Push and Pull Factors Surrounding Older Adults’ Relocation to Supportive Housing: A Scoping Review

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RÉSUMÉ
Les logements avec services de soutien, tels que les résidences pour personnes âgées et celles offrant des services d’assistance, sont de plus en plus considérés comme des choix adaptés aux besoins des personnes âgées au Canada. Cet examen de la portée décrit la nature et le contenu des recherches explorant les facteurs qui incitent les personnes âgées à déménager en résidences avec services de soutien. Une recherche effectuée sur PubMed, CINAHL, Web of Science et PsycINFO a permis de repérer 34 articles sur ce sujet. Les articles examinés utilisaient une variété de méthodes et de cadres théoriques, dont le modèle “Push and Pull”, qui était le plus courant. Cet examen de la portée suggère que les problèmes de santé et les déficits fonctionnels sont les principales causes de relogement en résidences avec services. Davantage d’études longitudinales sont nécessaires en vue de définir de manière plus exhaustive les déterminants médicaux et sociaux du relogement et ses conséquences. Ceci permettra de caractériser plus précisément cette population en croissance pour mieux aligner les politiques sur les besoins des adultes âgés qui envisagent ou entreprennent un relogement.

ABSTRACT
Supportive housing, including retirement homes and assisted living, is increasingly touted as a suitable living option for Canadian older adults. This scoping review describes the nature and content of studies that explore underlying factors that motivate older adults to relocate to supportive housing. We conducted a search of PubMed, Cumulative Index of Nursing and Allied Health Literature (CINAHL), Web of Science, and PsycINFO, which identified 34 articles for review. Articles reviewed employed a variety of methods and guiding theoretical frameworks, of which the push and pull framework appeared to be most common. This review suggests that health and functional deficits are important reasons for relocation to supportive housing for older adults. Further longitudinal data are required to more comprehensively describe medical and social determinants for relocation and its consequences, in order to better describe this growing population and better align policies with the needs of older adults contemplating or undergoing relocation.

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Introduction

In 2016, more than 400,000 Canadians lived in long-term care or supportive housing (Statistics Canada, 2017a). As our population continues to age, an unprecedented number of individuals will come to live in such congregate arrangements (Statistics Canada, 2017b). Supportive housing is an umbrella term encompassing retirement homes and assisted living (Canadian Centre for Elder Law, 2008). Although some adults 65 years of age or older move to supportive housing from community living, supportive housing remains distinct from long-term care homes (Canadian Centre for Elder Law, 2008; Perks & Haan, 2010). Long-term care homes are provincially regulated institutions that have entry requirements based on care needs, whereas supportive housing provides the option of relocating regardless of need (Howe, Jones, & Tilse, 2013).

Within Canadian long-term care homes, person-level data are collected through the mandated use of a standardized instrument (the Resident Assessment Instrument/Minimum Data Set [RAI-MDS] 2.0 or interRAI-Long-Term Care Facilities [LTCF]) across provinces and territories (Hirdes, Mitchell, Maxwell, & White, 2011). These data have played and continue to play a crucial role in shaping long-term care policy in Canada and other countries (Carpenter & Hirdes, 2013). The lack of a similar data infrastructure in supportive housing impedes evidence-based policy discussions for a sector with fragmented and jurisdiction-specific regulations (Canadian Centre for Elder Law, 2008).

An aging population with increasing care needs places a growing emphasis on supportive housing as an alternative to long-term care (Perks & Haan, 2010) but it is unknown whether these facilities have the capacity to meet residents’ needs (Hirdes et al., 2011). For example, to be licensed in Ontario, a retirement home must offer at least two of the following services: meal provision, bathing assistance, personal hygiene, dressing or ambulation, dementia care, medication administration, incontinence care, or the services of a physician, nurse, or pharmacist (Ontario Retirement Communities Association, 2018). Therefore, retirement homes may offer a wide range of heterogeneous services, such as providing meals and medication administration, but whether they can support residents who require additional help with activities of daily living is unclear. Without information on important factors that may be driving residents to relocate to supportive housing, it is difficult to ascertain the level of care needed to best serve this group of older adults.

A recent study from the Hamilton Niagara Haldimand Brant region of Ontario shed some light on the characteristics of retirement home residents by comparing those receiving home care services with home care clients living in the community (Poss et al., 2017). Approximately 40 per cent of retirement home residents receive home care services, and they tend to have greater cognitive and physical impairments than their community counterparts (Poss et al., 2017). This study also suggests that potential discrepancies exist between the care available in supportive housing and the needs of residents accessing such services. Yet, despite the growing numbers of older adults relocating to supportive housing, their characteristics and needs remain under-studied, hampering any informed assessment of the patchwork of policies implemented across Canada.

An understanding of the existing literature is needed to guide future investigations of prospective supportive housing residents, services, and policies. The push and pull framework, based on Lee’s theory of migration (Lee, 1966), is a conceptual guide that is commonly used to examine the factors for relocation. In the context of older adults’ relocation to supportive housing, this framework posits that older adults are influenced by push and pull factors when considering relocation to supportive housing. Pull factors are those that attract older adults to supportive housing, whereas push factors drive them out of their current living situation (Tyvimaa & Kemp, 2011). Given the paucity of literature focused on this population, it is unclear how these factors relate to older adults’ health and functioning; hindering the assessment of supportive housing policies’ relative appropriateness.

We therefore conducted a scoping review to describe the nature and content of studies that explore older adults’ reasons for relocating to supportive housing in order to better understand their needs. More specifically, we reviewed studies that examined older adults’ reasons for moving, and their relation to health and function.
Methods
A scoping review is designed to provide an overview of the literature on a topic with an expected paucity of evidence (Armstrong, Hall, Doyle, & Waters, 2011). We conducted a scoping review of the supportive housing literature in accordance with Arksey and O'Malley’s (2005) framework, to achieve our objectives.

Search Strategy
The search strategy was devised to describe the population, the setting, and the outcomes of interest. Because of the heterogeneity of terms used to describe supportive housing, a wide-range of keywords identified in Howe et al.’s (2013) international comparative search of terms was used (Table 1). We searched in PubMed, Cumulative Index of Nursing and Allied Health Literature (CINAHL), Web of Science, and PsycINFO up to and including August 2018.

Table 1: Search strategy

| Concept                      | Search Terms                                                                 |
|------------------------------|------------------------------------------------------------------------------|
| Retirement home AND Supportive housing/Seniors | (relocation OR mobility OR move OR moving OR migrate OR migration OR transition) AND (choice OR consider* OR decision OR decid* OR select* OR reason* OR push OR pull OR proactive OR reactive OR plan OR influence OR determin* OR factor) AND (disease OR illness OR comorbidity OR frailty OR Function* OR Activities of daily living OR ADL* OR IADL* OR Instrumental activities of daily living OR Quality of life OR Functional status OR everyday function* OR Functionally impaired elderly) AND (cohort OR cross-section OR survey OR review) AND (prevalence OR incidence OR epidemiology OR risk) |
|                             | TS=((retirement AND (community OR communities OR home OR village OR resort OR town OR condominium OR park OR housing OR apartment)) OR (village AND (lifestyle OR rental OR vertical)) OR (supportive OR supported) AND (housing OR senior OR accommodation OR resident)) OR (assisted AND (living OR service OR facility* OR apartment)) OR (residential AND (home OR care OR living OR park)) OR (sheltered AND (care OR housing)) OR (service AND (housing OR flat)) OR (care AND (close OR flex OR integrated)) OR (seniors OR senior) AND housing) |

Data Charting and Thematic Analysis
Publication characteristics, study characteristics, and participant information were collected and extracted. Publication characteristics included year of publication, journal, country in which the study was conducted, and MEDLINE® indexing status of the journal. Study characteristics included descriptors for supportive housing, study design, and the use of guiding frameworks or models, and participants’ information included age, gender, and measures of health or functioning. MEDLINE indexing status was used as a surrogate for the visibility of the article to health care professionals and policy makers (Matsoukas, 2015).

Results were collated by identifying common themes in the literature (Levac, Colquhoun, & O’Brien, 2010). Publication characteristics, general approaches in study designs, and the use of guiding frameworks or models were summarised once charted. Lastly, study...
participants were described, and measures of health and function were reported.

**Results**

**Search Results**

Our database searches returned 15,522 publications, with 13,615 unique citations. A total of 2677 (not counting 128 duplicates) were added after the updated search in August 2018. After screening and full-text review, 34 articles were included (Figure 1).

**Summary of Study Characteristics**

Table 2 provides an overview of included articles’ study characteristics. Most studies (44%) were conducted in the United States, followed by Australia (21%), Canada (12%), and Europe (12%). Two studies (6%) were conducted each in Israel, China, and Taiwan. More than half of articles (56%) were published between 2007 and 2012, with only 12 per cent having been published before 2006. The majority of studies (65%) were published in journals that were indexed for MEDLINE. Articles were most frequently published in the *Journal of Applied Gerontology* (15%) and *Journal of Housing for the Elderly* (12%). The former is indexed for MEDLINE but the latter is not.

The most frequently used descriptor for supportive housing was retirement living, with 44 per cent of studies using “retirement” in their definition of their setting, followed by “assisted living” (21%). Settings that included “retirement” were continuing care retirement communities, retirement villages, and retirement communities. Remaining articles (35%) used a variety of descriptors, such as senior housing/houses (including congregate senior housing and housing for seniors), supportive housing, and government-subsidized senior citizen apartment buildings (Table 2).

The push and pull framework was the most commonly applied framework (27%); half of studies used another conceptual approach, and 24 per cent used none. Almost all 34 articles reported participants’ age and gender, and 65 per cent reported at least one measure of health and/or functioning.

**Study Designs**

Studies used various designs to explore older adults’ factors for relocating to supportive housing. A qualitative approach was applied in half of the studies, while quantitative approaches were used in 47 per cent (Table 2). Only one study used mixed methods, in which they conducted interviews and applied quantitative instruments (Ewen & Chahal, 2013).

Qualitative approaches consisted of interviews with older adults and/or their families who were planning to move to, or already resided in, supportive housing. Most authors analyzed qualitative data using thematic or content analysis (Table 3). A few studies also collected data via participant observation. These studies...
Factors for Relocation to Supportive Housing

Table 2: Study characteristics

| Number of Studies (%) |
|-----------------------|
| **Year of publication** |
| 2000-2006 | 4 (12%) |
| 2007-2012 | 19 (56%) |
| 2013-2018 | 11 (32%) |

| **Country** |
|-------------|
| United States | 15 (44%) |
| Australia | 7 (21%) |
| Europe | 4 (12%) |
| Canada | 4 (12%) |
| Other | 4 (12%) |

| **Indexed for MEDLINE®** | 22 (65%) |

| **Supportive housing descriptors** |
| Retirement living | 15 (44%) |
| Assisted living | 7 (21%) |
| Other descriptors | 12 (35%) |

| **Study design** |
| Qualitative | 17 (50%) |
| Quantitative | 16 (47%) |
| Mixed methods | 1 (3%) |

| **Guiding frameworks and models** |
| Push and pull framework | 9 (27%) |
| Ecological theory of aging | 6 (18%) |
| Other | 11 (32%) |
| None | 8 (24%) |

| **Studies reporting age of participants** | 33 (97%) |
| Studies reporting gender of participants | 34 (100%) |
| Studies with measures of health or functioning | 22 (65%) |
| General health | 21 (62%) |
| ADLs and/or IADLs | 11 (32%) |
| Depression or mood | 6 (18%) |
| Cognition | 4 (12%) |
| Pain | 3 (9%) |
| No assessment of health or functioning | 12 (35%) |

**Guiding Theoretical Frameworks**

The majority of studies (77%) used a theoretical framework to guide their inquiry into older adults’ relocation to supportive housing (Table 2). The most frequently used framework was the push and pull framework, which was applied explicitly in 27 per cent of studies, followed by the ecological theory of ageing, which was used in 18 per cent of studies. Different frameworks were used in 32 per cent of articles. The rest of the articles did not report the use of a framework. Table 4 lists these theoretical frameworks.

Most frameworks applied in the studies reviewed were directly related to ageing and relocation: the push and pull framework, the ecological theory of ageing, or frameworks describing different types of movers (e.g. Litwak and Longino Jr’s (1987) and Gardner, Browning, and Kendig’s (2005) models, and concepts designed for examining person–environment interactions (e.g. complementary/congruence model of wellbeing). However, some researchers generalised concepts that are non-specific to older adults or relocation to study this phenomenon, including Rosenbaum’s (1990) theory of learned resourcefulness, grief, ecological system theory (Portacolone & Halpern, 2016), and the theory of planned behaviour (Ajzen, 1985).

**Push and Pull Factors Affecting Relocation to Supportive Housing**

The articles that applied the push and pull framework revealed several factors involved in older adults’ relocation to supportive housing (Table 2). Push factors for relocation included individuals’ or spouses’ health challenges, increasing social isolation, fear of burdening family, inadequate living arrangements, necessary maintenance of property, and aiming to achieve control over one’s future. The most frequently cited push factor in the studies were older adult’s or their spouse’s declining health (Bekhet, Zauszniewski, & Nakhla, 2009; Crisp, Windsor, Anstey, & Butterworth, 2013; Ewen & Chahal, 2013; Groger & Kinney, 2001; Stinson & McCrea, 2004; Tyyminen & Kemp, 2011). Articles that did not explicitly use the push and pull framework also showed that older adults who were relocated experienced increasing physical decline (Svidén, Wikström, & Hjortsjö-Norberg, 2002), falls (Castle & Sonon, 2007; Saunders & Heliker, 2008), cognitive impairment (Rockwood et al., 2014), and/or functional deficits (Ewen & Chahal, 2013; Granbom, Lofqvist, Horstmann, Haak, & Iwarsson, 2014).

Quantitative approaches largely entailed the use of surveys and questionnaires developed by authors for the purposes of the study (Table 3). The majority of studies used a cross-sectional design to look at relationships between factors surrounding the transition, but a few studies were longitudinal in nature. A pair of studies, for example, administered a survey at two time points, one year apart, to investigate older adults’ relocation outcomes after moving to supportive housing (Smith & Sylvestre, 2008; Sylvestre & Smith, 2009). Two studies used longitudinal data from existing cohorts: the Longitudinal Study on Aging II in the United States (Hong & Chen, 2009) and the ENABLE-AGE Project in Europe (Granbom et al., 2014). Finally, one study used online vignettes to present different scenarios to prospective older adults and their adult children to explore decision-making surrounding relocation (Caro et al., 2012).

Note. ADL = activities of daily living; IADL = instrumental activities of daily living.
Table 3: Summary table of reviewed studies

| Authors (Year) | Descriptor for Supportive Housing | Purpose of Study | Guiding Frameworks or Models | Data Collection Methods and Tools | Data Analysis | Participants or Sample | Age Reported (Years) |
|---------------|----------------------------------|-----------------|----------------------------|---------------------------------|--------------|------------------------|----------------------|
| Groger and Kinney (2001) | Continuing care retirement community (CCRC) | To better understand why people move to CCRCs | Push-pull framework | Interviews | Functional health: (Short Form Survey-36 [SF-36]); cognitive functioning ( Metamemory Questionnaire); depression (The Center for Epidemiologic Studies Depression Scale [CES-D]) | Thematic analysis | 8 married couples and 5 single women moving into CCRCs | Mean: 74.4 years (Range: 68-81 years) |
| Svidén, Wikström, and Hjortsjö-Norberg (2002) | Sheltered housing for the elderly | To analyse how individuals describe their experience of moving to and living in sheltered housing | N/A | Semi-structured interviews | Phenomenological approach to thematic analysis | 41 women and 18 men living in sheltered housing for >1 year | Not reported |
| Krout et al. (2002) | CCRC | To examine reasons given for relocation to an upstate New York CCRC | Push-pull framework | Interviews and author-developed survey to collect demographics | Exploratory factor analyses and multiple logistic regressions | 91 affluent individuals who relocated to one CCRC (64% female and had graduate/professional degrees) | 60% > 75 years |
| Stimson and McCrea (2004) | Retirement village | To identify relationships between push-pull factors, predictor variables, and relocation to retirement villages | Push-pull framework | Mail-in survey | Factor analyses and path analyses | 985 residents typically from a white-collar background (60-65% female) | Most common age of entry is 70-74 years |
| Bekhet, Zauszniewski, and Wykle (2008) | Retirement communities | To examine the relationship among positive cognitions, learned resourcefulness, and relocation adjustments | Rosenbaum’s theory of learned resourcefulness | Self-report questionnaire with scales to assess learned resourcefulness, positive cognition, and relocation adjustment | Hierarchal regression and a correlation matrix | 104 cognitively unimpaired elders (66% women) | Mean: 85 years (range: 65-95 years) |

Continued
| Authors (Year)                          | Descriptor for Supportive Housing | Purpose of Study                                                                 | Guiding Frameworks or Models | Data Collection Methods and Tools                                                                 | Data Analysis       | Participants or Sample | Age Reported (Years) |
|----------------------------------------|-----------------------------------|----------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------|---------------------|-----------------------|----------------------|
| Bekhet, Zauszniewski, and Nakhla (2009) | To understand why elders relocate to retirement communities and what living in the communities is like from their perspective | Push-pull framework                                                              | Interviews                  | Constant comparative method                                                                   |                     |                       |                      |
| Castle and Sonon (2007)                | Assisted living facilities        | To examine factors around the search, selection, and satisfaction of residents and family members in assisted living | Conceptual model based on typical sequence for assisted living search and selection process | Questionnaire adopted from nursing home research, consisting of health and functional measures, demographics, search, choice, selection, and satisfaction | Logistic regression | 375 assisted living residents (76% female) with matched family members (76% female) | 77 years (SD: 5.2) |
| Kemp (2008)                            | Assisted living facilities        | To explore pathways that lead couples to assisted living and how marriage influences their lives in this setting | N/A                         | Interviews                                                                      | Inductive analysis | 20 married couples and 10 adult children                                                          |                      |
| Saunders and Heliker (2008)            | Assisted living facility          | To explore the expectations and experiences of newly admitted residents          | N/A                         | Interviews                                                                      | Content analysis   | 5 newly admitted female residents                                                              |                      |
| Sergeant and Ekerdt (2008)             | Congregated senior housing, assisted living | To study motives for residential mobility and the decision-making process within the context of the ecological layers of aging | Ecological layers of the aging context | Interviews | Self-reported health problems | 30 individuals and couples who moved within the past year and 14 extended family members (66% female). | 11% 60-69 years, 39% 70-79 years, 50% 80-87 years |

Continued
| Authors (Year)          | Descriptor for Supportive Housing | Purpose of Study                                                                 | Guiding Frameworks or Models                                                                 | Data Collection Methods and Tools                                                                 | Data Analysis            | Participants or Sample                  | Age Reported (Years) |
|-------------------------|----------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------|---------------------|
| Smith and Sylvestre (2008) | Government subsidized senior citizen apartment buildings | To determine effects of neighbourhood and individual change on personal outcomes of recent movers | Amended Golant’s model, an interactional worldview in which older adults’ relocation outcomes are influenced by personal and behaviour-setting components | Investigator-developed longitudinal survey administered 1 year apart                            | Logistic regression     | 137 retirees (62% women) who recently (1 month to 1 year) moved to senior citizen apartment buildings. Majority of respondents obtained a gr 7 to 12 education. | 37% 55-64 years 27% 65-74 years 25% 75-84 years 11% ≥85 years |
| Sylvestre and Smith (2009) | To determine effects of changes in local behaviour settings and individual attributes on adjustments of older parents who have moved to senior citizen apartment buildings | | | | | |
| Ball et al. (2009) | Assisted living facilities | To examine how race and class influence decisions to move to assisted living | N/A | Interviews, participant observation, and review of residents’ records | Grounded theory approach | 60 residents (70% women), 43 family members/friends, 12 administrators; ~ 50% African American and 50% white | 4% 18-44 years 11% 45-64 years 10% 65-74 years 46% 75-84 years 29% ≥85 years |
| Hong and Chen (2009) | Supportive housing | To test a model for late-life relocation and health derived from the ecological model of aging and the complementary/congruence model of well-being | Ecological model of aging Complementary/congruence model of well-being | Longitudinal Study on Aging II (a nationally representative sample of noninstitutionalized persons ≥70 years) Looked at 12 medical conditions for comorbidities; functional disability (Nagi’s 7 items); Functional limitation (combined ADLs, IADLs); Self-rated health (1=excellent to 5=poor) | Latent growth curve modeling (to estimate variations in initial status and longitudinal changes) | 5,294 older adults (63% women); 2.4% recently relocated to supportive housing | Mean: 75.5 years (SD: 5.26) |
| Jungers (2010) | Assisted living | To create a rich description of the meaning of relocation and describe nuances in the process | Late-life transition | Focus group, interviews, and observations | Phenomenological approach to thematic analysis | 14 participants (10 women) residing in assisted living facilities | Mean: 85.2 years (range: 75-98) |
| Authors (Year)         | Descriptor for Supportive Housing | Purpose of Study                                                                 | Guiding Frameworks or Models                  | Data Collection Methods and Tools                        | Data Analysis                        | Participants or Sample                                                                 | Age Reported (Years) |
|-----------------------|----------------------------------|----------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------|---------------------|
| Cheng et al. (2011)   | Residential care facilities       | To understand the well-being of residents and how the environment affects residents’ activities and health | Therapeutic landscapes (Gesler)            | Interviews Self-rated health status (5-point scale from excellent to poor) | Constant comparative method           | 27 elderly residents (17 female), 16 family members, 5 residential care facility managers | Mean age: 80 years   |
| Finn et al. (2011)    | Retirement village               | To explore financial considerations that retirees had when relocating           | N/A                                         | Convergent interviews                                    | Content analysis                      | 81 retirement village residents; 52 discussed financial issues (28 women) whose interviews were analyzed | Mean 76.3 years (range: 55-89) |
| Tyvimaa and Kemp (2011)| Senior house                     | To explore factors influencing relocation to senior houses                       | Push-pull framework                         | Interviews and open-ended questions from surveys          | Content analysis                      | 120 senior housing residents (15 were interviewed) from 3 sites; 55-79% were women depending on site | At site 1, 50% of respondents were ≥75 years. At site 2, respondents were 60-70 years old. At site 3, age was distributed from 55 to ≥75 years |
| Ayalon and Green (2012)| CCRC                             | To examine the transition to CCRCs within the framework of anticipatory and disenfranchised grief | Anticipatory and disenfranchised grief       | Interviews                                                | Thematic analysis                     | 29 CCRC residents (24 female) and 19 adult children (13 female)                          | Range: 72-88 years |
| Bäumker et al. (2012) | Extra care housing               | To examine factors motivating older people to move to extra care housing compared with those moving to retirement villages | Push-pull framework                         | Investigator-developed questionnaire                     | Chi-square analyses                   | 949 individuals (65% female) recently relocated to extra care housing or retirement villages | Mean ages among settings ranged from 75.5 to 77.5 years |

Table 3: Continued
| Authors (Year)               | Descriptor for Supportive Housing | Purpose of Study                                                                 | Guiding Frameworks or Models | Data Collection Methods and Tools                                                                 | Data Analysis         | Participants or Sample                                                                 | Age Reported (Years) |
|-----------------------------|-----------------------------------|----------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------|----------------------|
| Caro et al. (2012)          | Retirement community              | To determine how five distinct dimensions (functional status, features of current housing, social networks, features of retirement communities, and finances) affect decisions to relocate | Ecological theory of aging   | Online vignettes (text, photographs, audiovisual clips) using a fractional factorial survey design | Logistic regression   | 215 older adults (79% female) and 51 adult children (6% in senior housing)             | Median: 73 years     |
| Huang (2012)                | Senior housing                    | To use a model based on the theory of planned behaviour to investigate factors underlying older adults’ intention to move into senior housing | Theory of planned behaviour  | Questionnaire based on the model developed using the theory of planned behaviour                  | Predictive modeling   | 264 older adults (63% female) from 5 randomly selected in older adult schools           | 28% 61-65 years, 21% 66-70 years, 20% 71-75 years, 20% 76-80 years, 11% ≥ 81 years |
| Weeks, Keefe, and Macdonald (2012) | Several housing options (including special retirement and congregate housing) | To examine how sociodemographic characteristics, health, and unmet support needs influence relocation preferences | Push-pull framework         | Mail-in survey based on the 1998 Seniors’ Housing and Support Services Survey (developed by the Canada Mortgage and Housing Corporation) | Logistic regression   | 1,015 community-dwelling adults (58% female) in 4 Canadian provinces                  | 34% 65-69 years, 27% 70-74 years, 20% 75-79 years, 11% 80-84 years, 7% ≥ 85 years |
| Ewen and Chahal (2013)       | Congregate senior housing          | To elucidate push-pull factors associated with moving into congregate senior housing | Push-pull framework         | Semi-structured interviews and scales for measuring psychosocial well-being Self-rated health (Cantril ladder; 10=very best possible health and 0=worst possible health); co-morbid health conditions | Horizontalization, clusters of meaning, and developing themes, Multiple regression and t-tests for quantitative data | 26 older women who recently moved to congregate senior housing | Mean: 78 years |
| Walker and McNamara (2013)   | Retirement living facilities       | To identify issues older adults face when relocating to retirement living         | Person-environment-occupation model, Stages of relocation from decision (push-pull factors) to adjustment. | Semi-structured interviews Grounded theory approach | 16 “relatively healthy” residents (12 female) from retirement living facilities (3 who recently made the decision to relocate) | Mean: 80 years |

Continued
| Authors (Year) | Descriptor for Supportive Housing | Purpose of Study | Guiding Frameworks or Models | Data Collection Methods and Tools | Data Analysis | Participants or Sample | Age Reported (Years) |
|---------------|----------------------------------|-----------------|-----------------------------|----------------------------------|--------------|-----------------------|---------------------|
| Crisp, Windsor, Anstey, and Butterworth (2013) | Retirement village | To identify distinguishing characteristics of older adults who consider relocation in the future from those who have not | Push-pull framework, Five factor model of personality | Mail-in survey Self-rated physical health in relation to physical activity, pain, and general perceived health (RAND-12 Health Status Inventory [RAND-12] Physical Health Component Score) | Logistic regressions | 517 community-dwelling residents (51% female) | Mean: 65 years (SD: 8.0) |
| Bohle et al. (2014) | Retirement village | To explore influences on the housing choices of retirees | Gardner’s two types of movers to retirement villages: planners and reactors. | N/A | Convergent interviews | Analysis of convergent and divergent themes | 81 retirement village residents (46 female) and 73 local community residents (40 female) | Mean: 77.7 years (range: 59-93 years) |
| Granbom, et al. (2014) | Special housing | To explore which aspects of housing and health predict relocation to ordinary or special housing in very old age | Ecological theory of ageing (person-environment fit) | Longitudinal data (part of the Enabling Autonomy, Participation, and Well-Being in Old Age: The Home Environment as a Determinant for Healthy Aging [ENABLE-AGE] Project collected via home visits, interviews, assessments, and observations; Symptom List Questionnaire (0-30); Geriatric Depression Scale (0-15); 4 tasks from Mini-Mental State Examination (MMSE); use of a mobility device; ADLs; IADLs; perceived functional independence; SF-36) | Cox regression modeling | 384 persons living in the community (75% female); 70 participants relocated after 4 years (46 to special housing) | Mean: 84.9 years (SD: 3.0) |
| Authors (Year)          | Descriptor for Supportive Housing | Purpose of Study                                                                 | Guiding Frameworks or Models       | Data Collection Methods and Tools                                                                 | Data Analysis                                           | Participants or Sample                                                                 | Age Reported (Years) |
|------------------------|-----------------------------------|----------------------------------------------------------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------|
| Rockwood et al. (2014) | Assisted living and nursing home  | To compare events and symptoms that predispose and precipitate moving of older adults to assisted living or to a nursing home | N/A                               | Health record review and personal/facility interview. Cognitive impairment scale (Global Deterioration Scale); Dependence Scale (0-15, 15 indicating worse dependence); Dementia Symptom Scale (Symptom Guide) | Analysis of variance and chi-square                    | 174 residents who were admitted to nursing home or assisted living; 54 moving from community to assisted living (69% female) | Mean: 85.3 years (SD: 6.4) moving to assisted living |
| Crisp, Windsor, Butterworth, and Anstey (2015) | Retirement community | To investigate changes in loneliness or social networks following relocation | Five Factor Personality Model Social network-health relationship | Mailed-in self-report questionnaires at prior to relocation, 1, 6, and 12 months post relocation SF-12 Physical Health, SF-12 Mental Health; Depression Anxiety Stress Scales (DASS) | Longitudinal modeling                                   | 83 older adults relocating to a new retirement community (61% female); 549 community-dwelling older adults | Mean age of those moving to retirement homes: 75 years (SD: 7.66) |
| Ayalon (2016)          | CCRC                              | To evaluate views of CCRC residents on the nursing unit within their community   | N/A                               | Interviews conducted over 4 years Subjective health status (excellent, good, mediocre, poor, very poor) | Longitudinal thematic analysis                         | 57 continuing care retirement community residents (>60% female)                         | Mean: 80 years (SD: 4.7) (first interview) to 83 years (SD: 3.5) (last interview) |
| Portacolone and Halpern (2016) | Housing for seniors | To understand reasons that led community-dwelling older adults to relocate to senior housing | Micro/subjective, meso/institutional, and macro/ideological lens of analysis | Ethnographic interviews and participant observation | Thematic analysis guided by micro, meso, or macro lens of analysis | 23 living in building for seniors and 24 living in conventional housing (66% female); all living alone | ≥75 years |
| Koss and Ekerdt (2016) | Supportive housing                | To examine how anticipation of the fourth age influences third-age residential reasoning | Ecological theory of aging Anticipation of the fourth age (marked by progressive dependence and decline) | Semi-structured interviews | Thematic analysis                                      | 30 community dwelling older adults (50% female); 7 lived in independent housing or associated with age-segregated communities | Mean: 76.4 years (range: 67-97 years) |

ADL = activities of daily living; IADL = instrumental activities of daily living; SD = standard deviation.
Factors for Relocation to Supportive Housing

Table 4: Theoretical frameworks

| Framework | Brief Description | Key Article |
|-----------|-------------------|-------------|
| Push and pull framework | See Introduction. | Tyvimaa & Kemp (2011) |
| Ecological theory of aging | There are age-related changes to health and function that influence the person-environment fit. This causes an "environmental press", which may result in relocation. | Granbom et al. (2014) |
| Litvak and Longino’s model of three types of moves among the elderly | Older adults make three types of moves: (1) healthy retirees moving for amenities and friendship, (2) frail older adults moving because of their need for informal care, and (3) older adults moving because of their increased dependency and need for formal care. | Krout et al. (2002) |
| Gardner’s two types of movers | There are two types of movers: (1) planners who are motivated by future health concerns and (2) reactors who move because of current health problems. | Crisp, Windsor, Anstey, & Butterworth (2013) |
| Golant’s model of an interactional worldview | Builds on ecological models by providing a temporal perspective on person-environment and behavioural relationships. | Smith and Sylvestre (2008) |
| Complementary/congruence model of wellbeing | Older adults’ well-being is dependent on their ability to satisfy their needs using available environmental resources. | Hong and Chen (2009) |
| Therapeutic landscapes | A concept used by health geographers in which one’s outcomes are influenced by the power of place to provide physical, mental, and spiritual healing. | Cheng et al. (2011) |
| Ecological systems | The use of micro/subjective, meso/institutional, and macro/ideological perspectives to understand relocation. | Portacolone & Halpern (2016) |
| Rosenbaum’s theory of learned resourcefulness | Learned resourcefulness (a repertoire of self-control skills and ability to cope with adversity) can facilitate positive relocations. | Bekhet et al. (2008) |
| Anticipatory and disenfranchised grief | Anticipatory grief refers to one’s reaction to impending losses. Disenfranchised grief refers to grief that one cannot openly acknowledge. | Ayalon & Green (2012) |
| Theory of planned behaviour | States that one’s behaviours are determined by one’s intention to perform that action, and that such intention is influenced by attitude and the subjective norm. | Huang (2012) |

Pull factors for relocation were related to one’s lifestyle, community and social amenities, the prospect of receiving care, and affordability (Table 5). Pull factors generally involved the availability of amenities and care that enabled older adults to maintain an existing lifestyle (Stimson & McCrea, 2004). Articles that did not apply the push and pull framework also suggested that reasons for relocation related to the maintenance of older adults’ current lifestyle. For example, Kemp (2008) found that couples who moved to assisted living homes did so because of their desire to continue living together after a spouse’s major health transition. The push and pull factors are described in Table 5.

Other Factors Influencing Relocation

Articles that used other models or no explicit guiding conceptual framework described additional factors, which may or may not be related to push and pull factors, influencing older adults’ relocation to supportive housing. An article that used the ecological theory of ageing examined how different dimensions affected relocation: functional status, features of current housing, social networks, features of retirement communities, and finances (Caro et al., 2012; Sergeant & Ekerdt, 2008). Another article described how increasing dependence results in changes in the person-environment fit, which may precipitate the move (Granbom et al., 2014). Using the ecological theory of ageing, Koss and Ekerdt (2016) categorised older adults’ reasoning for relocation as preemptive, where participants believed that their current homes would be suitable in the future, or contingent, where they have anticipated having the need to relocate.

Reviewed articles also explored the impact of adult children (Castle & Sonon, 2007; Sylvestre & Smith, 2009), older adults’ subjective interpretations of the new residential setting (Smith & Sylvestre, 2008), socioeconomic status and race (Ball et al., 2009), learned resourcefulness (Bekhet, Zauszniewski, & Wykle, 2008), grief (Ayalon & Green, 2012), and the larger cultural and political context (Portacolone & Halpern, 2016; Sergeant & Ekerdt, 2008) as factors for relocation.

Study Participants

All articles reported participants’ gender, and all but one (97%) reported participants’ age (Table 2). With the
exception of one study that included only women (Saunders & Heliker, 2008), 60–70 per cent of participants were women (Table 3). All mean and median ages were greater than 60 years (Table 3). Younger participants (with a mean age of 65 years old) tended to be community-dwelling residents who may have been relocating to supportive housing (Crisp, Windsor, Anstey, & Butterworth, 2013; Weeks, Keefe, & Macdonald, 2012). In contrast, in articles with participants who were already living in supportive housing, the participants were 70–80 years old (Bäumker et al., 2012).

Participants were often described as healthy (Walker & McNamara, 2013) and/or cognitively unimpaired (Bekhet et al., 2008); no studies focused on older adults with significant physical and/or cognitive impairments. Approximately two thirds of studies used at least one measure of health or functioning (Table 6). Up to 62 per cent assessed general health, with self-rated health being the most frequently used instrument. Activities of daily living (ADLs) and instrumental activities of daily living (IADLs) were the second most frequently assessed aspect of health and functioning, with 32 per cent of studies applying an instrument to measure them. Other standardized instruments, such as the Center for Epidemiologic Studies Depression Scale (CES-D) and the Minimum Data Set Cognitive Performance Scale (MDS-CPS), were used to measure depression/mood and cognition, respectively (Table 6). A total of 12 per cent of studies collected information related to specific health conditions from patients and/or their medical records (Ball et al., 2009; Ewen & Chahal, 2013; Hong & Chen, 2009; Sergeant & Ekerdt, 2008). Cardiovascular disease and hypertension were the most commonly reported

### Table 5: Push and pull factors affecting relocation

| Study                  | Push Factors                                                                 | Pull Factors                                                                 |
|------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Groger & Kinney (2001) | Desire to plan while able                                                    | Attachment to community                                                      |
|                        | Optimal timing and ready for change                                          | Joining friends and neighbors                                                |
|                        | Fear of burdening family                                                    | Proximity to family                                                          |
|                        |                                                                              | Prospect of long-term care                                                   |
| Krout et al. (2002)    | Decline in own or spouse’s health                                           | Continuing care                                                              |
|                        | Deteriorating homes                                                         | Health services on site                                                      |
|                        | Reduction in income                                                         | Household and maintenance help                                               |
| Stimson & McCrea (2004)| Change in lifestyle                                                          | Built environment                                                           |
|                        | Home maintenance                                                            | Affordability                                                                |
|                        | Social isolation                                                            | Location                                                                     |
|                        | Health and mobility                                                         | Desire to maintain existing lifestyle                                        |
| Bekhet et al. (2009)   | Own or spouse’s failing health                                               | Location                                                                     |
|                        | Getting rid of responsibilities                                             | Family and reputation of facility                                            |
|                        | No help                                                                      | Security                                                                     |
|                        | Closing facility                                                            | Joining friends                                                              |
| Tyvimaa & Kemp (2011)  | Personal circumstances: social isolation, declining health status, need for assistance | Social environment: new lifestyle, activities, age homogeneity                |
|                        | Physical environment: heavy housework, renovation                           | Physical environment: easy living, purpose built                             |
|                        | Community environment: unsafe neighbourhood, lack of services                | Community environment: location, access to services, public transportation   |
| Bäumker et al. (2012)  | Health reasons (e.g. own or spouse’s health)                                 | Attractions of extra care (e.g. tenancy rights, care support on-site, security, accessibility, size, communal areas, family/friends, social/leisure facilities) |
|                        | Housing reasons (e.g. home requiring adaptation or too much to manage)      |                                                                              |
|                        | Social reasons (e.g. isolation) were less important than health and housing reasons |                                                                              |
| Weeks et al. (2012)    | Authors did not categorize factors. Factors significantly related to relocation included gender (women), age (<80 years old), household income (higher income), whether the current home met their needs, and unmet heavy cleaning needs. |                                                                              |
| Ewen & Chahal (2013)   | Health and functional decline                                                | Availability of on-site services                                             |
|                        | To relocate closer to a relative who needs care                              |                                                                              |
| Crisp, Windsor, Anstey, & Butterworth (2013) | Authors did not categorize factors. Those most likely to have considered relocation to retirement villages were: younger (55-64 years old vs. 65-74), or retirees with enough money, worse physical health, and poorer current neighbourhood social cohesion. |                                                                              |
health conditions (Ball et al., 2009; Ewen & Chahal, 2013; Sergeant & Ekerdt, 2008).

Articles that commented on participants’ health or functioning generally stated that participants were in good physical health with only minor problems. For example, Groger and Kinney (2001) reported that participants had high levels of well-being, with the exception of a few reporting minor “forgetfulness” problems. Studies that used self-rated health as a measure of general health commonly reported that participants were in “fair” or “excellent” health (Bekhet et al., 2009; Huang, 2012; Weeks et al., 2012). Some of the articles suggest some deficits in ADLs/IADLs among study participants. One study reported average scores of 7.2/10 and 5.5/10 on the Older Americans Resources and Services ADL and IADL Scales (Castle & Sonon, 2007), whereas another found that only 31 per cent of 215 retirement home residents were independent with two or more IADLs (Caro et al., 2012). The three articles that examined how health and functioning impacted relocation found that worse health, dependence with IADLs, cognitive deficits, and accessibility problems were associated with relocation found that only 31 per cent of 215 retirement home residents were independent with two or more IADLs (Castle & Sonon, 2007), whereas another study reported average scores of 7.2/10 and 5.5/10 on the Older Americans Resources and Services ADL and IADL Scales (Castle & Sonon, 2007), whereas another found that only 31 per cent of 215 retirement home residents were independent with two or more IADLs (Caro et al., 2012). The three articles that examined how health and functioning impacted relocation found that worse health, dependence with IADLs, cognitive deficits, and accessibility problems were associated with moving to supportive housing (Granbom et al., 2014; Hong & Chen, 2009; Rockwood et al., 2014).

Discussion

We conducted a scoping review to identify and describe manuscripts reporting on older adults’ reasons for relocation to supportive housing. Of the 34 articles that met eligibility criteria, 12 per cent described studies that were conducted in Canada; the majority were published after 2007. Thirty-five percent of articles were published in a journal not indexed for MEDLINE, which may hinder their visibility to health services researchers. As a result, literature regarding older adults’ reasons for relocating to supportive housing may be under-utilised to inform the planning and delivery of care, and refinement of supportive policy. This may also explain why the literature may focus on the geographical and planning aspects of older adults’ relocation rather than health-related factors.

Articles reviewed were heterogeneous. First, numerous descriptors were used to designate purpose-built housing that provides services for older adults, ranging from “senior housing” to “retirement homes”. This is consistent with previous reviews of supportive housing nomenclature, suggesting that commonalities exist among settings despite the diversity in descriptors used (Howe et al., 2013). Second, studies employed a variety of qualitative and quantitative designs. Despite differing approaches, both qualitative and quantitative studies had a shared purpose: to understand the factors driving older adults’ relocation to supportive housing. Notably, some articles reported using similar frameworks despite using different study designs. For example, Groger and Kinney (2001) used the push and pull framework to analyze interview data, whereas Stimson and McCrea (2004) used the framework to guide the development of a model from survey data.

The use of a guiding framework or model was reported in 76 per cent of manuscripts. One third of articles that used a guiding model explicitly applied the push and pull framework, making it the most frequently used conceptual framework. Another commonly used conceptual framework was the ecological theory of ageing, which revolves around the person–environmental fit (Granbom et al., 2014). Despite the use of different guiding frameworks and models, there appears to be a common theme among the reviewed articles: a combination of push and pull factors influences older adults’ relocation to supportive housing. For example, “environmental press”, as described in the ecological theory of ageing, is analogous to push factors. Another example includes the Gardner’s model of two types of movers that categorises older adults into planners and reactors (Crisp, Windsor, Butterworth, & Anstey, 2013), echoing that some are pushed into relocating to supportive housing and must move reactively, whereas others may be pulled into relocating by planning around their anticipated future needs.

Generally, the reviewed studies, specifically those using qualitative approaches, provide valuable insight into...
the influence of older adults’ lived experiences, albeit framed a priori using guiding models, on their relocation to supportive housing. Perceived and actual decline in health or health of a spouse were the most commonly cited push factors. Pull factors generally revolved around the availability of amenities and support that participants anticipated that they would need in the future. Importantly, these factors are also consistent with the results of articles which did not explicitly utilise the push and pull framework, suggesting that these findings are not just artifacts resulting from the use of this guiding model. Articles also explored potentially influential variables, such as the role of adult children and grief, which modify older adults’ experiences with relocation but do not necessarily push or pull them towards supportive housing.

Overall, studies that included both community-dwelling and supportive housing residents showed that those residing in supportive housing tended to be older and were mostly women (Crisp, Windsor, Anstey, & Butterworth, 2013; Weeks et al., 2012). This may be because women have a longer life expectancy than men, and because of the association between increasing age and health and functional deficits. The likelihood that women are the surviving partner in their relationship may contribute to their relative overrepresentation in supportive housing. Many men with similar health and functional challenges may have partners to help them avoid moving to supportive housing (Rockwood, Song, & Mitnitski, 2011). Approximately two thirds of articles used at least one measure of health or function, and most participants were described as healthy, with a few being described as having minor deficits in functioning. However, three articles examined the impact of health and functioning on relocation to supportive housing (Granbom et al., 2014; Hong & Chen, 2009; Rockwood et al., 2014). These manuscripts reported that physical impairments and functional impairments were associated with moving to supportive housing. The instruments used to assess health and functioning varied and often relied on self-report. The limited and largely subjective data on participants’ health and functioning hinder the extrapolation of whether needs are met in supportive housing.

This review of 34 articles reporting on factors surrounding older adults’ relocation to supportive housing revealed several gaps in the literature. First, the results of reviewed articles suggest that older adults are pushed into supportive housing by declining physical health and functioning. However, details about this decline, such as diagnoses and comorbidities, are limited by the variable use of instruments and reliance on self-report. Second, there is a collage of different terms used to describe supportive housing, which hinders comparisons and policy discussions with regard to this setting (Howe et al., 2013). Third, financial considerations were identified in a small number of studies, which is surprising given the costs often associated with supportive housing options (Federal/Provincial/Territorial Ministers Responsible for Seniors, 2019). Moreover, considerations related to gender identity, culture, and religion appear to be virtually absent from the literature. Lastly, evidence regarding supportive housing consists of both health-related and non-health-related literature. Although this body of evidence facilitates a multidimensional understanding of older adults’ relocation to supportive housing, active efforts may be required to bridge silos between disciplines.

Gaps identified in this review make it difficult to ascertain the appropriateness of current policies. Although evidence suggests that older adults relocate to supportive housing in part because of health and functional impairments, there appears to be a paucity of comprehensive and observational literature to support this. In Canada, the Federal/Provincial/Territorial Ministers Responsible for Seniors (2019) recently called for more evidence that considers the many factors at play, including socio-economic and cultural ones, to guide policies for older adults’ housing. Future research should focus on collecting and summarising objective information about the health and functioning of older adults relocating to supportive housing. Longitudinal observational study designs may be particularly useful because the current literature suggests that changes in older adults’ health and functioning often prompt relocation. This study design can facilitate a detailed understanding of older adults’ needs, and consequently, inform policies relevant for both older adults contemplating moving to and those already residing in supportive housing. The application of guiding frameworks and models appears to be useful in exploring health-related and non-health-related factors that influence the transition to supportive housing. However, the use of a framework such as Andersen’s behavioral model of health services use (Babitsch, Gohl, & von Lengerke, 2012) may be more comprehensive in capturing predisposing, enabling, and need factors associated with relocation.

Finally, standardized nomenclature for supportive housing needs to be established to facilitate the synthesis of this evidence, and national and international comparisons of related policies. The mandatory use of interRAI standardized assessments systems in the long-term care and home care sectors across Canada provides a rich resource with which to better understand the clients served in these sectors and guide policy (Heckman, Gray, & Hirdes, 2013). It is time for a similar approach to be implemented in the supportive housing sector.

Strengths and Limitations

Our scoping review should be interpreted in light of its strengths and limitations. The strengths of this review
are the non-restrictive inclusion criteria that encompassed all study types, the use of multiple databases spanning multiple disciplines, and the use of a systematic process documented using reference management software. This review is limited by the exclusion of non-English articles. Finally, our focus was on the identification of factors related to relocation decisions. A number of articles identified also addressed lived experience of the actual relocation and of its aftermath on quality of life in a supportive care setting, which, as important topics, would require specific reviews and further research.

**Conclusion**

This scoping review describes the nature and content of 34 articles focusing on older adults’ reasons for relocating to supportive housing. Approximately one third of included articles were published in journals not indexed for MEDLINE, which suggests that a portion of literature focuses on non-health-related aspects of supportive housing, such as geography and planning. This is also reflected in the heterogeneous study characteristics that included various qualitative and quantitative designs and different guiding conceptual theories. Ideas explicitly or implicitly related to the push and pull framework were common in the articles. It was frequently reported that declining health and functioning was a commonly cited push factor towards relocation to supportive housing. However, although two thirds of the articles utilised a measure of health or functioning, most relied on subjective and self-reported measures. Future research is needed to produce data regarding the health and functioning of older adults moving to supportive housing to better inform policies for this growing population.

**References**

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11–39). Heidelberg, Germany: Springer.

Arksey, H., & O’Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. https://doi.org/10.1080/136455703200119616

Armstrong, R., Hall, B. J., Doyle, J., & Waters, E. (2011). ‘Scoping the scope’ of a Cochrane review. *Journal of Public Health*, 33(1), 147–150. https://doi.org/10.1093/pooky/fgq015.

Ayalon, L. (2016). Do not hear, see, or speak: views of older residents and their adult children about the nursing unit in the continuing care retirement community. *International Psychogeriatrics*, 28(11), 1867–1877. doi: 10.1017/s1041610216000788.

Ayalon, L., & Green, V. (2012). Grief in the initial adjustment process to the continuing care retirement community. *Journal of Aging Studies*, 26(4), 394–400. doi:10.1016/j.jaging.2012.05.001.

Babitsch, B., Gohl, D., & von Lengerke, T. (2012). Re-visiting Andersen’s behavioral model of health services use: A systematic review of studies from 1998–2011. *Psychosocial Medicine*, 9, 1–15. https://doi.org/10.3205/psm000089.

Ball, M. M., Perkins, M. M., Hollingsworth, C., Whittington, F. J., & King, S. V. (2009). Pathways to assisted living: The influence of race and class. *Journal of Applied Gerontology*, 28, 81–108. https://doi.org/10.1177/0733464808323451.

Bäumker, T., Callaghan, L., Darton, R., Holder, J., Netten, A., & Towers, A. M. (2012). Deciding to move into extra care housing: Residents’ views. *Ageing & Society*, 32(7), 1215–1245. https://doi.org/10.1017/S0144686X11000869.

Bekhet, A., Zauszniewski, J. A., & Nakhl, W. E. (2009). Reasons for relocation to retirement communities: A qualitative study. *Western Journal of Nursing Research*, 31(4), 462–479. https://doi.org/10.1177/019394590332009.

Bekhet, A. K., Zauszniewski, J. A., & Wykle, M. L. (2008). Milieu change and relocation adjustment in elders. *Western Journal of Nursing Research*, 30(1), 113–129. https://doi.org/10.1177/0193945907309309.

Bohle, P., Rawlings-Way, O., Finn, J., Ang, J., & Kennedy, D. J. (2014). Housing choice in retirement: community versus separation. *Housing Studies*, 29(1), 108–127. doi:10.1080/02673037.2013.825693.

Canadian Centre for Elder Law. (2008). Discussion paper on assisted living: Past, present and future legal trends. Retrieved 22 June 2019 from https://www.bcli.org/publication/discussion-paper-assisted-living-past-present-and-future-legal-trends-canada-0.

Caro, F. G., Yee, C., Levien, S., Gottlieb, A. S., Winter, J., McFadden, D. L., et al. (2012). Choosing among residential options: Results of a vignette experiment. *Research on Aging*, 34(1), 3–33. https://doi.org/10.1177/019286511404032.

Carpenter, I., & Hirdes, J. P. (2013). Using interRAI assessment systems to measure and maintain quality of long-term care: A good life in old age? Monitoring and improving quality long-term care (pp. 93–139). Paris: OECD Publishing.

Castle, N. G., & Sonon, K. E. (2007). The search and selection of assisted living facilities by elders and family. *Medical Care*, 45(8), 729–738. https://doi.org/10.1097/MLR.0b013e318061bb6.

Cheng, Y., Rosenberg, M. W., Wang, W., Yang, L., & Li, H. (2011). Aging, health and place in residential care facilities in Beijing, China. *Social Science & Medicine*, 72(3), 365–372.

Crisp, D. A., Windsor, T. D., Anstey, K. J., & Butlerworth, P. (2013). Considering relocation to a retirement village: Predictors from a community sample. *Australasian
Crisp, D. A., Windsor, T. D., Butterworth, P., & Anstey, K. J. (2013). What are older adults seeking? Factors encouraging or discouraging retirement village living. *Australasian Journal on Ageing*, 32(3), 163–170. https://doi.org/10.1111/j.1741-6612.2012.00623.x.

Crisp, D. A., Windsor, T. D., Butterworth, P., & Anstey, K. J. (2015). Adapting to retirement community life: Changes in social networks and perceived loneliness. *Journal of Relationships Research*, 6, e9. https://doi.org/10.1017/jrr.2015.5.

Ewen, H. H., & Chahal, J. (2013). Influence of late life stressors on the decisions of older women to relocate into congregate senior housing. *Journal of Housing for the Elderly*, 27(4), 392–408. https://doi.org/10.1080/02763893.2013.813428.

Federal/Provincial/Territorial Ministers Responsible for Seniors. (2019). Report on housing needs of seniors. Retrieved 22 June 2019 from: https://www.canada.ca/en/employment-social-development/corporate/seniors/forum/report-seniors-housing-needs.html

Finn, J., Mukhtar, V. Y., Kennedy, D. J., Kendig, H., Bohle, P., & Rawlings-Way, O. (2011). Financial planning for retirement village living: a qualitative exploration. *Journal of Housing for the Elderly*, 25(2), 217–242. doi:10.1080/02763893.2011.571107.

Gardner, I. L., Browning, C., & Kendig, H. (2005). Accommodation options in later life: Retirement village or community living? *Australasian Journal on Ageing*, 24(4), 188–195. https://doi.org/10.1111/j.1741-6612.2005.00121.

Granbom, M., Lofqvist, C., Horstmann, V., Haak, M., & Iwarsson, S. (2014). Relocation to ordinary or special housing in very old age: Aspects of housing and health. *European Journal of Ageing*, 11(1), 55–65. https://doi.org/10.1007/s10433-013-0287-3.

Groger, L., & Kinney, J. M. (2001). Reason for moving to a continuing care retirement community (CCRC). *Gerontologist*, 41, 138–139.

Heckman, G., Gray, L. C., & Hirdes, J. (2013). Addressing health care needs for frail seniors in Canada: The role of interRAI instruments. *The Canadian Geriatrics Society Journal of Continuing Medical Education*, 3(1), 8–16.

Hirdes, J. P., Mitchell, L., Maxwell, C. J., & White, N. (2011). Beyond the ‘iron lungs of gerontology’: Using evidence to shape the future of nursing homes in Canada. *Canadian Journal on Aging-Revue Canadienne Du Vieillissement*, 30(3), 371–390. https://doi.org/10.1017/S0714980811000304.

Hong, S., & Chen, L. (2009). Contribution of residential relocation and lifestyle to the structure of health trajectories. *Journal of Aging & Health*, 21(2), 244–265. https://doi.org/10.1177/0898264308328960.

Howe, A. L., Jones, A. E., & Tilse, C. (2013). What’s in a name? Similarities and differences in international terms and meanings for older peoples’ housing with services. *Ageing & Society*, 33, 547–578. https://doi.org/10.1017/S0144666712000086.

Huang, H. C. (2012). Factors influencing intention to move into senior housing. *Journal of Applied Gerontology*, 31(4), 488–509. https://doi.org/10.1177/0733464810392225.

Jungers, C. M. (2010). Leaving home: An examination of late-life relocation among older adults. *Journal of Counseling and Development*, 88(4), 416–423.

Katz, S., Downs, T. D., Cash, H. R., & Grotz, R. C. (1970). Progress in development of the index of ADL. *The Gerontologist*, 10(1_Part_1), 20–30.

Kemp, C. L. (2008). Negotiating transitions in later life: Married couples in assisted living. *Journal of Applied Gerontology*, 27(3), 231–251. https://doi.org/10.1177/0733464807311656.

Koss, C., & Ekerdt, D. J. (2016). Residential reasoning and the tug of the fourth age. *Gerontologist*, 57(5), 921–929. https://doi.org/10.1093/geront/gnw010.

Krout, J. A., Moen, P., Holmes, H. H., Oggins, J., & Bowen, N. (2002). Reasons for relocation to a continuing care retirement community. *Journal of Applied Gerontology*, 21(2), 236–256. doi:10.1177/07364802020020007.

Lawton, M. P., & Brody, E. M. (1970). Assessment of older people: self-maintaining and instrumental activities of daily living. *Nursing Research*, 19(3), 278.

Lee, E. (1966). A theory of migration. *Demography*, 3(1), 47–57. https://doi.org/10.2307/2060063.

Levac, D., Colquhoun, H., & O’Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, 5(1), 69. https://doi.org/10.1186/1748-5908-5-69.

Litwak, E., & Longino, C. F., Jr. (1987). Migration patterns among the elderly: A developmental perspective. *The Gerontologist*, 27(3), 266–272. https://doi.org/10.1093/geront/27.3.266.

Matsoukas, K. (2015). Confirming that a journal is indexed in Medline and/or PubMed. MSK Library Blog. Retrieved 22 June 2019 from https://library.mskcc.org/blog/2015/12/confirming-that-a-journal-is-indexed-in-medline-and-or-pubmed/

Ontario Retirement Communities Association. (2018). Types of care. Retrieved 22 June 2019 from http://www.orcareti

Perks, T., & Haan, M. (2010). The dwelling-type choices of older Canadians and future housing demand: An investigation using the Aging and Social Support Survey (GSS16). *Canadian Journal on Aging-Revue Canadienne Du Vieillissement*, 29(3), 445–463. https://doi.org/10.1017/S0714980810000413.

Portacolone, E., & Halpern, J. (2016). "Move or Suffer": Is age-segregation the new norm for older Americans living
alone. *Journal of Applied Gerontology*, 35(8), 836–856. https://doi.org/10.1177/0733464814538118.

Poss, J. W., Sinn, C. J., Grinchenko, G., Blums, J., Peirce, T., & Hirdes, J. (2017). Location, location, location: Characteristics and services of long-stay home care recipients in retirement homes compared to others in private homes and long-term care homes. *Healthcare Policy*, 12(3), 80–93.

Rockwood, J., Richard, M., Garden, K., Hominick, K., Mitnitski, A., & Rockwood, K. (2014). Precipitating and predisposing events and symptoms for admission to assisted living or nursing home care. *Canadian Geriatrics Journal*, 17(1), 16–21. https://doi.org/10.5770/cgj.17.93.

Rockwood, K., Song, X., & Mitnitski, A. (2011). Changes in relative fitness and frailty across the adult lifespan: Evidence from the Canadian National Population Health Survey. *Canadian Medical Association Journal*, 183(8), E487–E494. https://doi.org/10.1503/cmaj.101271.

Rosenbaum, M. (1990). Introduction: From helplessness to resourcefulness. In M. Rosenbaum (Ed.), *Learned resourcefulness*, (pp. xxv–xxxv). New York: Springer.

Saunders, J. C., & Heliker, D. (2008). Lessons learned from 5 women as they transition into assisted living. *Geriatric Nursing*, 29(6), 369–375. https://doi.org/10.1016/j.gerinurse.2007.10.018.

Sergeant, J. F., & Ekerdt, D. J. (2008). Motives for residential mobility in later life: Post-move perspectives of elders and family members. *The International Journal of Aging and Human Development*, 66(2), 131–154.

Smith, G. C., & Sylvestre, G. M. (2008). Effects of neighborhood and individual change on the personal outcomes of recent movers to low-income senior housing. *Research on Aging*, 30(5), 592–617. https://doi.org/10.1177/0164027508319655.

Statistics Canada. (2017a). Dwellings in Canada. Retrieved 22 June 2019 from http://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016005/98-200-x2016005-eng.cfm

Statistics Canada. (2017b). A portrait of the population aged 85 and older in 2016 in Canada. Retrieved from http://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016004/98-200-x2016004-eng.cfm

Stimson, R. J., & McCrea, R. (2004). A push-pull framework for modelling the relocation of retirees to a retirement village: The Australian experience. *Environment and Planning A*, 36(8), 1451–1470. https://doi.org/10.1068/a36206.

Svidén, G., Wikström, B., & Hjortsjö-Norberg, M. (2002). Elderly persons’ reflections on relocating to living at sheltered housing. *Scandinavian Journal of Occupational Therapy*, 9(1), 10–16. https://doi.org/10.1080/110381202753505818

Sylvestre, G. M., & Smith, G. C. (2009). Spatial aspects of the residential adjustments of older parents moving to low-income senior housing: A longitudinal study. *Geoforum*, 40(5), 918–929. https://doi.org/10.1016/j.geoforum.2009.06.007.

Tyvimaa, T., & Kemp, C. L. (2011). Finnish seniors’ move to a senior house: Examining the push and pull factors. *Journal of Housing for the Elderly*, 25(1), 50–71. https://doi.org/10.1080/02763893.2011.545742.

Walker, E., & McNamara, B. (2013). Relocating to retirement living: An occupational perspective on successful transitions. *Australian Occupational Therapy Journal*, 60(6), 445–453. https://doi.org/10.1111/1440-1630.12038.

Weeks, L. E., Keefe, J., & Macdonald, D. J. (2012). Factors predicting relocation among older adults. *Journal of Housing for the Elderly*, 26(4), 355–371. https://doi.org/10.1080/02763893.2011.653099.