Mount Saint Vincent University
Department of Family Studies and Gerontology

Nursing Home Physical Design and Homelikeness: How Does It Impact Quality of Life for Long-Term Care Residents in Nova Scotia?

by

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Abstract

Understandings of quality of life in nursing homes often include the importance of homelikeness but not necessarily from the resident's perspective. This research explored nursing home physical design and its role in residents' perceptions of homelikeness and quality of life. It involved a secondary analysis of data collected as part of the Care and Construction study, including 15 in-depth interviews with residents from three nursing homes in Nova Scotia. Interviews were analyzed using grounded theory techniques (Corbin & Strauss, 2008). Ecological theories were utilized as a conceptual framework for understanding nursing home residents' relationships with, and perceptions of, the physical environment.

Three overarching themes emerged from resident interviews: (a) renegotiating relationships, (b) having autonomy and choice and (c) experiencing homelikeness, and these themes were woven together by the common thread of continuity. Continuity represented various aspects of how residents talked about the home and its homelike (or unhomelike) characteristics: the importance of continuity of care; facilitating a continuation of residents' hobbies, preferences, and lifestyle from before they were living in the home; and the ability to maintain existing relationships and develop new meaningful relationships. The theme addressing autonomy and choice suggests the importance of a nursing home that is person-centered in its design and practices, while the theme addressing homelikeness and relationships highlights dimensions of homelikeness and their relationship to physical design features and the social environment. Physical design contributed to residents' perceptions of homelikeness in conjunction with other factors, but it does not appear to be in itself what determines what

residents perceive as homelike. It was more the physical environment in general those residents referred to which suggests that the physical *design* of the nursing home does not necessarily limit the likelihood of a home being perceived as homelike. It seems more likely that the physical design sets the stage for other characteristics to be present, which appear to be more of what residents have identified as homelike to them. Physical design lays the groundwork both literally and figuratively for certain policies, practices, relationships, and choices to be carried out and appears to play both direct and indirect roles in residents' perceptions of homelikeness.

Homelikeness from the resident perspective shares many qualities with the International Resident Assessment Instrument's (interRAI) quality of life domains (Kehyayan et al., 2016), suggesting that homelikeness may be an important aspect of quality of life for residents. Nursing home residents' voices should be honoured in order to capture the complexity of notions such as homelikeness and inform more person-centered long-term care policy and planning, including design guidelines.

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Chapter 1: Introduction and Research Questions

As Nova Scotia's population continues to shift towards a higher proportion of older adults, the projected demand for services such as residential long-term care will continue to increase. In 2016, 6.8% of Canadians 65 and over resided in a nursing home or residence for seniors; for Canadians 85 and over, this percentage increases to 30% (Garner, Tanuseputro, Manuel, & Sanmartin, 2018). The long-term care sector will need to be responsive to an increasing number of older adults for whom long-term care is "home". Indeed, whether long-term care feels like home for its residents is becoming increasingly important as improvements to quality of life in nursing homes are sought. Homelikeness in long-term care is not only a timely issue, but also one that is beginning to emerge in research and gain traction in policy.

Homelikeness refers to an individual's perception of feeling at home (Chamberlain, Weeks, & Keefe, 2017; Weeks, Chamberlain, & Keefe, 2017). The definition of homelikeness is inconsistent throughout the literature (Lundgren, 2000), but in general, it suggests descriptions of one's home environment that encompass warmth, coziness, familiarity, and domesticity (Adams & Chivers, 2013; Lundgren, 2000). The creation of homelike nursing home environments is associated with the culture change movement – a mission within the gerontology community that aims to transform nursing homes that can be accomplished in part by eliminating institutional characteristics. These characteristics include practices such as the removal of nursing stations and regimented bathing and mealtimes, and shifting towards design and practice that appeals to residents, staff, and others who visit the facility (Chapin, 2010; Lundgren, 2000). However, in determining what changes should be made to make a facility more homelike, it should be

recognized that while these conceptualizations of homelike designs and practices may appeal to some, they may discount the interests of others. These conceptualizations can become problematic when visions of homelike facilities are shaped by ideological structures that create an inequitable version of homelikeness (Lundgren, 2000).

Reference to a "homelike" environment in long-term care in Nova Scotia made its policy debut in Nova Scotia's Continuing Care Strategy in 2006 (Nova Scotia Department of Health & Wellness, 2015), and it continues to be part of long-term care program requirements for space and design in the province today (Nova Scotia Department of Health and Wellness, 2007, 2019). However, there is no consistent definition of "homelike" across policies in Nova Scotia, and as such, the extent to which requirements surrounding homelikeness are implemented is difficult to understand, let alone measure. Most policies refer to homelikeness in terms of physical design, despite recent research showing that the perception of homelikeness is impacted by many characteristics, not only physical design (Keefe, Dill, Ogilvie, & Fancey, 2017; Nova Scotia Centre on Aging, 2015). Although homelikeness is a multifaceted concept, the opportunity to focus on the physical design component through comparisons of traditional and newer models is relevant locally and timely theoretically. Some newer nursing homes in Nova Scotia have embraced a "household" design that involves small, self-contained households, while "traditional" nursing homes have generally been organized by floors and units. Comparing homelikeness among nursing homes with different physical designs and staffing approaches (i.e., models of care) throughout the province contributes to the general understanding of homelikeness as a concept in

research and can inform provincial- and facility-level policies and guidelines pertaining to the physical environment.

Recent research suggests that homelikeness plays a role in resident quality of life (Keefe et al., 2015). This study examines how physical design contributes to homelikeness in nursing homes, to understand the complexities of "feeling at home" in places that are generally known for their institutional characteristics (Baker, 2007). It will also analyze how homelikeness contributes to quality of life for nursing home residents. The *how* behind this relationship has not been examined and in addressing the absence, the proposed research seeks to understand what aspects of physical design might make some residents feel more at home than others, and how this contributes to their quality of life. This study will also contribute to conceptual knowledge of homelikeness as well as future policy, by producing an evidence-informed definition of homelikeness within the context of residential long-term care.

This study draws on ecological theories as a conceptual framework for understanding nursing home residents' relationships with, and perceptions of, the physical environment.

Research Questions

This research aimed to understand how the physical design of the nursing home contributes to residents' perceptions of homelikeness. In this context, physical design refers to the nursing home designs examined in the Care and Construction project: traditional and household. The traditional design, or traditional space, refers to a facility organized by floors or units, while the household design, or household space, refers to facilities organized into small, self-contained households. This research also explores

homelikeness as a construct in long term care research and its role in resident quality of life.

To answer these questions, a secondary analysis of interview data was completed with the following research questions addressed:

1. How does physical design contribute to nursing home residents' perceptions of homelikeness?
    a. How does the physical space enable, or act as a barrier to, relationships?
    b. How does traditional space compare to household space?
2. How does homelikeness contribute to resident quality of life?

Chapter 2: Conceptual Framework

Bronfenbrenner's Ecological Model

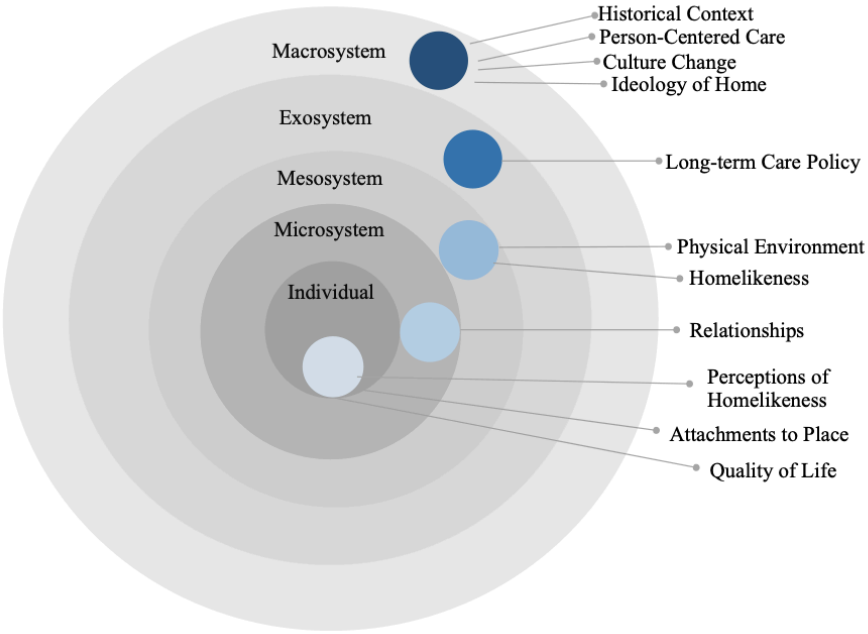
According to Bronfenbrenner's ecological model, an individual is embedded within a larger system of settings and the relationship between person and environment accommodates changes to these settings/contexts across the lifespan (Bronfenbrenner, 1977). As Bronfenbrenner explains, structures that impact an individual can be imagined as nested within one another: "environmental structures, and the processes taking place within and between them, must be viewed as interdependent and must be analyzed in systems terms" (p. 318). The levels within the system suggested by the ecological model represent different environmental or social contexts that are interdependent in nature, and within which the individual is embedded. Beginning at the broadest level and moving inwards, the macrosystem represents cultural patterns that are not concrete but instead provide the "blueprints" (p. 515) for the functioning of other systems within it. The exosystem consists of societal institutions, such as government, that do not directly surround the person but impact the settings a person will directly encounter. The mesosystem represents the interactions among an individual's microsystems, which may be the interaction between family and staff in the nursing home context. The microsystem includes an individual's immediate setting and the relationships that the individual nurtures within it. In Bronfenbrenner's model, "setting" refers to "a place with particular physical features in which the participants engage in particular activities in particular roles for particular periods of time" (p. 514).

For the purposes of this study, the individual who is referred to in the center of the ecological model is the nursing home resident. The contexts, both past and present, that

have helped shape a resident's perception of homelikeness and subsequently, their quality of life, can be situated within the ecological model (see Figure 1). This review outlines these contexts and their relationship with other systems within the model; the aim of which is to elucidate the origins and characteristics of homelikeness and the ways in which they shape the resident's perception of a homelike environment. The following overview of the literature begins with macrolevel contexts and will discuss the higher-level cultural influences and movements that have impacted homelikeness as a concept in research. The review then moves inwards to the exo-, meso-, and microsystems to discuss the physical design of the nursing home. The factors cultivated at the individual level will then be discussed, including a resident's attachments to place, their perception of homelikeness, and quality of life.

Figure 1

Literature Review Embedded in Bronfenbrenner's (1977) Ecological Model



Ecological Theory of Adaptation and Aging

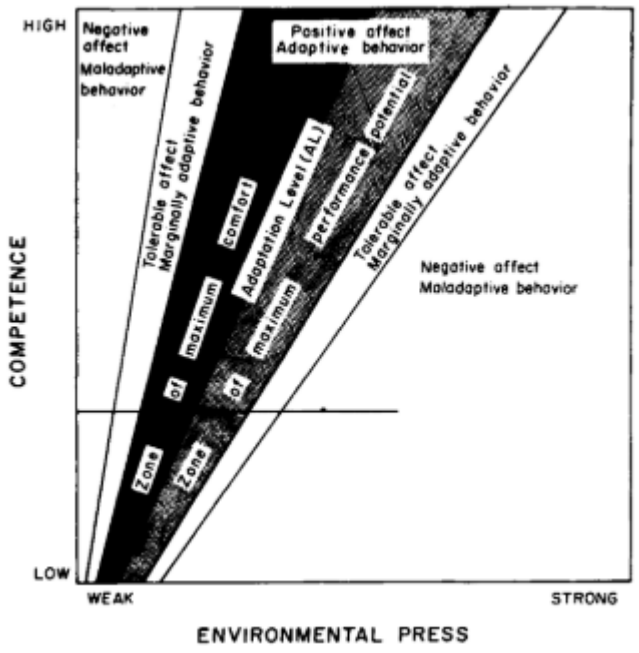
Nahemow and Lawton's (1973) ecological theory of adaptation and aging is closely related to Bronfenbrenner's (1977) ecological model, which was used earlier in this thesis to illustrate the interdependent sources of influence on an individual's perception of homelikeness (see Figure 1). These ecological theories are both address the relationship between person and environment, with the recognition of the transactional nature of the relationship. Nahemow and Lawton's theory anchors much of the research concerning the interaction of person and environment and is a key framework in environmental gerontology. Indeed, it is well known that design of the physical environment is related to how a person behaves within it (Cutler, 2000). Ecological theory posits that behaviour results from the interaction between different dimensions of environment – physical, social, psychological, and cultural (Cutler, 2000). The environmental demand placed on the person refers to the *level of press*. It is theorized that the person's competence level interacts with the level of environmental press and impacts the person's behaviour and affect (Lawton & Nahemow, 1973; see Figure 2). Aligning competence with the level of environmental press is thought to support the person's highest level of functioning possible.

Ecological theory has been used to emphasize the importance of good person-environment fit in order to promote well-being (Shield, Tyler, Lepore, Looze, & Miller, 2014) and mastery of one's environment (Nahemow & Lawton, 1973). In recent gerontological literature, use of this framework has been used as a lens for evaluating implementation of culture change in nursing homes. Shield et al. (2014) suggest that changes to the physical environment grounded in principles of culture change can create

supportive environments for resident choice, satisfaction, and personal control. For example, within the Care and Construction study, in one culture change facility garden boxes were added outside of the facility that were positioned at a level that could be accessed comfortably by wheelchair, allowing residents with different levels of mobility to access gardening as an activity.

Figure 2

Ecological Theory of Adaptation and Aging



Note. From "Toward an ecological theory of adaptation and aging," by L. Nahemow and P. M. Lawton, in W. Preiser (Ed.), *Environmental Design Research: Selected Papers* (p. 27), 1973: Lucille Nahemow. Copyright 1973 by Lucille Nahemow. Reprinted with permission.

Chapter 3: Literature Review

This literature review begins with an overview of the culture change movement in the context of long-term care, particularly as it relates to nursing home physical design and environment; the role of person-centered care in advancing culture change will also be considered. Homelikeness is covered in terms of physical design, as well as other factors contributing to how residents' perceive 'home'. Finally, a review of literature surrounding nursing home residents' quality of life, and how homelikeness can play a role, is provided.

Culture Change

Broadly, culture change involves the ways that people commit to enacting change in long term care (Kane, 2001). The culture change movement began in 1986 in the United States when the Institute of Medicine (IOM) published "Improving the Quality of Care in Nursing Homes" after surveying nursing home residents for their definitions of quality of care and quality of life (Koren, 2010). A year after the report was issued, the "Nursing Home Reform Act" was published. Part of the act's mandate was to provide each nursing home resident with individualized care, or "person-centered care". Some states began to use "household" models, wherein larger areas in nursing homes were broken down into smaller units/households. These leading states in the culture change movement, researchers, advocates, and policy makers formed a group called the Pioneer Network. This network created a set of guiding principles for culture change based on what they considered the "ideal" institution: resident direction, homelike atmosphere, close relationships, staff empowerment, collaborative decision-making, and quality improvement processes (Koren, 2010). With the culture change movement in the United

States came the introduction of homelikeness as a goal in long term care. As Baker (2007) writes on the topic of transformative nursing homes, culture change:

> requires uprooting the institutional nature of the nursing home and planting in its place a new community that looks and feels much more like a home than a hospital, both in its physical design and in the relationships it nurtures. (p. 3)

The culture change movement in long-term care is complex and imbued with historical significance. It occupies a distinct role in the departure from medicalization in the long term care sector, and refers to specific notions of "culture" and "change". Culture, in this context, refers to organizational culture and its responsiveness to the changing landscape of long term care. The particular form of culture is multi-layered and represented by a combination of "values, beliefs, and assumptions" (Chapin, 2010, p. 186) manifested through organizational structure, policy, programming, and importantly, physical environment. The complement to culture in this context, change is meant to be far-reaching and reflective of altered values and behaviours that translate outwardly into systemic shifts (e.g., processes and practices) (Chapin, 2010).

In her book *Old Age in a New Age: The Promise of Transformative Nursing Homes*, Baker (2007) comments on her meetings with Dr. William Thomas (known as the founder of the culture change movement and certain progressive concepts in care) and her observations from dozens of culture change nursing homes across the United States. According to Baker's observations, vast differences in look and feel existed across nursing homes, but there seemed to be common values that every other element of the home was built upon. Some of these values were the redesign of the building to reflect home and the maintenance of a sense of purpose and meaning. Implementing changes,

big or small, that reflect these values seem to make a profound difference in the feel of the home.

Culture change advocates maintain that an unsupportive physical environment can promote decline such as apathy and lethargy (Baker, 2007). The bedrock of culture change is to facilitate a sense of home so that residents can engage with the environment and others, and maintain their identity beyond illness. In Baker's (2007) conversations with Steve Shields, a leader in the household model of nursing homes, Shields explains that a hurdle to implementing culture change is "a basic fundamental flaw in our planning for people with special needs – we don't expect them to be home" (p. 34). This observation suggests that the possibility of a nursing home becoming a genuine home is not often considered, and in this way, transformation can be stifled because the environment is only viewed as an institution where the residents themselves are the "work". This perspective lacks recognition of residents' identities and "homeplaces" (Lundgren, 2000), and it is commonly thought that humanizing the way that people think about nursing home residents and their dwellings is crucial to fostering true culture change (Baker, 2007; Chapin, 2010; Koren, 2010).

The goals of the culture change movement as they exist currently focus on moving away from institutional design and practices and instead making nursing homes more homelike. According to (Koren, 2010), there are certain features of the ideal culture change facility: resident direction, involving resident decision-making and care; homelike atmosphere, involving small households and removal of institutional features; close relationships, referring to care continuity and relationships among residents, staff, family and community; staff empowerment, concerning the organization of work and overall

support; collaborative decision-making, which supports a departure from hierarchy, and more team-based work; and quality-improvement processes, and ensuring ongoing work to create measurable change.

Although a dearth of writing on culture change in long-term care exists, it has been noted that definitions of culture change are often more philosophical than they are descriptive (Chapin, 2010). There are certain principles associated with culture change although how they are adopted can vary tremendously and over time as facilities gradually implement change. This variation, along with the tendency for facilities to be at different stages of transformation (see Table 1) makes it difficult to envision culture change 'on the ground', especially since those who implement cultural transformation do so according to their interpretation of what culture change looks like.

Descriptions of facilities as "culture change facilities" or "homelike" are now not an exception, but the norm (Lundgren, 2000), and it should be acknowledged that those that are directly involved in making an environment homelike (e.g., managers, administrators, architects, politicians and others, collectively referred to "experts") are being influenced by highly ideological representations of home. For instance, Lundgren's work discusses what is meant by home when the term homelike is used in the context of housing for older adults. In this context, homelike design and décor appears to be associated with archetypes of a "good" home, which Lundgren calls the "aesthetics of being homelike" (p. 109). The curtains, rugs, furniture, and wall décor represent aesthetic norms of the good home, which are conjured to create images of homelike environments. Underlying this symbolic image of home are social and cultural constructions that are important to consider when unpacking the concept of homelikeness. For instance, one

could consider commonly held beliefs about older adults and their dwellings; how are they being reflected in the design and décor in nursing homes? Importantly, some scholars have characterized homelike as one end of a spectrum that spans to another end – institutional. In this way of thinking, creating a more homelike environment is thought of in terms of the removal of institutional characteristics such as long hallways and nursing stations (Koren, 2010; Lundgren, 2000). It is also essential to be aware of how homelikeness is defined based on who is defining it. For example, scholars of environmental gerontology explain the ideology of home is reflected in how those directly involved in the architecture, design, and décor of the nursing home conceive of what is homelike to an older adult (Lundgren, 2000). However, when homelikeness is defined by an older adult living in a nursing home (i.e., resident) it is the opportunity for the individualization of one's space that brings an increased sense of choice and more opportunity to ascribe meaning to one's environment (Kane, 2001). According to Koren (2010), practices that encourage resident choice such as personalizing one's space are integral to the delivery of person-centered care.

Person-Centered Care

The first documented use of person-centered care in long-term care policy for older adults in North America was in the United States when the *Nursing Home Reform Act* was enacted in 1987 (Koren, 2010) after the Institute of Medicine published a report documenting the lack of personal treatment or satisfactory healthcare (Institute of Medicine Committee on Nursing Home Regulation, 1986). Nursing homes were the only institutions in the healthcare sector to have an explicit requirement for person-centered care. Traditional approaches to care in nursing homes were being increasingly questioned

as individualized approaches prompted certain nursing home reform advocates known as the Pioneer Network to embrace person-centeredness (Baker, 2007).

Person-centered care has been described as a resident's right to self-determination and choice, which entails that the resident be the centre of all arrangements including care and decision-making, and has been viewed as a solution to overly medicalized approaches to care (Rockwell, 2012). Accordingly, Koren (2010) suggests that creating person-centered nursing homes is the overarching goal of culture change, and in this view, culture change and person-centered care are interconnected parts of the trajectory towards nursing home transformation. Transformation refers to the overall shift from institution to an environment that represents home and community, and involves "dramatic steps to revise longstanding negative stereotypes of the nursing home" (Chapin, 2010, p. 185). This shift would require an overhaul of many aspects of the nursing home. Such aspects could refer to changes in workers' scope of practice, which may be broadened to include participation in cooking meals (Cutler & Kane, 2009; Rabig, Thomas, Kane, Cutler, & McAlilly, 2006); the addition of furniture and décor that feels inviting for guests, which can encourage social interaction among residents and visitors (Shield et al., 2014); and the removal of locks on doors to support residents in living autonomously in their environment (Power, 2016). Accordingly, culture change facilities offer a person-centered *home* first, while also providing long-term care services, thereby prioritizing the home in nursing home. A nursing home should not be regarded as a healthcare site to truly represent person-centeredness (Koren, 2010). However, according to Rockwell (2012) there are considerable challenges to implementing person-

centered care in nursing homes due to constant competition between resident priorities and organizational priorities.

Issues that have occurred with implementing person-centered care models in nursing homes, one of which is the Eden Alternative, have been associated with an increase in staffing size. Staff training on person-centered care often cannot be completed in a timely manner, which contributes to the lack of adherence to the model in practice (Rockwell, 2012). Further, models of person-centered care are adopted by many facilities for the purpose of making improvements to the overall facility or organizational culture, without being prescriptive. Due in part to the absence of procedures associated with person-centered care, the degree to which the philosophy is adopted is varied across nursing homes. One well-established element associated with person-centered care in the literature and in practice is the provision of a homelike atmosphere, both in approach to care and physical design (Koren, 2010).

Culture Change in Physical Design

To understand culture change in action, it is useful to look at some of the manifestations of the movement. There have been many developments in culture change models for long-term care, although some have been more concrete in addressing the physical design of the nursing home (Zimmerman & Cohen, 2010). To make sense of the outgrowths of culture change, Grant and Norton (2003) developed a model that outlines four stages of the movement (Table 1). This model posits that culture change in facilities moves through stages as organizational and physical changes develop. It is useful for understanding and comparing the characteristics of different culture change models and it will be used to contextualize the following discussion of some of these models.

Table 1

Four Stages of Nursing Home Culture Change

Stage	Features
1. Institutional Model	The traditional medical model is organized around a nursing unit without permanent staff assignment. Neither residents nor staff are empowered in this model. Staffing inconsistency limits relationship-building between staff and residents, and depresses job satisfaction.
2. Transformational Model	Awareness of the key elements of culture change is pushed throughout the organization via workshops and educational sessions for various departments and types of staff. Permanent staff assignments to units may be made to start the development of communities within the facility. Low-cost physical changes may be introduced, including new furnishings, artwork, plants, carpeting, and higher-end finishes — such as crown molding.
3. Neighbourhood Model	Traditional units are divided into smaller areas. Resident-centered dining may be adopted, eliminating full kitchens. Neighborhood coordinators are sometimes introduced and unique names and physical attributes are developed for each neighborhood.
4. Household Model	Self-contained living areas have up to 25 residents. Typically, each household has its own kitchen, living area, and dining area. Staff are self-directed teams who perform a variety of functions. Household management is a collaborative process that places resident preferences first, followed by staff and household capacities.

Note. Table created from content in Grant and Norton (2003).

Eden Alternative

One of the first models of culture change, the Eden Alternative was founded by Dr. William Thomas, a key member of the Pioneer Network whose work has been mentioned earlier in this paper for its significance to advocacy surrounding nursing home transformation (Chapin, 2010). The Eden Alternative was developed in 1991 in response

to what Thomas identifies as the three "plagues" of nursing homes: boredom, loneliness, and helplessness (Chapin, 2010). To combat these plagues, this model champions an ecology of the home by promoting the integration of living elements. For example, outdoor space and gardening is part of enriching the home as well as the presence of animals and children (White-Chu, Graves, Godfrey, Bonner, & Sloane, 2009). A defining organizational innovation of the model is the flattening of the traditional hierarchical structure and recognizing of each staff member's contributions to resident care. There is an emphasis on the staff-resident relationship and fostering opportunities for creating meaning through activity and care. This model does not have a specific requirement for physical changes, although they are strongly encouraged. In this case, the stage of culture change reached depends on the individual facility and the significance of physical changes made (Cheek, Nolan, Piano, & Larsen-Orta, 2008; Grant & Norton, 2003). These changes may occur at the second, "transformational" stage by the additional of certain design elements such as plants and less institutional-looking furniture, and by maintaining consistent staff assignments for each resident. Progression to later stages of culture change necessitates an increased commitment to physical changes including smaller divisions of the traditional unit, or further, self-contained households. Cheek et al. (2008) suggest that the Eden Alternative is the sister model to the Green House model, which has more explicit guidelines for the physical design of the facility guided by the Eden philosophy.

Green Houses

Green Houses are nursing homes that are more akin to small houses than institutions and are an application of many of the principles suggested by Thomas in the

Eden Alternative (Rabig et al., 2006). Green Houses are self-contained houses intended for 10 or fewer residents – an innovation known for the promotion of the de-institutionalization of nursing homes. Some of the progressive aspects of the Green House model are the small size of house itself as well as the small number of residents living in each house. The houses are intended to appear as though they could blend in architecturally to the neighbourhood. Traditional symbols of domesticity (Braedley & Martel, 2015) are encouraged, such as a hearth, large farmhouse kitchen, living room, designated laundry area, porch and outdoor space. Homes are further characterized by the absence of institutional furnishing, hallways, call bells, nursing stations, and medication storage. Technological innovation is an essential part of the Green House model, which is thought to support residents in care interactions, maintaining independence, and in communicating with remote family and friends.

Organizational changes followed suit with nursing staff roles being broadened to include meal preparation and housework, which challenges traditional institutional, medicalized staff roles (Rabig et al., 2006). These changes are also reflected in the provision of clinical assessments and care that are organized as visits to the home instead of more intrusive, hospital-like rounds. An approach to care that minimizes or eliminates medical characteristics in the nursing home is a philosophical principle underlying the Green House model, with the aim of supporting the normalcy of nursing home living (Lum, Kane, Cutler, & Yu, 2008).

Cutler and Kane (2009) explained the impact of a transformed physical environment in what is one of the few post-occupancy evaluations of nursing homes guided by the culture change movement. When the Green House concept first emerged it

did not come with a description of physical design, other than the requirement of a hearth area, a large dining table to accommodate all residents as well as staff and guests, and single rooms. The idea used to guide physical design originally was to think about whether people would have a particular decorative element in their own home, and if people would not, then it was said not to belong in a Green House. There are few post-occupancy evaluation studies conducted in culture change nursing homes (Cutler & Kane, 2009; Cutler, Kane, Degenholtz, Miller, & Grant, 2006; Kane, Lum, Cutler, Degenholtz, & Yu, 2007; Lum et al., 2008). Cutler and Kane's (2009) longitudinal study evaluated the performance of the building and examines the relationship between design and social and behavioural outcomes in the first four Green Houses built in Mississippi. Researchers used floor and site plans, administrative data, photographs, behavioural mapping, environmental checklists to assess quality of residents' room and bath, physical tracers to explore how physical space was used, time scans of the use of shared space, and long-term follow-up interviews. One of the challenges in creating these homes was balancing physical design and the heavy care needs of its occupants. The equipment needed in order to provide nursing-home level care can be burdensome in designing for a homelike atmosphere (Cutler & Kane, 2009). Furthermore, the sustainability of the Green House requirements, such as the use of dining chairs during mealtimes for residents that use wheelchairs, were not maintained for some of the Green Houses.

One of the main implications of this post occupancy evaluation is that implementing Green Houses require an intense commitment that usually involves the complete replacement of a nursing home or circumstances where the Green House(s) will not operate alongside another nursing home. It was suggested that Green House

implementation at an existing nursing home can make it difficult for staff to navigate more than one model of care, which can affect care delivery (Cutler & Kane, 2009). However, the performance of the houses proved positive overall and results showed that in general, utilization of both private and shared spaces aligned with the Green House's intended use. Further development of some of the ideas introduced by Green Houses (e.g., smaller divisions within facilities; self-contained houses) have emerged in the more recent literature, such and neighbourhood and household models (Chamberlain et al., 2017; Keefe et al., 2017; Shield et al., 2014; Zimmerman & Cohen, 2010).

Neighbourhood Model

The Neighbourhood model is associated with the Pioneer Network and is recognized by its physically-defined environment within a larger setting (Jurkowski, 2013). Neighbourhoods are encouraged to develop their own identity through customization of the area according to residents' preferences with the goal of creating a homelike atmosphere on their terms. A common feature is to decentralize dining, where kitchen staff may be consistently assigned to a particular neighbourhood and residents may have mealtimes with other residents in their neighbourhood. Neighbourhood facilities must have staff training in order to encourage the implementation of the model in everyday practice, and some facilities will crosstrain employees to encourage continuity. This model is highly related to the Household model, although it differs in that it does not necessarily require environmental change to the same extent and can be more easily implemented within existing physical structures (Cheek et al., 2008).

Household Model

In line with Grant and Norton's (2003) stages of culture change of the same name, the Household model is thought to most fully integrate the principles of culture change. It aims to support a family life setting and accordingly, usually not exceeding 12 residents (Jurkowski, 2013). The small number of residents living in each household gives the resident more opportunity to provide their input about the management of the household. Consistent staff assignments are given to each household, which affords both the staff and resident opportunities to develop relationships, and supports the staff in facilitating residents' preferences. Further, the small number of residents enables the staff to engage the residents in group activities such as meal preparation or activity planning.

In Households, laundry, cooking, and daily living occurs within each of the individual household units. By extension, the physical design could be described by all of the traditional, domestic features. Other notable physical features include that nurses' paperwork and charting is completed at a household table instead of the traditional nurses' station, which means that there is removal of some of the most institutional elements. One of the most distinctive qualities of the Household model is each unit's "personality" and the opportunity for unique additions to many areas of the unit. Jurkowski (2013) notes that Households are encouraged to source furniture and other décor from non-hospital suppliers, such as stores in the local community. Private rooms and bathrooms are also benchmarks of the Household model, and each resident is permitted and encouraged to fully personalize their room not only with décor, but also with paint colour or wallpaper. Other characteristics of the Household model's physical environment are windows in each room, bathroom features that are adjustable for a sitting

or standing resident (e.g., mirrors, door handles, sinks), ability to adjust lighting and heating, and workout rooms (Jurkowski, 2013).

The moving parts of physical design, organizational structure, and staff roles are "mutually reinforcing" (Cutler & Kane, 2009, p. 326) components that are integral to supporting cultural transformation. According to the Pioneer Network, one of the essential components of culture change is veering away from the medical model and removing institutional qualities of long-term care (Chapin, 2010). Moreover, culture chance advocates suggest that long-term care facilities can embrace transformation by adopting a person-centered model of care that revolves around residents' remaining abilities (Chapin, 2010). Although these initiatives are in line with what seems to be the "vision" for culture change facilities, the drastic changes to the way that nursing homes are operated have not come without some hurdles. Shield et al.'s (2014) review of nursing home administrators' experiences of implementing culture change into their respective facilities showed that many staff members and residents did not react favourably of the changes. Changes in the physical environment, such as a change in the dining area, was distressing for some residents. Administrators reported that involving the residents in decision making as much as possible and keeping ongoing communication about the change was helpful in easing some of the anxiety. Staff members that were resistant to the changes were encouraged to become more involved with the new initiatives to foster leadership and acceptance (Shield et al., 2014). Other studies such as Brownie and Nancarrow's (2013) review of the impact of person-centered care in culture change facilities, found that an increase in falls was reported in two studies, which may have been a byproduct of supporting residents in maintaining

autonomy. Despite these challenges, nursing home design that has been guided by culture change principles has generally shown positive outcomes, such as resident, staff, and family members' perceptions of a homelike environment (Chamberlain et al., 2017; Cutler & Kane, 2009; Rijnaard et al., 2016).

Homelikeness

Institutional space is typically portrayed in architectural literature as "rational, authoritarian, technological and hierarchical" (Lundgren, 2000, p. 109), and critics often draw on these descriptors in favour of improvement of the physical environment in nursing homes. Those who advocate for a better environment in institutions most often make reference to some variation of the term homelike. Correspondingly, the words homelike and homelikeness have been expressed many ways throughout the literature. In a recent systematic review of the literature surrounding nursing home residents' perspectives on sense of home, Rijnaard et al. (2016) found that "sense of home", "meaning of home", "at-homeness", or homelikeness were common variations in language to reflect a homelike environment in a nursing home. Although most of the literature tends to describe homelikeness similarly, giving a concrete definition to the term can become very difficult. For instance, the most up-to-date systematic review surrounding nursing home residents' sense of home uncovered 15 factors that influence homelikeness (Rijnaard et al., 2016). It is justifiably difficult to settle on any specific characteristics of homelikeness, especially when homelikeness takes on vastly different meanings depending on who is being asked to provide a definition.

The breadth of homelikeness in long-term care can be daunting as research has shown that residents' perceptions can be an amalgamation of many factors spanning from

environmental to social to organizational (Keefe et al., 2015; Lewinson, Robinson-Dooley, & Grant, 2012; Rijnaard et al., 2016). A physical environment cannot be inherently homelike as different perspectives of home will dictate how closely a particular setting approximate home. However, there are certain physical features and practices that impact whether a nursing home is deemed homelike by its occupants (Keefe et al., 2015). Homelikeness based on residents' perceptions has been defined as an individual's perception of feeling at home (Chamberlain et al., 2017) and homelikeness as it is actually felt by residents is impacted by psychological, physical, and social factors (Joseph, Choi, & Quan, 2016; Rijnaard et al., 2016).

Rijnaard et al.'s (2016) review suggested the importance of staff-resident relationship to homelikeness. Residents from two studies valued relationships with staff when they felt that the staff cared about them and their well-being. However, identified in two other studies was the potential for certain practices and use of language to hinder the development of these relationships; specifically, staff spoke differently around resident than when they spoke with others, which undermined the resident's sense of self-worth. When staff did not use genuine and personable styles of communication, such as updating residents via information sheets under their door, residents can feel less at home (Lewinson et al., 2012; Rijnaard et al., 2016). Lewinson et al. argue that many of the practices that detract from residents' sense of home are partly due to the staffing approach. For instance, personalized care delivery and getting to know staff on a personal level are discussed in the context of three studies in Rijnaard et al., although multiple studies mention the difficulty in actualizing this approach to care because of an unfavourable staffing ratio. Being able to relate to staff meaningfully has been shown to

positively promote residents' feelings of homelikeness, particularly when they allowed interactions to be reciprocal (Rijnaard et al., 2016; Rockwell, 2012). For example, five studies in Rijnaard et al.'s review point to the importance of participant in homelike tasks, such as setting the dinner table or preparing meals. This can promote a sense of value derived by narrowing the power differential between a resident and staff member (Robinson, Colin Reid, & Cooke, 2010). This is also supported by practices encouraging decentralized mealtimes, which allows food to be prepared within a smaller group and in a smaller environment that feels more like family life (Jurkowski, 2013).

Homelikeness is also impacted by factors associated with the built environment (Joseph et al., 2016). Concerning building exteriors, Marsden (1999) asked older adults and family members to evaluate assisted living facilities for their homelikeness, or "homeyness" in Marsden's terms, by sorting photos of facilities into piles ranging from "not at all homelike" to "very homelike". It was found that one-story buildings, particularly if they possessed a pedestrian entryway, were more likely to be perceived as homelike by older adults compared to buildings with additional stories (Marsden, 1999). Older adults also identified certain facilities as more homelike when the facility's exterior was landscaped (e.g., plants surrounding the facility), had wood or brick siding, prominent roof, and other decorative details such as window trim, shutters, and balconies (Marsden, 1999). It was thought that many of the elements older adults considered more homelike approximated the characteristics of single-family homes, and were representative of what Marsden calls "human scale" (p. 87); the relationship between the size of a building and size of a person that allows a person to make sense of the environment. It is thus unsurprising that smaller-scale facilities were deemed more

homelike – a finding that is consistent with other studies of homelike housing for older adults (Cutler, 2000; Kane et al., 2007; Rabig et al., 2006). These exterior and more architectural components of the built environment are important to consider alongside the interior design elements, which are typically the focus of literature surrounding person-environment interactions.

Elements of a facility's interior environment appear to influence residents' sense of control and privacy (Joseph et al., 2016; Weenig & Staats, 2010), both of which are attributes that are associated with homelikeness in nursing homes (Imamoğlu, 2007). Weenig and Staats (2010) suggest that interior design and the configuration of space play a role in providing opportunities for privacy as well as social interaction. The configuration of space may refer to the way in which a facility is compartmentalized, the type and function of the area, and the room's arrangement. Social interaction can occur in private spaces such as a resident's room or communal spaces such as recreation rooms, kitchens, or hallways, and it is important for residents to have unrestricted access to a variety of these settings in order for choice and control to be actualized (Joseph et al., 2016; Weenig & Staats, 2010). This includes the provision of private spaces—particularly a private room—within the facility, where one can withdraw if desired (Rijnaard et al., 2016). Two studies in Rijnaard et al.'s review found that residents cherished more private conversations such that the ability to retire to more private areas became highly valued. Private areas in the facility do not necessarily have to be completely separate from communal spaces; rather, privacy is impacted by interior design such that certain configurations of a setting can determine the extent to which a resident can visually monitor the environment (e.g., locate other residents), and the extent to

which the resident perceives that others can visually monitor their behaviour (Joseph et al., 2016).

Joseph et al. suggest that access to settings that represent a gradation from public to private space is essential, as this has been associated with higher environmental control for residents (Barnes, 2006). A concrete example of this may be the ability to move amongst public (e.g., lobby), semi-private (e.g., kitchen or library) and private (e.g., resident bedroom) settings. The use of public and private space in nursing homes was echoed by Rijnaard et al. (2016) in their review as an important facet of the built environment, which addressed the design of public and "quasi-public" space (pp. 11-12). In at least three instances in these studies, the boundaries between private and more public spaces were ambiguous, which made it difficult for residents to make sense of the space's intended use and therefore did not support a feeling of homelikeness. Some of these areas included living rooms, because of the difficulty in holding meaningful conversation among many residents; hallways, as the option to move about the facility without being met with physically inaccessible areas was inconsistent; and the lack of designated space for particular activities, which made some residents uncertain about the use of space for their desired endeavours (Rijnaard et al., 2016). Imamoğlu (2007) found that the ability to personalize one's space contributes to homelikeness. Similarly, residents from four studies in Rijnaard et al.'s review described factors related to the importance of the private room space and the ways in which personalization would be desirable. For example, in more than one study there was a desire for spaciousness, and one study specifically mentioned the ability to remove unnecessary furniture in their

private space. Residents in another study expressed a desire to store items that would allow for the continuity of their daily activities (e.g., work corner for writing).

As Rijnaard et al. suggest, a list of factors that contribute to residents' experiences of home should be made available to architects, nursing home administrators, family members and others who impact the resident's experience in order to provide concrete suggestions that foster homelikeness. In particular, factors that support residents in perceiving a homelike environment need to be taken into account. These factors are important for a process called placemaking—a process that involves a resident creating new attachments to their environment (Cutchin, 2003; Groger, 1995).

Placemaking

The importance of place for older adults is well documented. It can be expressed by a sense of physical "insideness" (Chapin, 2010), social belongingness (Chaudhury, 2003), and meaning through associations with place (Rowles & Chaudhury, 2005). Although "place" appears to be a simple concept at face value, scholars of geography have identified nuances in the politics of place that can inform how residents form attachments to nursing homes. For example, there is an important distinction between the concepts of space and place. The distinction is best thought of as an analogy to the difference between house and home. Specifically, Rowles and Bernard (2013) explain that home is different than house in that home requires dwelling; that is, connection between the person and location that develops over time and conjures feelings of familiarity and comfort. A home serves as a reference point in relation to the rest of the world. According to Easthope (2004), modern, institutional buildings are often considered as "placeless" because of the feeling of alienation upon occupying the

building. to create meaningful attachment to place in fostering homelikeness. This underscores the necessity of opportunities for residents to develop meaningful relationships with others and with their environment, as whether residents identify with or against the nursing home is thought to impact their sense of home (Rowles & Bernard, 2013).

Easthope (2004) explains that the value of a concept such as place in housing research is that it concerns, "the relationships that people have with the external world" (p. 124). This can refer to relationships to the physical space around the person as well as relationships to others within said space. Homelikeness concerns exactly this idea; that is, how one feels at home, how the space looks like home, and that others treat the space like home (Keefe et al., 2015). In all cases, there is a connection between person and place that develops meaning for the person – in this case, a nursing home resident:

> bringing spaces to life and developing a sense of being at home in these spaces is a complex process involving use, awareness, and the development of emotional attachments, all filtered through ongoing processes of vicarious immersion. (Rowles & Bernard, 2013, p. 11)

This is echoed by Easthope (2004), who comments that ideas of place are intimately tied to community, individual and group identity, collective memory, and political structure. Easthope suggests that the influence of place on identity should be considered in research concerning housing, such as long term care. In particular, geographers argue that one's identity is not only internally constructed, but is impacted by their interaction with the world around them. In essence, a "sense of place" requires that place develop meaning by a person assigning meaning to it – place does not have meaning until it is given

meaning with the presence of humans. Other scholars have even drawn further distinctions between a true sense of place and what Tuan (1980) called “rootedness” (as cited in Easthope, 2004, p. 130). Rootedness is felt with familiarity, while sense of place is thought to develop with appreciation and when one defines oneself with qualities of a particular place. When one feels a sense of place there is a distance felt between self and place, which allows one to be aware of one’s presence in relation to place.

The importance of attaching meaning to a new space for nursing home residents is substantiated by Chaudhury’s (2003) exploration of place therapy for quality of life. Place-therapy can encourage nursing home residents to connect with past and current places, including home-places, to support quality of life. Chaudhury suggests that many nursing homes and other institutional facilities are considered “nonplaces”; the physical and social environments are institutional and consequently, residents have few opportunities to connect with the past in order to create meaning from which they can develop attachment to their environment. Home can be the strongest attachment to place there is (Chaudhury, 2003; Easthope, 2004) and living in long-term care can be even more difficult given the loss of attachment to one’s previous home and the need to find meaning in one’s new dwelling. Through the process of placemaking a resident may develop meaningful attachment to the new environment. Environmental features can assist residents in reminiscing or recalling past events or associations with other places, and can ultimately provide psychological support. Certainly, this plays a role in how homelike a setting may look or feel for a nursing home resident.

Homelikeness as it is experienced by nursing home staff, residents, and residents’ family members can be notably different from the homelikeness articulated in policy

documents and institutional guidelines. Importantly, homelikeness as it exists in these documents is informed by non-residents and their ideas about homelikeness will always involve an interpretive element (Lundgren, 2000; Marsden, 1999). Further, many of these documents prescribe a homelike atmosphere for residents without defining what is meant by homelike. Policy at the provincial and institutional levels, and subsequently, its implementation, is then subject to decision-makers' beliefs about what older adults perceive to be homelike (Chapin, 2010). The manifestation of these policies in the physical design and overall physical environment of nursing homes can be assessed by inquiring into residents' perceptions of homelikeness in the nursing home. The implication of offering a physical environment that residents perceive as homelike is thought to be an increased quality of life.

Quality of Life

Culture change advocates have argued for a philosophical overhaul of priorities in nursing homes. The management of the physical environment and the approaches to staffing and resident care should support a better quality of life for residents, which is defined in the context of each resident (Kane, 2001; White-Chu et al., 2009). As could be imagined, quality of life can look different for each resident and when it is referred to, generally, quality of life represents a resident's well-being indicated by either or a combination of subjective and objective factors (Ferriss, 2004). Quality of life becomes more specific in the context of resident assessment as it takes on meaning based on what measurement or method of assessment is chosen.

Much of the literature focuses on resident assessment for quality of care, wherein attention is paid largely to signs of poor healthcare contributing to the continued

medicalization of nursing homes (Kane, 2001, 2003; Koren, 2010). Quality of care is a distinct concept from quality of life, and involves the assessment of markers such as urinary tract infections, overmedicating (e.g. antipsychotics), and malnutrition. These issues are important and should continue to be addressed; however, it is clear that the focus has been upholding care standards rather than supporting residents in achieving good quality of life. Measuring quality of life as an outcome of living in nursing homes requires that it is given primacy, and is not simply the "pious afterthought to quality of care" (Kane, 2003, p. 297). Priority shifts that occurred with the culture change movement echoed a general trend in the late 1990s that health, and later, quality of life, is more than the absence of negative outcomes (Pennacchini, Bertolaso, Elvira, & De Marinis, 2011). This shift prompted the use of a more positive formulation of quality of life as an outcome measure in general, and also in nursing home research (Kane, 2001).

Kane (2003) also suggests that the lack of measurement of quality of life in research is partly due to the misalignment between the humanizing changes to nursing homes and the formal, "dehumanizing" process of actually measuring quality of life in such a setting. Evidently, quality of life is relatively recent in this body of literature, particularly when it comes to how residents experience nursing homes that have adopted culture change models. Kehyayan, Hirdes, Tyas, and Stolee (2016) have also commented that quality of life specifically as a self-report measure is in its infancy, explaining that the more recent celebration of culture change has not been met with increased use of person-centered methods of capturing quality of life. Using self-report measures is the gold standard for nursing home residents as gathering information from the source affords the most opportunity for genuine responses (Kehyayan et al., 2016). Certainly,

measurement of quality of life has developed into a plethora of measurement tools, some as more global measures, and some with more specificity. Various interpretations of health related quality of life are among the most used, but reflect only the aspects of one's life that are impacted by a particular health condition or treatment (Kane, 2003), which is not compatible with a person-centered approach due to its lack of holistic consideration for the person outside of their health status.

Kane (2003) offers a measure of quality of life developed for use in long-term care facilities that goes beyond the absence of negative outcomes such as depression and malnutrition and embraces residents' capacity for lifelong learning and well-being in such settings. Eleven domains of quality of life that were based on actual outcomes experienced by long-term care residents represent a more person-centered way of evaluating quality life than some other measures that examine structural elements of long-term care. One aspect of quality of life is represented by the domain "sense of safety, security, and order" (Kane, 2001, p. 297), which requires that the resident feel protected in their environment. Further, a resident's environment should include private space, alluding to Kane's domain, "privacy". This quality of life domain does not always infer privacy in the sense of having a private room or bathroom in the home; it relates to the ability to be alone when desired and to control what is known about oneself. "Autonomy/choice" is another key domain that emphasizes that the resident directs their own life and has agency in decision making. This is particularly important in revolutionizing the culture of nursing homes and it is reflected in one of the Pioneer Network's principles of culture change that states "all elders are entitled to self-determination wherever they live" (White-Chu et al., 2009, p. 372). This principle,

among others associated with cultural transformation, appeals to higher level resident needs and is notable in its recognition for continued growth and personal development in the latter stages of life. This reflects Kane's (2001) sentiment that to become truly person-centered, our thinking surrounding quality of life must exceed the fulfilment of basic needs and promote the cultivation of meaning through relationships and activity. Kane explains that embedded within the regulations surrounding nursing homes is the assumption that the best quality of life for residents possible should be sought insofar that health and safety outcomes are addressed. However, Kane also comments that the priority of quality of life should be elevated such that health and safety outcomes are consistent with the most *meaningful* quality of life possible.

The idea of nursing homes both meeting and going beyond the essentials is echoed in Brownie and Nancarrow's (2013) findings surrounding the impact of person-centered care in nursing home settings. Although results of the review showed that the majority of person-centered approaches were associated with positive outcomes such as decreased boredom and loneliness, two of the studies reviewed noted negative outcomes such as increased falls. The authors suggested that using a person-centered approach might be improved by framing it within Maslow's hierarchy of needs such that safety and physiological needs are met before addressing higher level needs such as self-confidence or independence. It is thought that the fulfillment of one's needs follows a sequence that is hierarchical and is based on the human motivation (Hagerty, 1999). The hierarchy begins with a person's need to fulfill the basic physiological needs and then moves toward ensuring circumstances create safety for the person. The trajectory of fulfilment then moves to the higher order needs including belongingness and love, esteem, and self-

actualization. This Maslovian type of thinking is cited in the literature as a helpful way of determining care priorities for supporting quality of life, and it has also been used to conceptualize quality of life as a construct for measurement (Hagerty, 1999; Kane, 2003). For example, the International Resident Assessment Instrument (interRAI) Quality of Life survey is comprised of ten domains that are grounded in different items of Maslow's hierarchy of human needs (Kehyayan, Hirdes, Tyas, & Stolee, 2015). Kehyayan and colleagues explain that the various items are significant to the nursing home setting, which supports a comprehensive appraisal of residents' experiences.

Homelikeness and Quality of Life

Researchers have begun to explore what quality of life means to nursing home residents using self-report measures of quality of life (Kehyayan et al., 2015). Some of these same researchers have contributed to our understanding of homelike qualities, whether they are part of the physical design of a nursing home, staffing approach, or approach to resident care. Indeed, there is overlap between the concept of homelikeness and what quality of life for nursing home residents looks like (Kehyayan et al., 2015, 2016). In the Care and Construction study, the definition of quality of life developed by the Nova Scotia Centre on Aging team included five elements: resident autonomy, homelikeness, meaningful relationships, meaningful activities, and resident affect (Keefe et al., 2015). The project used the interRAI Survey on Nursing Home Quality of life to measure quality of life from the resident perspective (and a modified version for the staff and family perspectives) as it closely aligned with the quality of life definition developed by the research team. The interRAI survey consists of 50 items across 10 domains (privacy, food/meals, safety/security, comfort, autonomy, respect, responsive staff, staff-

resident bonding, activity options, and personal relationships). For residents, homelikeness is measured by responding to the prompt, “This place feels like home to me” using a 5-point scale (0 = Never, 4 = Always) (Keefe et al., 2015). In order to examine predictors of resident quality of life, multilevel modelling was completed by adding individual-level variables (e.g., relationships) as well as home-level variables (e.g., size of unit) to the model. Results indicated that variables measuring homelikeness and relationships significantly predicted resident quality of life (Keefe et al., 2015). From the resident perspective, these included feeling as though one lived in a homelike environment, feeling that one has meaningful relationships, and whether or not one had experienced staff bonding. Model of care (see Table 1) was tested for its ability to predict quality of life, although results showed that it was not a significant predictor of quality of life for any of the three perspectives (Keefe et al., 2017). What is most notable, however, was that variables associated with models of care offering a household design and full-scope of practice predicted positive resident quality of life, even though model of care was not a significant predictor of quality of life in other contexts (Keefe et al., 2017). This implies that improvement of resident quality of life can be realized irrespective of model of care, which is promising to various generations of nursing homes pursuing transformation. It also shows that there is a unique role of household design and full-scope practice in supporting homelikeness and relationships. These observations allude to an intricate relationship among model of care, homelikeness, and resident quality of life, which presents ample opportunities for exploration.

According to Keefe et al. (2015), a homelike environment will be defined differently depending on who is asked, although homelikeness can be thought of as

"feeling like home", "looking like home", and "others treating [the nursing home] as the resident's home". It could then be said that homelikeness is influenced by the resident's perception of both the physical and social environments and according to results from the Care and Construction project, it was evident that homelikeness mattered for resident quality of life; however, what hasn't been investigated is *how* it matters. This study capitalizes on the residents' perspectives of their nursing home experience in order to disentangle the complex relationship between homelikeness and resident quality of life. Further, it celebrates the resident voice while exploring this relationship, as the resident perspective is underrepresented in this area of research (Kehyayan et al., 2015). This work especially considers the role of physical design and how it may contribute to, and interact with other components of, homelikeness. In other words, this research seeks to understand what aspects of physical design might make some residents feel more at home than others, and how this contributes to their quality of life.

Chapter 4: Methodology

The data for this project were collected by the Nova Scotia Centre on Aging as part of a larger project entitled *Care and Construction: Assessing differences in Nursing Home Models of Care on Resident Quality of Life*. Changes that occurred to the continuing care sector allowed the Care and Construction team to examine how different models of care (Table 2)—the combination of nursing home physical design and continuing care assistant (CCA) scope of practice—impacted resident quality of life. Participants in the study were over 1600 individuals representing nursing home residents, their families, and staff from 23 nursing homes representing both rural and urban areas of Nova Scotia. Data was collected in the forms of surveys, interviews, focus groups, participant observation, and case studies. This secondary data analysis focuses on the interview data, which was carried out with five residents from each of the models of care (Table 2), for a total of 15 interviews.

Table 2

Overview of the Care and Construction Models of Care

Model of care	Physical Design	Staff Approach
New-Full-Scope	New Small, self-contained households	Full-scope CCAs responsible for all tasks, including dietary and housekeeping
New-Augmented	New Small, self-contained households	Augmented CCAs provide care needs and limited dietary and housekeeping
Traditional	Traditional Floors/units	Traditional CCAs provide only care needs, other staff provide dietary and housekeeping services

Note. Adapted from "Care and construction: Assessing differences in nursing home models of care on resident quality of life," by J. Keefe et al., 2015, p. 2. Adapted with permission.

To capture the experiences of residents from nursing homes across models of care, residents were asked after the initial survey if they would be interested in a follow-up interview (Nova Scotia Centre on Aging, 2015). The number of residents interested in an interview differed by nursing home. In the Traditional home there were 36 residents interested, of which the chair of the resident working group determined that 17 would be sent a recruitment letter. In the New-Full-Scope and New-Augmented homes, fewer residents were interested and they were all sent recruitment letters. Lists of residents who were interested in an interview were sent to the residents' respective homes in order to confirm that the resident still resided at the nursing home and that there were no health and/or cognitive issues that would affect their ability to participate in an interview. Residents were interviewed in their nursing homes if they were still interested in participating. Interviews occurred until five interviews were conducted with residents of each facility type, and those who were sent a letter but were not interviewed were given a thank-you card (Delaney, 2017).

Interview participants were 48 to 94 years of age and the majority lived in the nursing home for at least 2 years, and all of them were cognitively intact. The in-depth interview guide (see Appendix) covered the following themes: staff, choices/autonomy, layout/physical design, relationships, and 'feeling like home'. Interviews ranged from 38 minutes to 104 minutes. Secondary analysis of interview transcripts explored how

nursing home physical design contributes to residents' relationships and residents' perceptions of homelikeness.

Quality of life was a multifaceted definition including components such as quality of care, resident autonomy, and activity involvement and was measured by the International Resident Assessment Instrument's (interRAI) Survey on Nursing Home Quality of Life (Godin, Keefe, Kelloway, & Hirdes, 2015; Keefe et al., 2015). Keefe and colleagues utilized multilevel modelling in order to understand how nursing homes vary in terms of quality of life by examining predictors at the nursing home level (e.g., size of NH) and at the individual level (e.g., relationships) (Keefe et al., 2015). The present study builds on the Care and Construction team's finding that homelikeness predicted resident quality of life by utilizing the interviews with residents in order to understand how this occurs.

Table 3

Participant Demographics

ID	Pseudonym	Age	Gender	Model of Care	Time in NH
NR1	Ellen	60	F	Traditional	5 years
NR3	Joan	73	F	Traditional	3 years
NR4	Nancy	79	F	Traditional	2 years
NR5	Harold	88	M	Traditional	> 2 years
NR6	Cora	78	F	Traditional	2 years
SR1	Adeline	78	F	New Full-Scope	2 years
SR2	Mabel	85	F	New Full-Scope	2 years
SR3	Marcie	48	F	New Full-Scope	2 years
SR4	Kay	78	F	New Full-Scope	N/A
SR5	Carol	Refused	F	New Full-Scope	> 2 years
TR1	Barbara	57	F	New Augmented	> 2 years

TR2	Edie	75	F	New Augmented	6-12 months
TR3	June	94	F	New Augmented	> 2 years
TR4	Helen	52	F	New Augmented	12-24 months
TR5	Jim	85	M	New Augmented	1 month

Note. NH = nursing home.

Ethical Considerations

Conducting a secondary analysis with qualitative data involves the use of data that were collected at an earlier date and most often by other researchers. While there may be minimal risk associated with secondary analysis, there were more ethical considerations during primary data collection. The consent process in particular can present risks that must be carefully considered (Maas, Kelley, Park, & Specht, 2002). The characteristics of many nursing home residents, such as vision and hearing loss and cognitive difficulties, can require additional time and care spent on the consent process. Ensuring that informed consent is obtained is the main ethical hurdle and this is especially pertinent considering the substantial percentage of nursing home residents with dementia or other cognitive difficulties (Sherratt, Soteriou, & Evans, 2007). Accordingly, a resident's capacity must be assessed, which involves making a judgment based on some criterion of capacity. The inherent risk in making judgments about a person's capacity is the possibility that the judgment does not reflect a person's actual capacity in a particular situation; this may result in the exclusion of a person who might otherwise provide valuable and underrepresented insight, or the inclusion of a person who might be better served by an alternative process of consenting.

Ethics approval for the original study—the Care and Construction study—was received from Mount Saint Vincent University, Saint Mary's University, Dalhousie

University, University of Prince Edward Island, and Capital District Health Authority. A certificate of ethical clearance (File # 2011-055) was granted by Mount Saint Vincent University for *Care and Construction: Assessing Differences in Nursing Home Models of Care on Resident Quality of Life (Surveys and Participant Follow Up Component)*, which contains the data used for this study. Ethics approval for conducting secondary data analysis (i.e., the present study) was obtained from Mount Saint Vincent University's Research Ethics Board (File # 2017-089). It should be noted that the ethics application for the Care and Construction study explicitly states that the data would be made available to students for the purpose of secondary analysis. Pseudonyms were assigned to each participant to protect their identity.

Analysis

Grounded Theory Approach

Grounded theory approaches are particularly suitable for research involving situations, processes, or phenomena that are lacking sufficient theoretical foundation, or that have not been explored with respect to a particular context or population (Chun Tie, Birks, & Francis, 2019; Richards & Morse, 2013). "Homelike" has often been defined by non-residents of nursing homes. Given that this research is a secondary analysis of in-depth interviews, only selected aspects of grounded theory were available. Nevertheless the academic application of grounded theory was useful in the present study in order to address the dearth of research on homelikeness from the nursing home resident perspective. The analysis procedure was informed by Hewitt-Taylor's (2001) detailed description of using constant comparative analysis in qualitative research.

A grounded theory approach is related to ecological models in that they both share a consideration of the interrelationships among phenomena. This study sought to understand how physical design contributed to resident perceptions of homelikeness, and how homelikeness contributed to resident quality of life—both of which are situations that benefitted from consideration of interrelationships. While the intent of the present study was not to create theory, grounded theory was a useful approach nonetheless because it is inductive in nature and supported new understanding of existing data. Use of ecological models helped to interpret findings in relation to the larger sociocultural context, which is especially important given the many factors that influence how homelikeness is experienced.

Procedure

The interviews were analyzed with the assistance of NVivo 11 using a constant comparison approach (Corbin & Strauss, 2008). Additionally, the use of computer-assisted software (i.e., NVivo) followed the general process outlined by QSR International (Adu, 2016). Interviews transcripts were first imported into NVivo and a "case" was created for each participant using the case classification function in order to link information to a specific participant for organizational purposes (e.g., memos, model of care). Some questions asked to participants during the in-depth interviews were discrete (e.g., age, time in nursing home, marital status), so in order to separate these data from the open-ended questions, I assigned each resident's answers to their respective case. This approach allowed me to create a fuller picture of each participant to refer back to during analysis while allowing me to focus in on participants' answers to open ended questions while coding.

Data exploration began as each of the interviews were read closely while key information and initial impressions for each interview were documented in linked memos. I then recorded my thoughts about the main ideas from the interviews and potential themes in a separate summary memo. Reflexivity was practiced through the use of a journal to document my decision making during analysis, which was particularly important given my prior knowledge with the Care and Construction project and its findings. Once my initial impressions were recorded, I began the coding process.

Coding

A crucial element of grounded theory is the emergence of theoretical codes from the data. Constant comparison analysis is one of the main techniques used in grounded theory methodology (Glaser, 2005). This technique involves successive phases of coding, the first of which is open coding. Open coding is the process of assigning labels to concepts that are derived from the data, or more simply, breaking the data down by labelling segments with short but meaningful "codes" (Corbin & Strauss, 2008). In order to allow codes to be data-driven, coding should not involve imposing codes upon data, but take on an inductive approach. As such, throughout the coding process I made extensive use of memos in order to document my process of developing codes and themes. Ecological models guided this process as a theoretical framework in order to consider the interaction between the individual (i.e., the resident), their physical and social environments, as well as sociocultural factors. In the open coding phase, I went through the data line by line, creating codes that were descriptive in nature (Hesse-Biber & Leavy, 2011). I focused on coding topics that were specifically related to the research questions (e.g., physical design and space, homelikeness). However, the entirety of each

interview was then coded and analyzed given that information that did not appear relevant at face value could contribute to the overall understanding of the research questions. Open coding began with the assistance of NVivo and generated a large number of initial codes and memos. In order to better visualize the results of the open coding phase, I wrote every code that emerged from the first round of coding on individual post-it notes. During the selective coding phase, I began to group together these post-it notes into preliminary themes that had appeared throughout the interview, thereby generating a set of key themes. Once these themes were established, I returned to NVivo and merged/edited the codes in the same way that I had done with the post-it notes. At this point it was apparent that there was not enough data that would allow me to make distinctions between the different models of care, therefore, going forward, data were no longer organized around model of care.

Once all of the data were organized into the new themes in NVivo, I began to compare information within themes and refine my descriptive codes into more analytical codes, producing subthemes within themes. Given the iterative nature of coding, these themes were a point of departure for continuing my coding and were edited, merged, and parsed apart as appropriate. As I progressed further through my analysis, I began searching for connections among themes through theoretical coding in order to identify commonalities with which to integrate findings, or in other words, to "weave the fractured story back together again" (Glaser, 1978, p. 72, as cited in Hernandez, 2009).

Chapter 5: Findings

The themes that were identified in the analysis were: (a) renegotiating relationships, (b) experiencing homelikeness, and, (c) having autonomy and choice (see Table 4). Quotes from resident interviews are presented alongside descriptions of each theme and subtheme in order to explore their analytical dimensions. The ways in which findings provide answers to the research questions will then be addressed.

Table 4

Coding Framework

Themes	Subthemes
Renegotiating Relationships	• Relationship dynamics change in LTC • Staff facilitate relationships • Having consistent and appropriate staffing
Having Autonomy and Choice	• Importance of facilitating and honouring choice • Home accessibility supports autonomy
Experiencing Homelikeness	• Interaction of physical and social environments • Creating a "home" away from home • Control of space and self

Renegotiating Relationships

This theme captured residents' descriptions of new, changing, and enduring relationships within the nursing home context. Residents often described their relationships with others in terms of changes. That is, they described how circumstances of their existing relationships have changed since entering the nursing home, how new

relationships were fostered with others, and the circumstances by which relationships with others in the nursing home are formed.

Relationship Dynamics Change in LTC

Residents often discussed their new and existing relationships in terms of the changes they experienced as a function of living in the home. This subtheme represents changes in how residents maintain relationships with family and friends, often becoming more reliant on the initiative of others; power in relationships, such as with staff, and how this is manifested in the nursing home context; and relationships developed with other residents living in the home.

Some families found different ways to continue supporting the resident's involvement in family life despite challenges: Kay said "when I first came here I thought 'I'm not staying here', you know? Well I had to come in because I have MS and uh my left side is really affected bad." She continued, "I've got four kids and they're at me all the time ... but no I get out a lot and uh, I go shopping, if someone's having a house party they pick me up and I go there. She also reiterated the importance of her continued relationship with family, saying "without them I'd be lost. I probably wouldn't even be happy here". This suggests how essential her relationship with family is in the nursing home context and was one of many who shared this feeling. There were also changes to how residents communicated and maintained relationships with friends and family. For example, one resident describes how she stays in contact with loved ones while living in the home: "On the telephone or emails. I got the webcam, I have to figure out how this goes, so more technology. It'll take a little more time." (Barbara)

While a few residents talked about changes to how they maintained relationships with loved ones that live outside the home, other residents spoke about relationships with others residing in the home and how they've changed with the nursing home context. Specifically, the availability of privacy and by extension, residents' sense of privacy, was something that underwent change. For example, Jim described a lack of privacy that impacts intimacy in his relationship:

> Uh…I gotta talk to the, sometimes they come in without knocking and I don't think that's right. I meant to mention that to her and I forgot, but, but occasionally they'll do that, they'll just open the door and walk right in. I mean we don't have sex that much but…would be very embarrassing if we did.

This demonstrated a change in relationship dynamics with Jim and his wife, but also between the couple and staff members. For instance, Jim had to manage his relationship with staff around boundaries, as well as the romantic relationship with his wife. This case is an example of how relationships in the nursing home context differ given the way that privacy is regarded. Changing relationship dynamics also occurred with the development of new relationships. The following resident had originally wanted a private room but changed his mind once he began living with a roommate:

> I, uh, had looked for a single room and didn't get it, but now I wouldn't want a single room. I realize that it would be, uh, more lonesome should we say…having someone to talk to, and, and where I get along with my roommate very well. (Harold)

The possibility of feeling lonesome without a roommate is an example of how expectations about relationships in the home can change; in other words, new

relationships can become particularly meaningful in the nursing home context. Certainly it seems that Harold's initial preference for a single room changed after having the companionship of his roommate. In addition to private and shared rooms as a factor in how relationships are renegotiated, some specific areas within the home were mentioned as places where residents develop relationships with one another. For instance, getting to know other residents occurred in the home's lounge during special events:

> June: … And then you learn to know all of the people on your floor.
>
> Interviewer: Mmhmm. What are some of the things you do to get to know each other?
>
> June: Uh…well you go down to the lounge. Well they have special music come in, and everybody gets together in one room and something will happen and then you'll turn and say well that was pretty good wasn't it?

Another example was the dining area; specifically, when asked about who she interacts with in the home, "Mabel" describes the helping relationship she developed with another resident in the dining room: "…the ones at the dining room table. The one that sits with me, I interact with him quite a bit, I, I uh, he's starting to get Alzheimer's so I have to be careful what I say to him." The interviewer then asked if she found it, "hard to talk to someone with that", to which she responded:

> No, no I don't. No I'm glad I'm able to do that. That helps him, yeah, to understand. And he wants to pay for his meals and I have to keep telling him they're already paid for, and the pills, the medicine, but other than that, yeah, I enjoy that. I enjoy helping him out, yeah. Gives me something to do.

Some residents found it more difficult to communicate and foster relationships with other residents in the home. One resident, Cora, described how she felt limited in how she could communicate with and relate to others, saying that it felt "very dumbed-down" in the home. She continued explaining her perception of some of the other homes in the area in comparison to the one she lives in:

> … I'm not saying that money buys intelligence, but sometimes it buys education. And, so some of those other ones have a [*sic*] sharper residents that you can communicate with. (Cora)

Cora's view suggests that relationship and social dynamics depended on the demographics of the residents living in the home, which can then affect how relationships are formed.

Evidently, the nursing home context presented various opportunities and challenges to relationships, such that relationship dynamics changed or adapted to new circumstances. A key difference between most homes in the community and nursing homes is having staff working in one's home, which is certainly another relationship that required negotiation.

Staff Facilitate Relationships

Staff members in the home were often described as playing a facilitative role to residents' relationships. The role of staff in the care of residents in nursing homes involves communication with the resident and their family and according to residents in this study, staff can even act as a "go-between" for residents and their families:

> …we have 2 main nurses on this floor, and the one that I really like is called [name of nurse], and she knows all my kids and if anything goes wrong, if I'm

> really sick and need some help, she will get in touch with [my son], who's my power of attorney and, uh, tell him what the latest is. (Joan)

Kay spoke similarly about the staff's facilitating role as helpful for her to socialize with her sisters in the nursing home:

> And the sisters I have around here are in all the time. No I mean, you never know when one's going to pop in, whatever, you know? And the staff always know where I am and if my sister does pop in, they go to the staff and say "Do you know where Kay is?"

It appeared that staff can play an important role in facilitating the relationships between the residents and their family and friends. Furthermore, staff may have facilitated relationships among residents. In the following case, staff members ensured that two residents could go to activities together. Edie noted:

> [The other resident] lives in the house next door. But she always goes to Bingo, they [the staff] always make a point to bring her in so she can sit- she has a wheelchair- so she can sit with me.

According to some interviews, residents could become more dependent on staff to participate in group activities, and staff could become important facilitators to residents' relationships with other residents. However, when the staff changed often, there were fewer opportunities for residents to develop relationships with them, and there was a recurrent "starting over" for the staff with learning about the resident and their family and friend dynamics.

Having Consistent and Appropriate Staffing

Having the same staff consistently, and having enough staff working, were perceived as ongoing issues that are important to residents. Multiple residents commented on the changing staff members and what they perceived as "difficulty" in hiring people to work, resulting in disruptions in the flow of resident care and activities. For instance, one resident stated:

> It's just that on weekends they hire, they have difficultly, I'm assuming this now, difficulty hiring people to work on the weekend and uh those are the ones that invade our privacy. The ones, the steady workers here don't, they're good, they understand. And they, they always either knock or yell or something. Yeah. But it's just the younger new ones that don't." (Jim)

It was clear that residents felt that there is sometimes a lack of continuity of care in terms of staffing, although the consistent staff members (i.e., the "steady workers") were perceived more positively. Other residents mentioned that they prefer interacting with staff members who work regularly. For example, one resident, Marcie, said: "I much [*sic*] rather talk with the nurses than I do with the staff because, they change. Like I know some of them but, they change". The same resident continued, "Like, for me for example, is that on the weekends or on the days that have certain people come in where we have people that need more care. I get pushed back." Evidently, this resident felt that her care was impacted by the inconsistencies in staffing, which was also echoed by other residents interviewed. For instance, another resident, Ellen, clearly described the importance of having this continuity of care: "it matters a lot to me if the same person gets me up in the morning and then feeds me."

Having Autonomy and Choice

Autonomy and choice were woven through various aspects of residents' lives in the nursing home. Choice represented the options available to residents, particularly in terms of meals/dining, activities, and personal care. In terms of the physical design and environment of the home, residents identified specific supports or qualities and how they either supported or acted as barriers to them carrying out the desired actions and activities. In this way, having choice allowed residents to express autonomy through decision-making and not being micromanaged throughout their day. Importantly, resident autonomy was relational given the role of other actors in the provision of choice. Choice, however, could also be interpreted as something that limits autonomy by managing residents.

This theme also involved the opportunities identified by residents for staff to facilitate their choices, and where these opportunities were lacking. These opportunities, however, were discussed with recognition for the many constraints under which staff were working, which then impacted the ability for residents' choices or preferences to be honoured.

Importance of Facilitating and Honouring Choice

Residents often spoke about being able to do things when and how they want. However, despite the emphasis placed on being able to self-direct, residents recognized limitations in the context of the home and the policies under which it operates. These involved, in particular, schedules, mealtimes and meal offerings, needing staff for many aspects of their day-to-day lives (e.g., bathing), low staff-to-resident ratios, and the fact that staff changed often. Residents commonly talked about the importance attached to availability of choice, and particularly the staff's role in facilitating autonomy and choice.

Multiple residents spoke about staffing issues, particularly how the limited number of staff to care for residents in the home placed constraints on the ability to live the way they wanted to live. The following resident, Joan, described the demands faced by staff that subsequently place limits on how care is offered to residents:

> Joan: They can always say "we've got nearly 400 residents in [name of nursing home] and we are all very busy!" Well, sure, but I'm a very busy lady too and there's only one of me!
>
> Interviewer: So you're saying you have minimal care here, but do you feel you're able to live the way you want to?
>
> Joan: No. No, because the way I want to live is not the way they offer it here.

Echoing Joan's comments, two other residents explained how the availability of staff impacted the amount of choice they had around "key things" such as direct care activities:

> …so they've [the staff] got that time to get seven residents up, and, uh, so you, you can ask for a time in there. You have some choice but not very much. No, the times of those key things are not yours. (Cora)

A commonality from many interviews, including those with the two residents quoted above, was the way in which they acknowledged how many other residents needed care, and the limitations they perceived around choice due to the time constraints of caring for many residents:

When asked whether she gets to choose when she wants a bath, June responded, "Sometimes you can if they have the time, yeah. But there's a lot of people to work for."

Despite the difficulties around choice and timing of care, it made a difference to residents if the staff member could be flexible to the resident's needs or wishes:

> Ellen: And uh, this was my bath day. But I choose to have a bed bath. And so this person said to me "this is your bath day. I'll give you a bed bath" And I said to her, "I really don't want a bed bath today" Sometimes I do just some layers like my arm pits, or between my toes...
>
> Interviewer: So you're able to choose how much they do?
>
> Ellen: That's right.

Residents also experienced some instances where their preferences were not able to be accommodated. In one instance, the resident believed that the lack of choice was to be expected by living in an "institution":

> I'm a food person. I've always been a food person, so the food's really important to me. And the foods here, the menu here is… quite poor. But that is how institution food always is, I'm not sure about that but I find that hard to take so thankfully my family or niece brings me food, which is helpful in one way, but I feel not helpful in that, not helpful because it lets [home] off the hook. (Ellen)

Institutional- and policy-level factors (e.g., staffing, meal offerings) limited some choices available to residents and therefore their ability to express autonomy in certain situations. For example, residents valued having flexible sleep schedules:

> I know they're not demanding about anybody, time anybody goes to bed. But me I like to go to bed early. I usually get up early. But I'm accustomed to that for having children, so that's, that's my thing. So, it does happen sometime, but not all the time. (Marcie)

Choice in sleep schedule, as well as a choice of when and what to eat was important:

> I think the fact that I can get up whenever I want to is a, a big factor. I like that. And I like that, when I go for my breakfast, they will give me something to eat [laughter]….Whenever I go, they will give me what I want to eat. (Carol)

Even being able to partake in chores such as doing laundry or cleaning was valued. For example, according to Adeline, being able to "make your own bed when you want to" was also a way in which choice was honoured during everyday activities. However, there were some instances where residents identified important aspects of their daily lives wherein their choices were not able to be accommodated. For Marcie, being given the chance to get dressed on her own would have been meaningful: "If I had to get dressed, I could, but they don't give you the chance". As explained by Marcie in her interview, she did not get the opportunity to try and get dressed on her own, exemplifying the importance of the staff's role in supporting residents particularly when it comes to doing activities as independently as possible. Staff facilitating choice in residents' everyday routines was important, and this joint role represented more of a relational approach to autonomy.

Residents talked about the role of staff in this context, and also about different features of the physical design and environment that either allowed them to do things on their own, or facilitated their access to different parts of the home. Whether there were options in terms of space (private spaces and social spaces) for residents to access was important to them; additionally, the accessibility of the physical environment in these different spaces played a role in how residents could utilize the space independently.

Accessibility Supports Resident Autonomy

This theme captured the physical space and design features that fostered resident autonomy by virtue of the accessibility of the home, as well as other means of facilitating accessibility for residents. Much of what residents described in terms of physical design and environment pertained to the physical accessibility of the home, including the availability of different spaces within the home and whether those spaces are accessible. For instance, one resident explained how layout could make it easier for her to find other residents and socialize:

> Barbara: Um…if I was involved to make a new building, there should be like a clock in all 10 houses and you know, go to the centre, and there would be the office here, and the chapel, and the day lounge. You know, and then we would have chairs and tables and then we could all gather, you know, I'm looking for so-and-so, oh there she is.
>
> Interviewer: I see. So if it was a wheel- a circle- with the common places in the middle, it would be easier to connect with people from other houses?
>
> Barbara: Yes because if I go, I try to go visit a house every day. So after 9 houses and then back to square one, it might be like 9 days later to visit them again. Yeah, it's so hard. So I don't care for the layout.

Helen described how the size of some of the common areas impacts how accessible the home is to residents and their families:

> The only complaint I have is when the building was made, the [name] centre should have been made bigger. Because the activities they put on here sometimes, the families come in with the residents, and it's not big enough.

In addition to the accessibility of the home, being able to access private and communal spaces was important. For example, having social spaces such as a common room that can easily be accessed (e.g., relatively close to residents' rooms and/or accessible by elevator) can make it easier for residents to move around to different areas should they wish to go to them:

> the long hallway that's in this cottage now I'm talking about, and it's so accessible to everything. The elevator's right out there if you wanna go to second floor and the common room or whatever they call it, community room, up there is where we have things going on. (Kay)

Indeed, if there were physically accessible common areas then residents who wanted to socialize might not have needed a staff or family member with them in order to get to and/or use the space. However, if there were no accessible ways of getting around/out of the home and/or to certain destinations if resident wanted to go out, then the resident may not have been able to do so without relying on a staff member:

> Interviewer: Oh I see, ok. So you're feeling like you don't have, uh, they're not supporting you to do what you want to do.
>
> Marcie: Oh I don't know they, ugh, when I go out now they always say 'Well you're gonna have to take somebody with ya to push the wheelchair.' I said 'I'm not an invalid, I can push me'. They say 'What if you get stuck somewhere or…'. I never do, I don't know what they're talking about so it's just, it just blows me over. So I gotta make an appointment with my daughter to come out with me if I wanna go out.

In many ways accessibility meant physical accessibility, but as can be seen in Marcie's case, accessibility also involved the role of a staff member. There were also elements of the physical environment that made it easier for residents to continue to do things independently, if that is what they wanted. For example, one resident described a modification to her closet that helped her do her own laundry:

> in my closet we have a bar- a hanger, and it's too much for me to stand up and put my clothes on the bar, so they've lowered the bar and now I can you know, do my laundry...that's part of my life, to do my laundry. The more I can do…I don't want to go backward. So I do my laundry, it might be an all-day thing, you know, in the future. But I can do my own laundry and, you know…babysit my plants [laughing]. (Barbara)

Another resident recounted similar features of the physical environment that allowed her to do laundry:

> what this laundry room is for is for the residents that can do them by theirself [*sic*]. ...They are low. The washers and dryers are low that we can reach them. I can even reach them by sitting in my wheelchair; the buttons on them so I can sit in my wheelchair and I can turn the buttons. The only thing I have to stand up to get is to press the button for the laundry detergent. (Helen)

An environment that supported those with limited mobility was important to residents, and was a notable way in which residents described physical features of the home. Accessibility also included aspects of the home that made it feel safe. One example was having the appropriate lighting for residents to be able to get around the building, according to Joan, who said: "Lighting is fairly good. It has to be because so many people

have vision problems. And they're [residents] not steady on their feet at all, so we've got to be so careful about falls."

Helen also mentioned a feature of the home that helped her feel safer from falls. She described a railing in each of the houses that she could use to "steady herself" wherever she goes, and that this railing also allowed her complete her daily exercises. In addition to appropriate lighting and railings to hang onto for balance, having features that allowed residents to access staff quickly helped residents to be on their own while still feeling safe:

> And it's very safe because since we're to the point where we're not stuck but we need someone with us at all times, so you know, I might be in my room but you can hear them there and they know all I have to do is holler, yeah- or the buzzer. (Barbara)

Although the physical accessibility of the home was a large part of what facilitated resident independence and autonomy, there was recognition of the staff's role in supporting residents to be able to live the way they want, thus the relational nature of autonomy in this study. As such, it was important to residents that the home be accessible both in terms of having responsive staff members as well as the features of the physical environment that enabled them to do things their way, sometimes independently.

Experiencing Homelikeness

Experiencing homelikeness includes the subthemes "control of self and space", "creating a 'home' away from home" and "interaction of physical and social environments". The experiencing homelikeness theme captured the multitude of ways in which residents talked about their home as *feeling* like home or not, and what qualities of

the physical and social environments contributed to this feeling. Part of experiencing homelikeness included having autonomy, expressed in part through control over one's own space and what one does within it.

Control of Self and Space

For many residents, what made the home feel homelike was having control over their space and their day-to-day routine in the home. In response to a question about what things make the space feel like home, one resident responded succinctly, "Well I have control over everything" (Ellen), effectively describing the core of this theme.

Having one's own space (e.g., a private room) and being able to personalize the space was homelike for residents. One resident gave the example of putting up their own décor as something that made her feel at home: "I enjoy the way it's laid out. And I enjoy the fact that you can…put anything up on the walls, there's no nothing said about it. Our family can bring anything in and put it up." (Edie) Importantly, when residents spoke about a homelike environment, they often mentioned the ability to do what they want to do in that environment: "I find it more homey than [previous home resident lived in], but then again I've got my private room and I can come in here and do whatever I want" (Kay). Having control/being able to self-direct was discussed as a factor with respect to homelikeness, regardless of how "at home" residents described feeling in the nursing home. Some residents described their home as homelike because they had control over themselves and their environment. Conversely, a few other residents suggested that an absence of control over events in the nursing home was a quality that did not make them feel at home. To illustrate, one resident distinguished between her former and current homes in the following way: "there's a lot of things that, they do here that I wouldn't do

at my house". (Marcie) Similarly, the following resident felt strongly that the home was not managed how she would have managed her own home:

> It doesn't feel like home. When they tell me this is my home, I glare at them and say "This is NOT my home, it never was, and it never will be!" And when I had a home, I didn't run it like this. (Joan)

It was very clear that residents valued maintaining some control and that it helped some residents feel at home. However, residents' comments suggested that how much control they had was limited and/or looked different in an institutional context wherein staff and policy play integral roles in the day to day lives of residents. Additionally, part of what made having control over the space important to residents is that others in the home treated the residents' space as their home. Residents valued when staff tried to create a homelike atmosphere, and as suggested by one resident, "[staff] want the atmosphere at [nursing home] to be like our home". (Helen) A notable example of the home not being treated as such, however, involved the way in which the death of a resident was treated by staff:

> And they didn't tell us, and they wanted to keep it quiet as in they asked the staff—they told the staff-- not to say anything. I think that is so wrong because that's on one side, they say that, and the other side, they say "This is your home. They're your neighbours." I was told that they wanted me not to say anything. They told us that. (Ellen)

Although staff told residents that the home is *their* home, according to Ellen, staff determining whether residents received and/or shared news about one of their fellow residents/neighbours did not amount to treating the home as the residents' home.

Evidently, having control over what one does while living in the home, and ultimately being able to self-direct, factored into how residents were able to feel at home.

Creating a "Home Away from Home"

Often residents remarked that the home did not feel like home to them, despite having some qualities that they considered homelike. Many residents believed that the home wouldn't ever truly be "home" in the way that they had previously known, but that the nursing home was a "home away from home". Creating a "home away from home" involved the ways in which a sense of familiarity or sense of connectedness to others in the home was cultivated. This theme included how features of physical design and environment, and other aspects of living in the home, felt homelike to residents. In some situations, this approximation to home was considered to be a positive quality, but for others, it was more about what was missing from the home. For instance, some residents made the distinction between looking like home, but not feeling like home: "Everything's the same as home. Like your kitchen and your dining area…well I know it's not home. Sometimes I get lonely for the family." (June)

As June explained above, some residents identified the family component that was missing from the feeling of being at home. Another resident identified the special pieces of furniture she had in her house as a factor in why she didn't feel at home:

> Interviewer: So by that do you mean, so it doesn't quite feel like home yet? Or?
>
> Nancy: Well, nothing feels like home. Let's face it.
>
> Interviewer: Ok, what things keep it from feeling like home?
>
> Nancy: Well I had my furniture at my home, was beautiful. Oh, yes, it was…mahogany, and I had some antiques, my son threw them all out, and then I

came here, and, you know…

Interviewer: So you miss those things.

Nancy: Mmm, yeah.

Similarly, when asked if there was anything that makes the home feel homelike, one resident responded:

> No, no I don't think too much here, it's just where this is, where I have my belongings and my clothes and things stored in here and, uh, I have a, a, a fairly friendly relationship with my roommate who you just saw. (Harold)

Even though there were was not much that felt homelike for Harold, he mentioned having his "belongings", as well as the relationship with his roommate. Another resident, Joan, also remarked that, "it doesn't [feel like home], but it certainly helps to have the cat." Having meaningful items, relationships, and animal companions felt homelike to residents, even if they did not necessarily feel like the nursing home was "home".

Residents connected the feeling of being "at home" with what home may have looked like for them in the past. One resident described having certain foods brought into the home: "[The staff] take us in pies in sometimes and in the fruit season we get apples or grapes." (Adeline) She also identified aspects of the physical environment that felt like home to her:

Adeline: Well winter's coming oh it's going to be home here there's floor heating.

Interviewer: Oh the floor is heated? Ahh interesting.

Adeline: And uh, things are clean here.

Interviewer: Uh huh. So it's warm and clean.

Like the warmth and cleanliness of the home, other features or qualities typically associated with domesticity were identified as what does, or would, feel homelike. At least two other residents suggested features of the physical environment that were lacking, and that prevented the home from being homelike for them. Cora described some of the qualities of a home for her:

> Well I'm used to having a stove and there's, I love balconies… Um, I want more space for another chair. I wouldn't want the commode in here, and uh, I'd have a big fridge, not that little one, so you know you know what a bachelor apartment is like.

While Cora identified physical features that resemble a "bachelor apartment" as home, another resident, Joan, described how she is unable to engage in a meaningful task because of the environment of the home: "I want to be able to do my own cooking. Maybe not all the time, every day, but I can't even make a cup of tea and that really bothers me." (Joan)

It was evident in many instances that what residents described as "homelike" involved aspects of the physical design and environment; however, residents' interviews more often captured elements of both the physical and social environments.

Interaction of Physical and Social Environments

A commonality across interviews with residents was how their ideas of home involved an interaction of physical and social environments. Often residents' descriptions of home did not include tangible things or qualities of the built environment on their own; however, almost all residents discussed their home in terms of relationships that occurred in the physical environment. In other words, it is an interaction between the physical and

social environments that appears to result in a feeling of homelikeness. In the same vein, homelikeness was also related to how residents were able to express autonomy with respect to the physical and social environments of the home. For example, one of the residents who lived in a new-augmented home said: "well with our house we try to-myself, I try to get the things that makes a home, and everyone they have their own bedrooms, a part of their life…" (Barbara). She later continued, "we're like soldiers, we need some life, some colour…and to make sure that everybody is comfortable." It was not only that everyone "has their own bedrooms" it's also that "everybody is comfortable", indicating a concern for communal well-being and comfort, part of which appeared to be having their own physical space in which to reside and personalize.

The way residents socialized appeared to be influenced by the physical design of the home, and the communal spaces in particular. June explained how it felt homelike when their group would spend time together in one of the common areas:

> Well there's nine of us to a group- a house. So I know we spend quite a bit of our time at the table talking, that way. Then…we go in say in the afternoon and we'll sit there. One lady she's in a motorized wheelchair. And there's another [resident name]. And we just sit there and they call it "chinleg" for an hour. (June)

The size of the home was also a feature that impacted how homelike residents perceived the home to be, and showed how physical and social environments can interact: "we go up and down in elevators, it was a great big place, huge place, it wasn't as homey as this place, I find the smaller places nicer." (Mabel) Mabel compared her current home to the prior nursing home, which she felt was "too big, too impersonal". In this instance it was the "smaller places" that were more homelike, compared to the larger homes that felt

"impersonal". Residents enjoyed having the close social interaction that went along with living in a smaller home with fewer residents, which illustrated how homelikeness involved aspects of both the physical and social environments.

Chapter 6: Discussion

The three overarching themes from resident interviews were: (a) renegotiating relationships, (b) having autonomy and choice and (c) experiencing homelikeness. These themes were further woven together by a common thread of *continuity*. This chapter first discusses how themes are interrelated, and what findings suggest about the role of physical design in residents' perceptions of homelikeness and in residents' relationships. Then, the idea of continuity is discussed in the context of previous literature around homelikeness. The role of homelikeness in resident quality of life is then considered based on the findings. The chapter concludes with implications and recommendations for future research, policy, and practice.

Continuity

The themes that emerged demonstrate the complexity of homelikeness and its meaning to residents of long term care. All three core themes (renegotiating relationships, autonomy and choice, and homelikeness) overlap in significant ways and are woven together through the common thread of continuity (see Figure 3). Continuity represents various aspects of how residents talked about the home and its homelike (or unhomelike) characteristics: the importance of continuity of care; facilitating a continuation of residents' hobbies, preferences, and lifestyle from before they were living in the home; and the ability to maintain existing relationships and develop new meaningful relationships. Continuity captures the ideas of familiarity, comfort, domesticity, all of which appear to conjure the sense that there is meaningful continuation of one's life living in the home. For instance, results indicate that being able to have meaningful relationships, whether that is maintaining existing relationships in the home or fostering

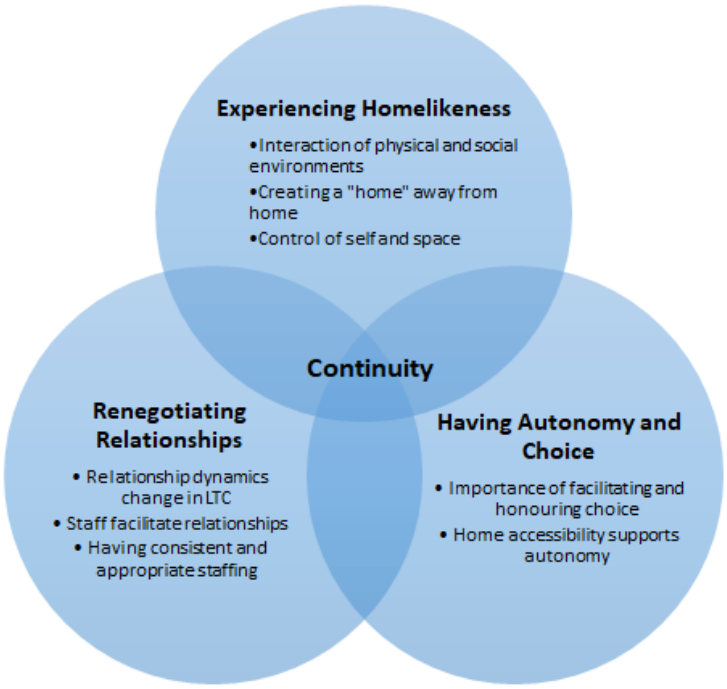
new ones is important to residents (i.e., renegotiating relationships). Furthermore, findings indicate that residents value being able to continue living the way they want in the home (i.e., autonomy and choice). Autonomy and choice are related concepts and it is difficult to tease them apart when representing residents' experiences. Nursing home residents are often dependent on others and therefore autonomy and choice become particularly important in the nursing home context. Autonomy in this study refers to relational autonomy (Walter & Ross, 2014), which recognizes the role of others (e.g., staff members) in residents' expressions of autonomy, such as decision-making. In this way, having choice can provide opportunities for residents to express autonomy (e.g., deciding what activity they want to engage in), but can also act as a tool to manage the actions of residents in that there are often limited options to choose from (e.g., predefined activities). Therefore, in this study choice refers to availability of choice, with recognition that it can be either a barrier and/or facilitator to residents expressing autonomy.

The overlap between having autonomy and choice and continuity can be described in two ways. Firstly, the physical accessibility of the home supports the maintenance of residents' autonomy through features such as washers and dryers that are low to the ground so residents can do their own laundry if they want to (i.e., having the opportunity to express autonomy through choice of doing laundry because there are physically accessible facilities to do so), or large elevators that enable wheelchair users to visit friends in the home. Secondly, having choice of food and activities allows residents to continue with their hobbies and regimens. An example from this study is staff making desserts with residents, which might be an activity that is reminiscent of a former home or the domesticity of home.

The idea of continuity appeared to be important to how "at home" residents felt (i.e., homelikeness) in various ways such as having cherished objects from one's former home brought into the home (e.g., furniture, family photos on wall); and having design that supports family visiting and even staying at the home, like one might have done in their own home.

Figure 3

Continuity and Connectedness in Themes



Physical Design and Homelikeness

One of the aims of this research was to examine the relationship between physical design and homelikeness in long-term care. Insights into this relationship resulted from this study, although data were not sufficient for these insights to be definitive. Based on how residents described the physical design of the home, one can think about the extent to which those characteristics may or may not contribute to perceptions of homelikeness

based on existing literature about what 'home' is to nursing home residents.

Physical design contributed to residents' perceptions of homelikeness in conjunction with other factors, but does not solely determine what residents perceive as homelike. It was more the physical environment in general those residents referred to which suggests that the physical *design* of the nursing home does not necessarily limit the likelihood of a home being perceived as homelike. It seems more likely that the physical design sets the stage for other characteristics to be present, which appear to be more of what residents have identified as homelike to them. Other research has established that the physical environment on its own is not enough to make a place homelike, but rather, can play a facilitative role (Cohen & Weisman, 1991).

Past research has also suggested both physical and social elements of homelikeness. For instance, Milligan (2009) writes, "home is not some kind of static, physical structure but is a dynamic, negotiated and contested space in which understandings of home and the complex relationships between care recipients, formal and informal caregivers are played out." (p. 68). Milligan illustrates the complexity of home as both a physical structure as well as a place wherein relationships are negotiated. Other scholars have also explored how these physical and social elements are part of how residents' find a sense of home, or find homelike.

Eijkelenboom et al. (2017) explored how the architecture of nursing homes can contribute to a sense of home for residents, creating a checklist for the built environment concerning what residents considered a homelike environment to be, intended for use by architects and interior designers. This study found that the following factors were related to sense of home: private space, (quasi-) public space, personal belongings, technology,

look and feel, and outdoors and location. In the same vein, Cooney (2012) explored how residents of long term care 'find home', and found four categories that supported residents in finding a home in LTC: continuity, preserving personal identity, belonging, and being active and working. The built environment was considered important to homelikeness in terms of facilitating or limiting privacy in both of the above studies, which is similar to the findings from the present study with respect to physical design as the groundwork or facilitator for other contributors to homelikeness. From a social ecological lens, the facilitative role of physical design may represent the transactional relationship between the individual (i.e., resident) and their microsystem (e.g., immediate environment and people within it; Bronfenbrenner, 1977). The mesosystem in the social ecological model represents the connections between microsystems; as such, the built environment/physical design of the nursing home could be thought of as the mesosystem that shapes how the individual participates in relationships and experiences homelikeness.

The physical design of the home was so closely connected to other elements of living at the home that it was difficult to tease apart any unique contributions of the home's physical design to homelikeness. Indeed, Cooney (2012) states that, "the concept of 'feeling at home', although intuitively understandable, is complex to define." However, there were some salient design features that were homelike and interacted with other factors. For instance, both common and private spaces have been cited as important spaces for creating a sense of home in previous literature (Eijkelenboom et al. 2017; Imamoglu, 2007). According to Eijkeleboom and colleagues (2017), who investigated the architectural components of residents' sense of home, having a private room was

associated with homelikeness/sense of home. In general, residents from the present study valued private spaces, particularly private bedrooms and bathrooms. Specifically, they valued the privacy of having their own space, wherein they can do what they want to do, and keep important belongings. The ability for the nursing home to accommodate family may also be important to homelikeness. For example, rooms that can accommodate a visiting family member to stay overnight or a family room that provides a space for loved ones to be present with a resident at end of life, in such cases. Living room-type spaces can also host visitors if the resident wants to be in a more communal space. Indeed, some residents indicated that bedrooms are often small or shared, and therefore not ideal for multiple visitors. Areas such as common rooms, hallways, elevators/lobbies, kitchens/dining rooms offered opportunities for residents to develop and maintain meaningful relationships with family, staff, and other residents.

Elements of physical design that residents spoke about when asked about the features that make the nursing home a 'home' were the size of the home itself, dining areas, kitchens, laundry rooms, and living and/or common rooms. Similar to previous research, these areas within homes have been deemed "archetypical features" in terms of homelikeness according to residents of long term care (Verbeek et al., 2016, p. 254). The domestic features described by residents seemed to offers the possibility for some degree of continuity from one's former dwelling in community (e.g., kitchen, garden and/or outdoor space, washer/dryers, private rooms if desired etc.). Physical design can also support the availability of choice for residents with respect to types of room configurations available and whether or not they have access to private spaces to which they can retreat. Accessible physical design was an important aspect of the home from

the resident perspective, as it can be crucial in supporting residents in maintaining as much autonomy as possible (i.e., common rooms large enough to accommodate many wheelchairs). Some residents commented on the layout of the entire home and their difficulty navigating it, where features such as lighting, proximity of residents' rooms, and directions to help with orientation were mentioned. Understandably, difficulty navigating one's home would not be a homelike quality, particularly for residents living with dementia (Design and Dementia Community of Practice, 2013; Passini et al., 2000).

In general, the results of the present study echo those of previous research about homelikeness and physical design. For instance, Imamoglu (2007) succinctly explains that, "home refers not only to a place type but also to a special relationship between people and the physical environment." Through the present study the importance of the resident's relationship to the physical environment, as well as relationships with others, was evident.

Physical Design and Relationships

There are multiple ways in which residents linked physical space and design with particular relationships, and as such, there was ample evidence for answering the question, "How does the physical space enable, or act as a barrier to, relationships?". Residents' room assignments can determine which staff members care for them, and it is very clear that residents find some staff competent and social, while others not. While it may be that room assignment and the staffing model are determining factors for these kinds of interactions, the design and/or environment of the home itself may be at play. For instance, as some homes are more insular than others (i.e., each "house" in the building being separate, versus hallways with rooms), the likelihood of interaction

amongst different groups of people either living or working in the home may differ. Where residents are located in the nursing home can also play a role in who residents interact with and even become friends with, according to some of the residents interviewed.

The proximity of the residents' living quarters to each other seems to also be a factor in their ability to interact with one another. As described, Barbara explained how she would like to visit everyone, every day, but finds the distance between each place she would need to go as too far, instead opting to visit one person a day. She had imagined if she were to redesign the building that she would have a central gathering place for all residents and living quarters would be located circularly around the gathering space. This example shows how the layout of the home can impact how residents can navigate and socialize within it. Furthermore, findings suggest that larger common areas are more desirable in terms of hosting family and socializing with others in the home, although the size of the home may also determine the size of the common areas and its capacity to accommodate groups. Importantly, physical design may facilitate relationships through physical accessibility such that residents can utilize the space independently, which may allow them to engage more easily with others in the home. The physical accessibility of the home may also reflect good person-environment fit (Nahemow & Lawton, 1973). Specifically, a layout that encourages social interaction may indicate that level of environmental demand (i.e., level of press) is appropriate in terms of supporting residents' social well-being (Shield et al., 2014).

Dining areas were a common topic of discussion in resident interviews and appear to play a significant role in residents' social lives. The role of dining areas and mealtimes

is one salient example of how physical and social environments interact for residents. For instance, some residents dine together every day and have the opportunity to engage with other residents, and often the *same* residents, frequently. Dining areas, as well as dining times and seating arrangements, seem to be important in terms of a regular gathering point wherein residents can socialize. Some homes have larger dining areas in which residents gather for meals at pre-determined times. The significance of dining areas in long term care have been discussed in previous literature (Hung, Chaudhury, & Rust, 2015; Iuglio, 2017) and mealtimes have been established as an important factor to resident quality of life (Wu et al., 2018).

Traditional space and household space were also considered in the present study. Traditional space could be described as the more institutional physical design, whereas household space refers to a newer style of physical design (i.e., new full-scope, new-augmented). Although differences in nursing home design did not emerge in this study, nursing home physical design has been identified as an intervening factor in the larger study (Keefe et al., 2015). Indeed, results from the larger *Care and Construction* study, from which the data for the present study were obtained, provide more insight into the role of new and traditional physical designs to homelikeness. Keefe and colleagues used multilevel modeling to understand the statistical contribution of physical design to homelikeness. These sophisticated analyses, which controlled for design factors such as size and age of the home, revealed that relationships and the social environment are more important to homelikeness than physical design. However, it is interesting to note that homelikeness (from the resident perspective) was significantly higher for those who lived in the ‘new’ homes than for those who lived in the ‘traditional’ homes, according to the

results of an independent samples t-test[1], which does not take into account design factors such as size and age of the home. In other words, when physical design factors are controlled for, the larger role of the social environment is revealed, which suggests that physical design plays a more indirect or facilitative role in homelikeness, and residents' relationships (i.e., social environment) play a more significant role.

In summary, physical design could be contributing to homelikeness for residents through laying the groundwork for socialization in common spaces, such as dining areas, lounges, and lobbies. The size of elevators, hallways, and common rooms can be facilitators or barriers to relationships in that they can make it easier for people to get to and from common areas, or they can host a larger amount of people and/or activities.

Continuity and Liminality

The idea of continuity was an important link among the findings of the present study and appeared to play a significant role in what was homelike to residents. The results of the present study suggest that continuity for residents can be facilitated by the maintenance or development of relationships; continuity of care; supporting residents' hobbies and preferences; having particular (i.e., accessible) design features that support

[1]An independent-samples t-test was conducted to test for differences in residents' perceptions of homelikeness based on the physical design of the nursing home in which they resided. Homelikeness was measured by residents' response on a 4-point Likert-type scale to the prompt "this place feels like home to me" (0 = Never, 4 = Always). Each nursing home represented one of three models of care (see Table 1), and to compare nursing homes with a traditional physical design to nursing homes with a new physical design, the model of care variable was recoded into a new variable with 2 levels: traditional (traditional model only) and new (new-full scope and new-augmented models combined). Scores on the measure of homelikeness were significantly higher for new nursing homes ($M = 2.82$, $SD = 1.36$) than for traditional nursing homes ($M = 2.36$, $SD = 1.51$), $t(261) = 2.72$, $p < .01$. Levene's test indicated unequal variances ($F = 7.12$, $p = .01$), so degrees of freedom were adjusted from 303 to 261.

resident autonomy; and personalization via cherished objects and possessions from one's former home.

Nursing homes have been described as having an atmosphere of "liminality" (Chivers & Kriebernegg, 2018, p. 40). Liminality in this context refers to impermanence and transience, which contrasts the idea of continuity found in the present study. Given that nursing homes have been long considered institutional spaces, and perhaps liminal spaces, then continuity in nursing homes could be a more homelike quality of homes that are less institutional. Results from two previous studies closely align with those of the present study in terms of continuity. One of the factors found to influence sense of home in Eijkeleboom et al. (2017) was the "preservation of one's habits and values". The "preservation" implies continuity of residents' lifestyle, which is similar to what the present study found to be important to homelikeness. Similarly, Cooney (2012) examined the perceptions of LTC residents for their perceptions of "being at home", and found that continuity was a key factor. The present study's findings align with those in Cooney's study, in which continuity meant a continuation of "normal activities and day-to-day rituals" (p. 4). Findings from the present study indicate a link between continuity and physical/social environments, again aligning with Cooney who found that the physical and social environments could be facilitating or constraining factors to 'finding home'.

According to Eijkelenboom et al. (2017), sense of home "does not happen overnight, but is gradually by the person in whom independence, security, and the source of own identity, choice and controls, and memories, are essential" (p. 112). Recent literature around length of stay in Canadian nursing homes has implications for the idea of continuity and its facilitation in LTC (Hoben et al., 2019). Hoben and colleagues

found a relationship between residents' care needs (e.g., high physical dependency, cognitive impairment) and their length of stay in nursing homes across various jurisdictions. Specifically, length of stay decreased for those jurisdictions wherein residents' care needs upon admission increased since 2008. The gradual nature of developing a sense of home could place limitations on how continuity could be used as a way to facilitate homelikeness/sense of home, as a short length of stay is not amenable to the development of a sense of home (Eijkelenboom et al., 2017).

Findings from the present study also indicate that having consistent and appropriate staff is meaningful to residents, although establishing continuity in this way is likely to be difficult due to the current shortage of continuing care assistants (CCAs) and registered nurses (RNs) in Nova Scotia. Specifically, there are unfilled vacancies for CCA positions in nursing homes and many RNs do not want to work in nursing homes (Henderson, 2019). Part of what may deter potential staff from working in nursing homes is the stigma associated with facility-based long-term care—that nursing homes are "little more than warehouses of death" (Canadian Healthcare Association, 2009, p. 24). Drawing on social ecological theory, macrosystem level factors such as the stigma of nursing home work influence exosystem level factors such as the long-term care sector and its policy priorities around staffing. Staffing policies influence what staffing looks like "on the ground" in nursing homes, which then influences the resident's social environment at the microsystem level. The resident's everyday interactions and relationships with staff are therefore influenced by factors at every level of the ecological model. Until staffing shortages can be resolved, fostering continuity through consistent staffing and appropriate staffing ratios seems unrealistic.

Fostering continuity appears to align with the delivery of person-centered care in that it represents an approach that veers away from medicalized care (Rockwell, 2012). Although there are limitations to creating a sense of home given that residents' length of stay at the home are decreasing (Hoben et al., 2019), and staffing shortages present difficulties in providing continuity of care (Henderson, 2019), continuity could be a lens for supporting residents' quality of life while they are living in the home and through relationships with others in the home.

Homelikeness and Quality of Life

The interRAI Survey on Nursing Home Quality of Life (Morris, 2009 as cited in Kehyayan et al., 2016) was the measure capturing quality of life in the larger study, and consists of ten domains: privacy, food/meal, safety/security, comfort, autonomy, respect, responsive staff, staff-resident bonding, activity options, and personal relationships. Although homelikeness is measured as part of resident QoL in the interRAI, *how* homelikeness contributes to QoL has not been thoroughly explored.

Quality of life for residents in the context of this study is evidently understood as a multifaceted concept, and there were multiple areas of overlap between residents' perceptions of homelikeness and the QoL domains listed above. Therefore, the contribution of homelikeness to resident QoL is that homelikeness extends to multiple areas within domains of the interRAI conceptualization of quality of life. Cooney (2011) similarly suggested that the aspects that facilitate a feeling of 'home' in LTC overlap with those that are thought to add quality to older adults' lives in LTC. Interestingly, from the resident perspective in the present study, homelikeness seemed to contribute to QoL not only in terms of comfort, but also relationships. The renegotiation of relationships in the

home was a theme that, in part, spoke to homelikeness; for instance, how staff treated residents and their family members. Residents also perceived a homelike environment to be one where others who live and work there are also treating the home as residents' home, which is in line with findings from Keefe et al. (2015). These findings suggest that a communal feeling of homelikeness may be important to residents' perceptions of home, which could be part of living in a group setting that places certain limitations on privacy (Green, Tinker, & Manthorpe, 2018), where residents are exposed to others' experiences in the home.

A few residents talked about the importance of comfort and closeness of those who live in the home, suggesting that homelikeness also depends on the perceptions and actions of others. Within the interRAI conceptualization of QoL, however, homelikeness is under the domain of Comfort, which is separate from other relationship-oriented domains such as staff-resident bonding and personal relationships. It could be possible that the qualitative nature of the present study revealed nuances of the association between homelikeness and relationships that are not explicated in the interRAI domains.

In terms of *how* homelikeness contributes to resident QoL, based on the resident perspective, findings suggested that homelikeness as a more holistic concept adds quality to residents' lives. More specifically, homelikeness as encompassing the degree of control residents have over their space and their day-to-day routine in the home; a sense of familiarity or sense of connectedness to others in the home; and, home in terms of relationships that occur and/or how they are facilitated by the physical environment. Furthermore, these finding were linked by the intersecting theme of continuity, which appeared to facilitate resident QoL insofar that residents were able to maintain close

relationships with family and friends, have meaningful items from home in their space (e.g., photos, furniture), continue doing activities they were accustomed to doing before the nursing home (e.g., laundry, cooking, painting), and enjoy familiar foods. These findings align with previous literature that has discussed residents continuing their lifestyle when living in small, homelike care environments (Verbeek, 2016), and how the preservation of habits and values is a factor in residents' sense of home (Rijnaard et al., 2016).

QoL is a common outcome in long term research (Edvardsson et al., 2019; Kane, 2003) and holds importance for policy makers (Canadian Association for Long Term Care, 2018). Findings from the present study, as well as the larger study (Keefe et al., 2015), that suggest the importance of homelikeness to resident quality of life would provide useful information to stakeholders in long-term care policy. Furthermore, additional knowledge about the role of physical design to facilitating homelikeness to residents can be utilized to improve resident QoL, possibly through space and design guidelines. Importantly, changes to policy and guidelines that influence the social environment of homes are also valuable avenues for improvement.

Implications and Recommendations

It is important to consider the resident experience of living in a nursing home as embedded in the context of policy, as well as the broader societal landscape. Recommendations for changes to physical design that support residents in feeling at 'home'—and by extension, their quality of life—could be beneficial, although they may not be immediately, or at all, actionable. Despite limited resources to overhaul physical design and environmental characteristics, there are other opportunities for improving the

environment of the nursing home in terms of its homelikeness to residents. For instance, given the role of the interaction of social and physical environments in facilitating homelikeness in this study, recommendations that utilize both physical and social aspects could be more realistic avenues than design overhaul for facilitating homelikeness and thereby adding quality to residents' lives. As an example from this study, a few residents described difficulties finding their way around the home when visiting other residents, which shows the importance of the physical environment (ease of navigation) to the social environment (visiting friends). Therefore, ensuring that there are salient visual cues in certain areas that can support resident navigation of the home could be a means of improving the homelikeness of the home. Furthermore, deliberately pairing residents who live in non-private rooms (e.g. pairing friends or gauging compatibility before assignments) and assigning staff consistently to certain areas could be a step towards a more comfortable and homelike social environment for residents. Although, this may be a recommendation for the future given the current shortage of nursing home beds and staff, there may not be the opportunity to have flexibility in staffing and room assignments. Perhaps as an alternative, homes could consider ways of facilitating relationships between residents and other residents, and residents with staff members for those who are interested in socializing.

Another way of facilitating a feeling of 'home' is encouraging residents and their family members to bring meaningful items ('cherished objects') for décor and/or furnishing, if possible. While the idea of cherished possessions as a means of supporting older adults in adapting to a new environment is not new (van Hoof et al., 2016; Wapner, Demick, & Redondo, 1990), the results of this study suggest that it may help facilitate a

sense of continuity (similar to what has been called 'historical continuity' in previous literature) that has been linked to homelikeness in LTC (Cooney, 2012). However, there are implications of decreasing length of stay in nursing homes (Hoben et al., 2019) on creating homelike nursing homes. The development of policy around 'homelike' environments in LTC should incorporate varying (and decreasing) lengths of stay in how 'homelike' is defined to reflect the current realities of LTC residents.

It is also important to consider the framing of homelikeness while further consideration for a policy-level definition is sought. Recognizing the limitations of recreating "home" in nursing homes is important because of how personal home is to each person and the emotional attachments that are often had with one's former home in the community (Pirhonen & Pietila, 2015; Verbeek, van Rossum, Zwakhalen, Kempen, & Hamers, 2009). A major challenge exists in providing a homelike experience alongside clinical care, given that the clinical care is associated with institution (Eijkelenboom, Verbeek, Felix, & van Hoof, 2017). Based on the results of this study, defining 'homelike' in policy and practice needs to go beyond ideological notions of "home", and towards the interplay of physical and social environments. This finding is in line with previous research (Cooney, 2012; Eijkelenboom et al., 2017) that investigated contributing factors to residents' sense of home and suggested a more "holistic understanding" (Eijkelenboom et al., 2017, p. 111) of homelikeness. Moreover, residents' voices should be critical in informing these definitions (e.g., Cooney, 2012).

Limitations and Directions for Future Research

The limitations to the present study stem primarily from the use of secondary analysis. As discussed previously, the inherent limitation in secondary analysis is that

theoretical sampling (Andrews et al., 2012) is completed as part of primary data collection, which can place limits on the researcher's ability to reach data saturation. Another limitation due to the use of secondary analysis is the distance between the researcher (i.e, myself) and the data. Through the process of conducting interviews and transcribing them, a researcher normally develops a close knowledge of the data. As I did not conduct the interviews with residents nor complete the interview transcription, I was limited in my ability to "know" the data. However, I was well positioned to ask questions to multiple researchers closely involved in the project and thus able to maximize my knowledge of the primary study, participants, and data collection.

An inherent limitation to secondary analysis of qualitative data is that the totality of the data has already been established and can limit one's ability to reach data saturation without collecting additional primary data (Andrews, Higgins, Andrews, & Lalor, 2012). In classic grounded theory, the researcher would know when to stop sampling when data saturation is reached; however, with secondary analysis the limits of sampling are determined by the data previously collected and therefore the completeness of the sample may be limited. Moreover, formulating research questions that can be adequately addressed by existing data is not always a possibility. While the research questions were used to guide the analysis, due to the nature of secondary analysis, in some instances there were limited data to draw from in order to fully answer the questions.

Avenues for future research could include interviews with residents who have lived in long term care for varying amounts of time to develop an understanding of how perceptions of homelikeness change or stay the same; alternatively, a longitudinal

approach could be taken with the same residents' perceptions of homelikeness over time. This approach would allow for more nuanced understanding of how residents experience feeling at 'home' or not, as older adults' attachment to place, including the home, could change over time (Cutchin, 2003; Chapin, 2010). A follow up study similar to Care and Construction study could be completed with residents of nursing homes, and to remedy the drawbacks of asking questions of secondary data, more focused questions about homelikeness could be asked in order to access the details of how physical and social environments contribute to residents' experiences of feeling at 'home'. Researchers undertaking research on physical design should consider more in-depth and direct questions concerning homelikeness of physical design elements. In order to be as clear as possible, it may be important to utilize photos and other visuals of nursing home design as prompts or aids in future interviews, which has been a method used by other researchers investigating the perceived homelike and institutional qualities of nursing homes (Imamoğlu, 2007; van Hoof et al., 2015). Given that a much-needed outcome of this line of research is the development of a definition for 'homelikeness' or 'homelike environment' informed by the resident voice, having visuals to consider alongside resident voice may assist in creating a concrete representation of homelikeness that can inform space and design guidelines.

Conclusion

Themes addressing autonomy and choice suggest the importance of a nursing home that is person-centered in its design and practices, whereas themes addressing homelikeness and relationships highlight dimensions of homelikeness and their relationship to physical design features and the social environment. Themes were woven

together by the common thread of continuity, which represented meaningful continuation of one's life living in the home in various ways.

Physical design contributed to residents' perceptions of homelikeness in conjunction with other factors, but does not appear to be in itself what determines what residents perceive as homelike. Rather, the physical design sets the stage for other characteristics to be present, which appear to be more of what residents have identified as homelike to them. In other words, physical design lays the groundwork both literally and figuratively for certain policies, practices, relationships, and choices to be carried out and appears to play both direct and indirect roles in residents' perceptions of homelikeness.

Homelikeness from the resident perspective shares many qualities with the interRAI's quality of life domains (Kehyayan et al., 2016), suggesting that homelikeness may be an important aspect of quality of life for residents. The nursing home resident's voice should be honored in order to capture the complexity of notions such as homelikeness and inform more person-centered long-term care policy and planning, including design guidelines and a policy-level definition of homelikeness.

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Appendix

Resident In-Depth Interview Guide
A Component of the Care and Construction Study

The objective of this study is to examine resident quality of life through the residents' experience with different models of care.

Instructions for Interviewer:

Key areas which we hope to assess in the in-depth interview: These interviews should examine the following: dynamics and interactions among the individuals, and dynamics and interactions with broader environment (social and physical), context around resident quality of life. We are particularly focusing on the five quality of life indicators of interest, which include: engagement in activities, control over daily life, quantity and quality of interactions, what characteristics impede their involvement, and what characteristics make the nursing home feel like home.

When asking the questions try to probe into how the physical structure of the nursing home and their interactions with others (staff, other residents and family) affect the five quality of life indicators. Because we want the interviews to supplement what we find in the survey, continually probe with questions such as why, or why not?

Before commencing the interview, the interviewer will obtain informed consent. The consent form explains the purpose and content of the study.
Start audio-recording now.
Start Time: _____
Finish Time: _____
Name of nursing home:_____

Name of your floor, unit/wing or neighborhood:

_____

Instructions: Read to Participant

In this study, we want to get a better understanding of the things that are important to you and your experience living here. The questions I'm going to ask have to do with what you are *currently* doing, what people are important to you and how the features of this facility affect you.

Section I:

First, I'd like to ask you a few general questions about you, I know some of these questions were asked on the survey but we wanted to confirm the information today.

1. **What is your age? _____**

2. **What is your relationship status? [Select one]**
   - Never married
   - Common-law

- Married
- Divorced/Separated
- Widowed

3. In total, about how long have you lived in *this* nursing home? [Select one]
   - Less than 1 month
   - 1 month to almost 3 months
   - 3 months to almost 6 months
   - 6 months to almost 12 months
   - 12 months to almost 24 months
   - 24 months or longer

4. Have you requested or are expecting a transfer to another nursing home?
   ○ No ○ Yes

5. How would you describe your level of mobility? [2]
   [Select one]
   - I have no problems walking about
   - I have some problems walking about
   - I am unable to walk about

6. How would you describe your ability to perform self-care?[2] [Select one]
   - I have no problems with self-care
   - I have some problems washing or dressing myself
   - I am unable to wash or dress myself

7. How would you describe your ability to perform usual activities? [2] [**Note:** If definition of usual activities is required: activities such as housework, leisure, social activities, work (paid and unpaid), study,. ´Usual´ means activities carried out on a regular basis, but not necessarily on a daily basis. The activities should be "usual for you"]
   [Select one]
   - I have no problems with performing my usual activities
   - I have some problems with performing my usual activities
   - I am unable to perform my usual activities

8. How would you describe your level of pain? [2] [Select one]
   - I have no pain or discomfort
   - I have moderate pain or discomfort
   - I have extreme pain or discomfort

[2] Full EQ-5D Scale

9. How would you describe your level of anxiety and/or depression? [2] [Select one]
    - o I am not anxious or depressed
    - o I am moderately anxious or depressed
    - o I am extremely anxious or depressed

Section II: Experiences Living Here

10. **Please tell me about what you do in a typical day** (weekday vs weekend).

    Note to Interviewer: Following cues from the participant's responses, guide the discussion to cover each of the theme areas and the questions there.
    Themes:

Staff Theme
When discussing this theme with the resident note the range of staff roles (includes care, therapy, recreation, cleaning, laundry, administration, spiritual care, etc)

11. Describe the staff who work with you through a typical day
    - e.g number of people; the types of things they do for/with you
    - How well you know them/how well they know you?

12. How do you feel about the interactions you have with staff?
    - What helps/hinders you to interact/communicate with staff the way you want? (Probe: Feedback vs friendly/casual conversation; **Care vs. companionship (caring for/caring about**?)
    - What is important to you about how staff work with you here (e.g. communication, interactions, way they help with care/activities)? (Probe: delivered with dignity, privacy, **safety, security**)

13. In what ways do staff influence/help/hinder you **to live the way you want**?
    - How do you feel about the amount/type of help that you get?
    - Tell me about other types of services that help you live the way you want (e.g. nursing care, eating healthy foods, exercise programs, access to equipment that helps you move, transportation to see your family or to go out on outings with your family)

Choices/Autonomy Theme
To be able to "live the way you want"

14. How much choice do you have about what you do?
    - When? (Time of day; frequency during day/week/month)
    - Where? (in own room, shared spaces, off-site (transportation options))
    - Are there activities that you would like to do but don't? Why?

15. How do you feel about the amount of choice that you have about what you do and when? (e.g. Hobbies, Social Activities, Meals, Personal care (Bathing, hair care, clothes/laundry), Exercise, Shopping)

16. How does the amount of choice about what you do, and when you do it, **affect the quality of your experience here (i.e, your quality of life**)?
    - How important is it to you?

17. In what ways do staff affect the choices you have about what you do?

Layout/Physical Design Theme

18. How does the layout and features of *name of nursing home* (rooms, furnishings, lighting, rules, location, transportation options, safety, comfort) help you live the way you want?

19. How does the layout/furnishings/etc affect the way you spend your time?
    - …the activities you choose?
    - …the time you spend (activities you share) with friends/family?
    - …the way the way that staff assist you? Interact with you?
    - …your comfort/security/freedom?

Relationships Theme

20. How do you feel about your interactions with other people who live here (i.e., other residents)?
    - Are you able to develop friendships with people who live here the way you would like to? Why? Why not?
    - As often as you want? Why? Why not?

21. Are you able to interact with family and friends who live in the community the way you would like to? Why? Why not?
    - As often as you want? Why? Why not?

22. How important are your friends/family to you and your life here?

23. In what ways do staff help you interact with friends/family?

24. How does the layout of *name of nursing home* (rooms, furnishings, lighting, rules, location, safety, comfort) affect the way you interact with friends/family?

'Feels like home' Theme

25. In what ways does *name of nursing home* feel like your home?
    - What things make it feel like home?
    - What things keep if feeling like home?

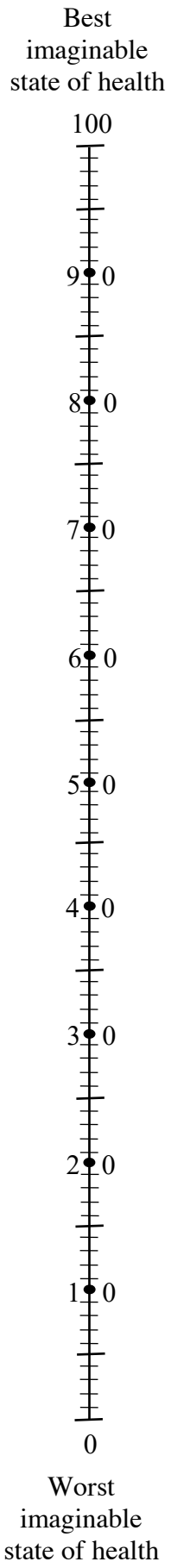
Section III: Overall Impression of Experience/QoL

26. How would you describe your overall quality of life? [Check one]
    - o Very poor
    - o Poor
    - o Neutral
    - o Good
    - o Very good

27. To help people say how good or bad their state of health is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked 100 and the worst state you can imagine is marked 0.

We would like you to indicate on this scale how good or bad your own health is today, in your opinion. Please do this by drawing a line from the box below to whichever point on the scale indicates how good or bad your state of health is today.[1]

Your own state of health today



28. Given your health status, how would you describe your overall experience of living in this nursing home? [Check one]
    - Very poor
    - Poor
    - Neutral
    - Good
    - Very good

29. Are there things you would like to change about your life here?
    - What they do you like overall? dislike?

30. Would you recommend *name of nursing home* (this site/this organization) to others? Why/why not?

31. Is there anything else you would to share with me about living here?

Thank and Close.

Field Notes

Please take a few minutes after the conclusion of the interview to record your impressions or concerns related to the environment/situation (e.g., distractions, other people present, etc.), the rapport between you and the resident, the resident's gender, cognitive abilitiy, emotional state of the resident, difficulties in communication, areas of difficulty within the interview or any other information which may be pertinent to interpreting the data.