.
11. *Informal Power*: Refers to power derived from the quality of alliances and relationships with people in the organization.
12. *Opportunity*: Refers to access to new challenges, opportunities to increase knowledge and skills, and opportunities for growth and movement within the organization.
13. *Resources*: Refers to the ability to exert influence outward and thus bring needed and valued resources into one's organizational domain.
14. *Support*: Refers to guidance and feedback received from subordinates, peers, and supervisors to enhance effectiveness.
15. *Information*: Refers to having timely access to information about organizational decisions and policy changes that may directly or indirectly affect one's organizational domain.

Appendix B: Study Questionnaires

Appendix B-1: IC-KNOW instructions, scale items and descriptors

The following statements refer to different ways that you can obtain information about residents, and to your perceptions of how well you know the residents that you are caring for. Read each statement carefully and think about the extent to which you agree or disagree with it. Place your responses in the space to the left of each statement using the following scale as a guide.

1. strongly disagree; 2. somewhat disagree; 3. somewhat agree; 4. strongly agree

- _____ a. I read the social histories in resident care plans.
- _____ b. I do not have the time I need to read the social histories of residents.
- _____ c. I talk to family members and friends in order to learn what has been and may remain important to the residents that I am caring for.
- _____ d. I have a good understanding of the residents that I am caring for.
- _____ e. I do not know the behaviour patterns of individual residents.
- _____ f. I know what the residents I care for like.
- _____ g. I find it hard to talk to residents because I do not know enough about them.
- _____ h. I plan a resident's personal care routine using the habits and routines they had at home.
- _____ i. I am aware of the skills that residents still have and include them into my care approaches.
- _____ j. Favorite beverages, meals and activities are part of a resident's day.
- _____ k. I do not feel like I know each resident as a unique individual.

Appendix B-2: IC-AUTONOMY instructions, scale items and descriptors

Here are some thoughts and feelings that people sometimes have about themselves as care-providers in long-term care facilities. How much does each statement describe your thoughts and feelings about your ability to provide care at the facility you work in?

Please rate each item below based on how you *generally feel* about each one by using the following scale as a guide:

1 Very Frequently; 2 Frequently; 3 Occasionally; 4 Seldom; 5 Never

- _____ a. Feel that you are not doing all you should in order to care for the residents that you look after.
- _____ b. Feel rushed because of facility routines.
- _____ c. Feel that the facility you work in supports the independence of residents.
- _____ d. Feel that you are able to allow the residents you look after to make decisions for themselves.
- _____ e. Feel that residents have enough to do during the day.
- _____ f. Feel that the facility you work in offers choice in activity programming.
- _____ g. Feel that you have done things for residents when they could have done it for themselves.
- _____ h. Feel that you have enough time to allow residents to do things for themselves.
- _____ i. Feel that the facility you work in makes an effort to include personal preferences into mealtimes (e.g. if a resident does not like his or her meal there is something else available on the unit or in the kitchen).
- _____ j. Feel good about the quality of care you are able to provide at his facility.
- _____ k. Feel that there are enough resources available to you to provide resident care.

Appendix B-3: IC-COMMUNICATION-SS instructions, scale items and descriptors

The following statements refer to different forms of communication between staff members. Read each statement carefully and think about the extent to which you have used it in the last 7 days. Place your responses in the space to the left of each statement using the following scale as guide.

1 Never; 2 Sometimes; 3 Often; 4 Always

- _____ a. Share personal information that I learn about residents that may help other staff members make sense of resident behaviour.
- _____ b. Staff members tell me about physical changes in residents.
- _____ c. Ask other staff what I should know before caring for a particular resident.
- _____ d. Share care approaches that can help residents to do things for themselves
- _____ e. Share care approaches that can help manage the difficult behaviours of residents.
- _____ f. Talk with other staff members in order to find out the meaning behind difficult resident behaviours.
- _____ g. Tell my supervisors about the need to change a procedure or practice that is no longer working for resident care.
- _____ h. Offer ideas for making changes within the care plans of residents.
- _____ i. Play a part in the making of facility procedures and practices.
- _____ j. Supervisors consider the preferences of staff members when making decisions about resident care (e.g., allowing staff to work in pairs rather than on their own).

Appendix B-4: IC-COMMUNICATION-SR instructions, scale items and descriptors

The following statements refer to different forms of communication between staff members and residents. Read each statement carefully and think about the extent to which you have used this care approach in the last 7 days. Place your responses in the space to the left of each statement using the following scale as a guide:

1. Never; 2. Sometimes; 3. Often; 4. Always

- _____ a. Talk to residents about social events that are going on within the facility (eg., birthday parties, social activities, outings). Factor loading: .81
- _____ b. Talk to residents about what is happening outside the facility (eg., current news events, weather). loading: .79
- _____ c. Talk to residents about their personal lives (eg., where they grew up, how many children they have). Factor loading: .61 value: 2.15

Appendix B-5: CONDITIONS OF WORK EFFECTIVENESS QUESTIONNAIRE

(31 items across 4 subscales +2 global items, 9 JAS and 18 ORS items)

HOW MUCH OF EACH KIND OF OPPORTUNITY DO YOU HAVE IN YOUR PRESENT JOB?

	None		Some		A Lot
1. Challenging work	1	2	3	4	5
2. The chance to gain new skills and knowledge on the job.	1	2	3	4	5
3. Access to training programs for learning new things.	1	2	3	4	5
4. The chance to learn how the works.	1	2	3	4	5
5. Tasks that use all of your own skills and knowledge.	1	2	3	4	5
6. The chance to advance to better jobs.	1	2	3	4	5
7. The chances to assume different roles not related to current job.	1	2	3	4	5

HOW MUCH ACCESS TO INFORMATION DO YOU HAVE IN YOUR PRESENT JOB?

	None		Some		A lot
1. The current state of the facility.	1	2	3	4	5
2. The relationship of the work of your unit (or wing, hall, neighbourhood, ,etc.) to the facility.	1	2	3	4	5
3. How other people in positions like yours do their work.	1	2	3	4	5
4. The values of top management.	1	2	3	4	5
5. The goals of top management.	1	2	3	4	5
6. This year's plan for your work unit. (or wing, hall, neighbourhood, ,etc.)	1	2	3	4	5
7. How salary decisions are made for people in positions like yours.	1	2	3	4	5
8. What other departments think of your unit. (or wing, hall, neighbourhood, ,etc.)	1	2	3	4	5

HOW MUCH ACCESS TO SUPPORT DO YOU HAVE IN YOUR PRESENT JOB?

	None		Some		A Lot
1. Specific information about things you do well.	1	2	3	4	5
2. Specific comments about things you could improve.	1	2	3	4	5
3. Helpful hints or problem solving advice.	1	2	3	4	5
4. Information or suggestions about job possibilities.	1	2	3	4	5
5. Discussion of further training or education.	1	2	3	4	5

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6. Help when there is a work crisis.	1	2	3	4	5
7. Help in gaining access to people who can get the job done.	1	2	3	4	5
8. Help in getting materials and supplies needed to get the job done.					
	1	2	3	4	5
9. Rewards and recognition for a job well done.	1	2	3	4	5

HOW MUCH ACCESS TO RESOURCES DO YOU HAVE IN YOUR PRESENT JOB?

	None	Some	A Lot		
1. Having supplies necessary for the job.	1	2	3	4	5
2. Time available to do necessary paperwork.	1	2	3	4	5
3. Time available to accomplish job requirements.	1	2	3	4	5
4. Acquiring temporary help when needed.	1	2	3	4	5
5. Influencing decisions about obtaining human resources (permanent) for your unit (or wing, hall, neighbourhood, ,etc.).	1	2	3	4	5
6. Influencing decisions about obtaining supplies for your unit (or wing, hall, neighbourhood, ,etc.).	1	2	3	4	5
7. Influencing decisions about obtaining equipment for your unit (or wing, hall, neighbourhood, ,etc.).	1	2	3	4	5

IN MY WORK SETTING/JOB: (JAS)

	None	Some	A Lot		
1. the amount of variety in tasks associated with my job is	1	2	3	4	5
2. the rewards for unusual performance on the job are	1	2	3	4	5
3. the rewards for innovation on the job are	1	2	3	4	5
4. the amount of flexibility in my job is	1	2	3	4	5
5. the number of approvals needed for nonroutine decisions are	1	2	3	4	5
6. the relation of tasks in my job to current problem areas of the organization is	1	2	3	4	5
7. my amount of participation in educational programs is	1	2	3	4	5
8. my amount of participation in problem solving task forces is	1	2	3	4	5
9. the amount of visibility of my work-related activities within the institution is	1	2	3	4	5

HOW MUCH OPPORTUNITY DO YOU HAVE FOR THESE ACTIVITIES IN YOUR PRESENT JOB?

(ORS)	None	Some	A Lot		
1. Collaborating on patient care with physicians.	1	2	3	4	5
2. Receiving helpful feedback from physicians.	1	2	3	4	5
3. Being sought out by physicians for patient information.	1	2	3	4	5

4. Receiving recognition by physicians.	1	2	3	4	5
5. Having physicians ask for your opinion.	1	2	3	4	5
6. Being sought out by supervisor for ideas about ward management issues.	1	2	3	4	5
7. Having immediate supervisor ask for your opinion.	1	2	3	4	5
8. Receiving early information of upcoming changes in work unit from your immediate supervisor.	1	2	3	4	5
9. Chances to increase your influence outside your unit e.g., nomination to influential committees by supervisor.	1	2	3	4	5
10. Seeking out ideas from auxiliary workers on the unit, e.g., secretaries, ward clerks, housekeeping.	1	2	3	4	5
11. Getting to know auxiliary workers as people.	1	2	3	4	5
12. Seeking out ideas from auxiliary workers outside of the unit, e.g., admission clerks, technicians.	1	2	3	4	5
13. Being sought out by peers for information.	1	2	3	4	5
14. Receiving helpful feedback from peers.	1	2	3	4	5
15. Having peers ask your opinion on patient care issues.	1	2	3	4	5
16. Being sought out by peers for help with problems	1	2	3	4	5
17. Exchanging favours with peers.	1	2	3	4	5
18. Seeking out ideas from professionals other than physicians, e.g., physio, OT, dietitian.	1	2	3	4	5

Appendix B-6: Global Empowerment

	Strongly Disagree			Strongly Agree	
1. Overall, my current work environment empowers me to accomplish my work in an effective manner	1	2	3	4	5
2. Overall, I consider my workplace to be an empowering environment .	1	2	3	4	5

Appendix B-7: Demographic Questionnaire

Please tell us something about yourself and the characteristics of your work setting.

1. **Gender:** ___ Male ___ Female 2. **Age** in years: _____ years
3. **Ethnicity** ___ Aboriginal/Native/First Nations ___ African/Black/African American
___ Asian/Pacific Islander ___ Latina/Latino ___ Middle Eastern/North African
___ Caucasian/White/European ___ Mixed/Multi
4. **Title** ___ RN ___ LPN ___ Care Aid/Care Attendant/Nurses Aid
5. **Years experience in nursing:** ___ years 6. **Years in current facility:** ___ years
7. **Highest level of education:**
___ High School ___ Certificate ___ Diploma
___ BScN ___ MSN ___ Other : _____
8. **Work Status** ___ Full time ___ Part-time ___ Casual
10. **Has a specific model of care been adopted and implemented at this facility?**
___ Yes ___ No ___ Don't know

If "Yes", please select the model that best applies to your facility

- ___ Eden Alternative
- ___ GentleCare
- ___ Other: Please Specify _____

1. **If a model of care has been implemented, do you feel the model has been successful?**
___ Yes ___ No ___ Somewhat ___ Unsure

Please tell us about any concerns or complements you have about the quality of your current worklife.

Please tell us about any concerns or complements you have about your ability, within this facility, to provide individualized care to the residents you work with.

Appendix B-8: Facility Demographic Questionnaire

Facility Code _____

Where is your facility located? ___Urban ___Rural

Is it a teaching facility? ___Yes ___No

Is your facility: ___Owned and Operated by the government , ___Private not for profit,
___ Private for Profit.

Are your care staff union members? ___ No ___ Yes (list) _____

Describe the organizational structure for nursing in your facility? (e.g., RNs are team leaders and LPNs supervise care aides on specific units) Organization chart?

Do your care staff have permanent resident assignments? ___Yes ___No

If "No", how often do they rotate assignments? ___After each block/rotation/shift
___ Weekly ___Fortnight (2 weeks) ___ Monthly ___ Other _____

How many residents live in your facility? _____

How many RNs work here? _____ How many LPNs? _____

How many Care Aides? _____

What is the RN to resident ratio in your facility? Days _____ Nights _____

What is the LPN to resident ratio in your facility? Days _____ Nights _____

What is the Care Aide to resident ratio in your facility? Ds _____ Ns _____

Would you describe your facility as offering: (You can select more than one)

___Extended Care ___Complex Care ___Assisted Living ___Multi-level Care,
___Special Care ___Intermediate Care ___Other _____

Has a specific model of care (such as the Eden Alternative or Gentlecare) been adopted and implemented in your facility? ___Yes ___No

If YES, please specify: ___Eden Alternative *Are you accredited? ___ Yes ___No
___ GentleCare ___Other (please specify) _____

How long ago did you implement this model of care? _____

Do you feel it has been successful? ___Yes ___No ___somewhat ___Unsure

Please explain _____

How long have you worked as a manager in LTC? _____

How long have you worked in your current position? _____

Appendix C: Study Information Document

Title: The Influence of Care Provider Access to Structural Empowerment on individualized Care in Long-Term Care Facilities

Investigator: Sienna Boothman
Contact Information: Phone....(604) 613-6462
E-mail...Boothman@telus.net

You are being invited to take part in this research study because you are a professional care provider in a long-term care (LTC) facility. Your participation is entirely voluntary, so it is up to you to decide whether or not to take part in this study. Before you decide, it is important for you to understand what the research involves. This study information sheet will tell you about the study, why the research is being done, and what is required of you, should you decide to participate in the study. If you do decide to take part in this study, you are still free to withdraw at any time and without giving any reasons for your decision. If you do not wish to participate, you do not have to provide any reason for your decision not to participate. Additionally, if you do not take part in this study or if you decide to withdraw at any time, it will have no effect upon your employment and your decision will be maintained in confidence. Please take time to read the following information carefully before you decide.

WHO IS CONDUCTING THE STUDY?

The study is being conducted by Sienna Boothman as part of her requirement for the completion of her Master of Arts in the Gerontology Program at Simon Fraser University.

BACKGROUND

Individualized care is based on the care recipient's needs and preferences and can increase residents' sense of autonomy. Based on Kanter's theory of structural empowerment, it is reasonable to assert that the goal of providing individualized care in LTC facilities can never be fully achieved unless formal care providers (e.g., Registered Nurses, Licensed Practical Nurses, and Care Aides) have adequate access to empowerment structures (i.e., access to information, support, resources, and opportunity structures).

WHAT IS THE PURPOSE OF THE STUDY?

The overall goal of this study is to explore the relationship between care provider access to structural empowerment and reported provision of individualized care in LTC facilities. Findings from this study may enable an increased understanding of organizational behaviour that can negatively influence the ability of care staff to provide individualized care within long-term care facilities. Therefore, if support is found for the hypotheses, this could enable the

development of system-wide quality improvements initiatives that specifically address care provider access to structural empowerment and positively influence the provision of individualized care.

WHO CAN PARTICIPATE IN THE STUDY?

If you are a registered nurse, a licensed practical nurse, or a care aide who is currently working in a permanent part-time or full-time position or the equivalent in a casual position in a long-term care facility and you are proficient in English you can participate in this study.

WHO SHOULD NOT PARTICIPATE IN THE STUDY?

If you are not a registered nurse, a licensed practical nurse or a care aide, and/or if you do not currently work in a part-time or full-time position in a long-term care facility and/or you are not proficient in English you should not participate in this study.

WHAT DOES THE STUDY INVOLVE?

This study is taking place in approximately 40 LTC facilities across British Columbia. From within these facilities, 200 RNs or LPNs and 200 care aides are being recruited to participate in this study.

As a participant of this study, you will be asked to fill out five survey questionnaires and return them in a pre-stamped envelope to the investigator.

The five questionnaires include the following:

1. Condition's of Work Effectiveness Questionnaire (31 items)
2. Job Activities Scale (9 items)
3. Organizational Relationships Scale (18 items)
4. Individualized Care Instrument (four subscales totalling 35 items)
5. Demographic questionnaire (13 items).

It will take you approximately 20 minutes to complete the survey questionnaires.

Overview of the Study

Introduction of the study to potential participants and invitation to participate.

Distribution of the survey packages

Completion of the survey packages by the participants.

Return of the completed questionnaires to the study investigator.

Compilation and dissemination of the study results.

Announcement of the winner of the raffle draw for \$500.

WHAT ARE MY RESPONSIBILITIES?

If you agree to take part in this study, you will be required to complete each of the survey questionnaires and to mail the entire package back to the investigator in the pre-stamped enveloped included in the survey package.

WHAT ARE THE POSSIBLE HARMS OF PARTICIPATING?

There are no risks or possible harms to you for participating in this study.

WHAT ARE THE BENEFITS OF PARTICIPATING?

There may or may not be direct benefits to you from taking part in this study. We hope, however, that the information learned from this study can be used in the future to develop system-wide quality improvements initiatives in LTC facilities that specifically address care provider access to structural empowerment and positively influence the provision of individualized care.

WHAT HAPPENS IF I DECIDE TO WITHDRAW MY CONSENT TO PARTICIPATE?

Your participation in this research is entirely voluntary. You may choose to withdraw from the study after you have received the survey questionnaires and before you have returned them to the investigator. However, data submitted in the questionnaire and returned to the investigator cannot be withdrawn as all data is collected anonymously.

WHAT HAPPENS AFTER THE STUDY IS FINISHED?

The study results will be made available to you and will be submitted for publication as a MA thesis. After publication of the thesis, the results will be disseminated through the submission of research articles to scientific journals and presentation proposals sent to scientific conferences.

WILL I BE PAID TO PARTICIPATE IN THIS STUDY?

If you complete and return the survey package within the allotted time period, you will be eligible to participate in a raffle for a prize of \$500. The draw will be conducted one week after all survey packages have been received.

WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?

This is an anonymous survey. Neither the survey questionnaires nor the demographic questionnaires contain any personally identifying information; therefore, there is no possibility of linking your identity to your survey questionnaire answers.

WHO DO I CONTACT IF I HAVE QUESTIONS ABOUT THE STUDY DURING MY PARTICIPATION?

If you have any questions or desire further information about this study before or during participation, you can contact Sienna Boothman at (604) 613-6462 or Boothman@telus.net

WHO DO I CONTACT IF I HAVE ANY QUESTIONS OR CONCERNS ABOUT MY RIGHTS AS A PARTICIPANT IN THIS STUDY?

If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, contact Dr. Marc Foulkes and/or Dr.

Allan Belzberg, Research Ethics Board [REB] co-Chairs by calling 604-587-4681. You may discuss these rights with the co-chairmen of the Fraser Health REB.

SUBJECT CONSENT TO PARTICIPATE

Completing and returning the study questionnaires to the study investigator implies your consent to participate in this study.

Thank you for taking the time to review this information. If you wish to participate in this research study and are comfortable with the procedures described in this letter, please complete the enclosed questionnaires and mail them back to us in the envelope

Appendix D: Letter of Support from HEU



HOSPITAL EMPLOYEES' UNION

PROVINCIAL OFFICE:
5000 North Fraser Way, Burnaby, BC V5J 5M3 • TEL: 604-438-5000 • FAX: 604-739-1510 • WEB: www.heu.org

November 30, 2006

Dear HEU member:

Re: HEU Support for Sienna Boothman's Research Project, *The Influence of Care Provider Access to Structural Empowerment on Individualized Care in Long-Term Care Facilities*

On behalf of the Hospital Employees Union, I would like to encourage you to volunteer to participate in this research project. This is potentially important research about your work and your ability to provide good quality, individualized care.

In the last round of bargaining in March 2006, HEU won an agreement to establish a provincial Residential Care Policy Committee. This committee will look at issues of staffing and quality care, and at strategies for improving the work environment for staff in residential care. We will have the opportunity to take the findings from this research to that policy table for consideration and action.

It is not that often that you have the opportunity to contribute to research that could make a difference. This is one of those opportunities. We would encourage you to participate.

Sincerely,

Marcy Cohen,
Research and Policy Director
Hospital Employees Union

MC/jp

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