



## Housing, Care and Support

Experience and expression of social isolation by inner-city high-rise residents

Love M. Chile Xavier M. Black Carol Neill

### Article information:

To cite this document:

Love M. Chile Xavier M. Black Carol Neill , (2014), "Experience and expression of social isolation by inner-city high-rise residents", Housing, Care and Support, Vol. 17 Iss 3 pp. 151 - 166

Permanent link to this document:

<http://dx.doi.org/10.1108/HCS-11-2013-0021>

Downloaded on: 09 December 2014, At: 13:01 (PT)

References: this document contains references to 47 other documents.

To copy this document: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)

The fulltext of this document has been downloaded 29 times since 2014\*

### Users who downloaded this article also downloaded:

Russell Moore, (2014), "Coping with homelessness: an expectant mother's homeless pathway", Housing, Care and Support, Vol. 17 Iss 3 pp. 142-150 <http://dx.doi.org/10.1108/HCS-02-2014-0002>

Aleš Strnad, Jakub Marek, (2014), "Homelessness in the Czech Republic", Housing, Care and Support, Vol. 17 Iss 3 pp. 121-130 <http://dx.doi.org/10.1108/HCS-06-2014-0013>

Suzanne Quinney, Leo Richardson, (2014), "Organisational development, appreciative inquiry and the development of Psychologically Informed Environments (PIEs): part two: the pilot study and evaluation", Housing, Care and Support, Vol. 17 Iss 3 pp. 131-141 <http://dx.doi.org/10.1108/HCS-05-2014-0011>

Access to this document was granted through an Emerald subscription provided by 407354 []

### For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit [www.emeraldinsight.com/authors](http://www.emeraldinsight.com/authors) for more information.

### About Emerald [www.emeraldinsight.com](http://www.emeraldinsight.com)

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

\*Related content and download information correct at time of download.

# Experience and expression of social isolation by inner-city high-rise residents

Love M. Chile, Xavier M. Black and Carol Neill

Love M. Chile is an Associate Professor and Carol Neill is a Senior Lecturer, both are based at Faculty of Culture and Society, School of Social Sciences and Public Policy, Auckland University of Technology, Auckland, New Zealand.

Xavier M. Black is based at Deloitte New Zealand, Auckland, New Zealand.

## Abstract

**Purpose** – The purpose of this paper is to examine the significance of social isolation and the factors that create social isolation for residents of inner-city high-rise apartment communities. We critically examine how the physical environment and perceptions of safety in apartment buildings and the inner-city implicate the quality of interactions between residents and with their neighbourhood community.

**Design/methodology/approach** – The authors used mixed-methods consisting of survey questionnaires supplemented by semi-structured interviews and focus group discussions using stratified random sampling to access predetermined key strata of inner-city high-rise resident population. Using coefficient of correlation we examine the significance of the association between social isolation, age and ethnicity amongst Auckland's inner-city high-rise residents.

**Findings** – The authors found the experience and expression of social isolation consistent across all age groups, with highest correlation between functional social isolation and “being student”, and older adults (60+ years), length of tenure in current apartment and length of time residents have lived in the inner-city.

**Research limitations/implications** – As a case study, we did not seek in this research to compare the experience and expressions of social isolation in different inner-city contexts, nor of inner-city high-rise residents in New Zealand and other countries, although these will be useful areas to explore in future studies.

**Practical implications** – This study is a useful starting point to build evidence base for professionals working in health and social care services to develop interventions that will help reduce functional social isolation amongst young adults and older adults in inner-city high-rise apartments. This is particularly important as the inner-city population of older adults grow due to international migration, and sub-national shifts from suburbs to the inner-cities in response to governmental policies of urban consolidation.

**Originality/value** – By identifying two forms of social isolation, namely functional and structural social isolation, we have extended previous analysis of social isolation and found that “living alone” or structural social isolation did not necessarily lead to functional social isolation. It also touched on the links between functional social isolation and self-efficacy of older adults, particularly those from immigrant backgrounds.

**Keywords** Social isolation, Functional social isolation, Inner-city high-rise residents, Inner-city living, Social connectedness, Structural social isolation

**Paper type** Case study

## Introduction

The study from which this paper is derived examined the concepts of community and connectedness for inner-city residents in Auckland New Zealand (Chile *et al.*, 2012). Analysis of data identified that 42 per cent of respondents experienced social isolation (10.6 per cent reporting “a lot” or “always”). The expression of social isolation was characterized by low levels of social interaction with other members of the apartment building and neighbourhood community, low levels of engagement with community and civic agencies, and feelings of loneliness and withdrawal from social activities because of perceived risks to personal and community safety.

In this paper, we examine the significance of social isolation and the factors that create social isolation for Auckland's inner-city high-rise residents. The population of inner-cities is growing exponentially in many countries, most significantly in developed countries as urban authorities

This research was supported by funding from Auckland Council, Auckland District Health Board, Parnell Trust Auckland, Presbyterian Support Northern, and Auckland University of Technology Faculty of Applied Humanities Research Grant Number AX11/05. The authors also thank the anonymous reviewers for this Journal whose constructive feedback helped to enhance the quality of this paper.

seek to consolidate inner-city residential activity to prevent urban sprawl and the attendant cost of infrastructure in expansive urban areas. However, the growth of inner-city high-rise living has attendant health and well-being consequences including physical, emotional and mental health. We present results from a case study of the experience of social isolation by residents of Auckland's inner-city high-rise apartments.

Although small (< 1 per cent in relation to the overall Auckland metropolitan area population), the growing importance of inner-city living presents a number of socio-environmental, cultural and health challenges to planners which need to be taken seriously. We examine the hypothesis that social isolation amongst inner city residents was associated with age and ethnicity. We hope that some of the issues raised in this paper will stimulate similar case studies of inner-city high-rise living in other cities and countries with similar issues.

For purposes of this study we adopt and extend Wilson's definition of social isolation "the lack of contact or sustained interaction with individuals and institutions" (Wilson, 1987, p. 60). We suggest that social isolation is both the physical and psychological distance between individuals and other members of the community, and may be identified in two forms, namely structural social isolation and functional social isolation. Structural social isolation refers to the state of the individual being alone in their home/apartment, while functional social isolation refers to a situation whereby individuals do not actively engage in social activities and/or actively engage/interact with other residents in their neighbourhood community, with low levels of engagement with organizations/agencies outside of the individual's formal work/study-related activities.

Example of structural and functional isolation include older people who are socially isolated because most of their mates in the same age-group with similar experiences, interests and backgrounds with whom to socially engage have died or re-located, and/or they may be physically isolated from family by distance or circumstances such as physical, mental and/or other forms of disability. Other individuals and groups such as international students may also experience structural and functional social isolation due to limited social contact because of the pressure of academic studies to achieve set goals in a foreign country. Such students, usually short-term residents, return to their home countries during university/school holidays and therefore spend limited time engaging with others to build long-term relationships.

Individuals and groups such as single women, single parents and young couples may experience functional social isolation because of perceptions of personal safety/security in their neighbourhood community, or lack of childcare support which prevents them from engaging in social activities away from home, particularly in the evenings and nights.

We argue that social isolation is the reverse side of social connectedness, which is facilitated by a range of factors including ties to family and friends, organizational memberships, involvement in socio-economic and cultural activities, political involvement and civic engagement. Social isolation is reduced when individuals establish and maintain networks of relationships which are an important means of enhancing individual and community social life.

Meaningful social contacts within one's neighbourhood community provide opportunity to access institutions and services, support networks and participation in the community. The living environment of inner city high-rise apartments, characterized by anonymity, impersonality and heterogeneity in increasingly culturally diverse communities with high tenants turnover, creates challenges for establishing and maintaining subsisting social contact between residents, with consequent serious implications for health and well-being outcomes.

### Links between social isolation and health

A number of studies make links between social isolation and health outcomes among various population groups. For older adults two key literature reviews by Cattán *et al.* (2005) and Nicholson (2012) found that social isolation impacts on quality of life and well-being of individuals, adversely affecting health outcomes. Nicholson (2012) undertook a review of literature on social isolation of older adults published in medical journals between 1995 and 2010 and found "numerous negative outcomes and potential risk factors related to social isolation" (Nicholson, 2012, p. 137). The deleterious health effects of social isolation were grouped under three sub-headings namely,

health behavioural (such as heavy drinking and smoking, poor nutrition), psychological (such as cognitive decline, death from suicide) and physiological (such as coronary heart disease) (Nicholson, 2012, p. 140).

Ensminger *et al.* (2009) report that people isolated or disconnected from others have a higher risk of dying prematurely, findings further supported by Steptoe *et al.* (2012) who found significantly higher premature death rate from all-cause mortality among socially isolated older adults (Steptoe *et al.*, 2012, p. 5797). Hill (2009) reports direct correlations between isolation and mental health among American Indians, arguing that the high incidence of suicide was associated with isolation and disconnection from community, whereas sense of belonging and connectedness has a negative association with suicidal ideation and may buffer the development of depressive symptoms (Hill, 2009, p. 65).

For indigenous and first-nation peoples, isolation takes on special significance because being connected with other people is viewed as an extension to and integration with family, community, tribe, and one's environment and creation. Thus, Hill suggests that the harmony between a person and their social and physical environment is an important factor in defining health and illness for the individual and the community among indigenous people, and their capacity to cope with change (Hill, 2006). This view is supported by Mayer *et al.* (2009) who report that connectedness to nature increases attention capacity, positive emotions, and ability to reflect on life issues.

Cohen and Sokolovsky argue that the presence of a strong "psychosocial kinship system" comprised of friends, neighbours, and close associates is a crucial factor in determining the success of programmes addressing the needs of schizophrenics (Cohen and Sokolovsky, 1978, p. 547). They reported lower rates of diagnosis and re-hospitalization among people with mental illness living within families. Frumkin *et al.* (2004) summarize findings from a range of studies on the links between social isolation and health outcomes and note that:

Research in public health and psychology shows that loneliness leads to depression, and people with strong networks, beginning with immediate family members extending to friends are less likely to be depressed. [...] districts with higher social capital had fewer inpatient and outpatient mental health visits, and lower use of alcohol and drug abuse services. Social capital is associated with decreased violent crime, less frequent binge drinking, lower teen birth rates, and more leisure-time-physical activity (Frumkin *et al.*, 2004, p. 170).

Similar findings have been reported for young people where studies have identified links between socially isolated youth and negative health outcomes including suicide (Beautrais, 2001; Joiner, 2006), while Caspi *et al.* (2006) found "social isolation during multiple developmental periods (in childhood, adolescence, and adulthood) had a cumulative, dose-response relationship to poor health outcomes" (Caspi *et al.*, 2006, p. 810).

Because a large number of young people living in Auckland's inner city are students, social isolation is particularly significant for health outcomes for inner city youth, even those with families. Bernat and Resnick report that social connectedness for young people has positive long-term behavioural change outcomes relating to health-risk behaviours such as substance abuse and violence perpetration (Bernat and Resnick, 2006, p. S11). Markham *et al.* (2010) undertook a systematic review of research published between 1985 and 2007 and identified eight sub-constructs of social connectedness that implicate health outcomes for young people. These include family connectedness, parent-adolescent general communication, parent-adolescent communication about sexual topics, parental monitoring or regulation, peer connectedness, partner connectedness, school connectedness, and community connectedness (Markham *et al.*, 2010, p. S24).

Markham *et al.* (2010) further reported that these constructs have significant influences on adolescent sexual and reproductive health, connection with significant others, and autonomy. Emotional attachment and commitment young people make through social relationships in the family, peer group, school, community, and/or culture reduce the chances of isolation. Isolation from these networks greatly undermines health outcomes.

Social isolation has particular deleterious consequences for young people as they struggle through hormonal changes during adolescence which potentially affect their physical bodies, their brains and sense of self-identity. These issues are further accentuated by challenges such

as peer bullying, family violence, socio-economic deprivation. Thus Halpern (2005) argues that young people living in the inner-city face the daunting challenges not only of dealing with growing up pains but also of navigating the obstacles imposed by an often precarious socio-economic environment (Halpern, 2005, p. 13). These experiences often lead young people to question their self-identity, mistrust other people, disconnect and withdraw into social isolation resulting in feelings of distress and hopelessness (Bolland *et al.*, 2005, p. 294).

On the other hand, youth who experience social connectedness are more likely to actively engage within their households, at school, in their work places, and in their communities, and to be more responsible members of society, gain experience in decision making, interact with peers and acquire a sense of belonging (Adejuwon and Balogun, 2004; Ginsburg *et al.*, 2002). They are also more likely to be self-aware, able to reflect on self in relation to others and to discover self by looking outward as well as inward, develop sense of accountability, learn self-expression and communicate deeper feelings from within. Social isolation and social disconnection have been further implicated as risk factors for youth problems such as violence and poverty (Landau *et al.*, 2000).

### Brief overview of Auckland's inner-city high-rise residential apartments

Auckland's inner-city high-rise residential apartments increased exponentially between 1991 and 2012, with about 16,000 residential apartments constructed between 1991 and 2006, (Bayleys, 2008) and a further 3,700 new apartments added between 2007 and 2012. During this period the inner-city population grew; the population was estimated at about 30,000 in 2013. Much of this growth is driven by local and regional governments' urban consolidation policies that seek to contain urban sprawl and the attendant costs of infrastructure development to service expansive urban areas as urban populations grow. Furthermore, individuals and families moving into the inner-city for easier access to inner-city services, entertainment and places of work/study, combined with rising costs of suburban housing have accelerated the growth of inner-city high-rise apartment living.

Morrison and Morgan contend that the growth of inner-city living is directly encouraged by municipal authorities as a means to "decrease commuting time, [create] a more vibrant street life, increase demand for local retail services and denser labour market for office staff" (Morrison and McMurray, 1999, p. 378). Furthermore, increased migration in the early 1990s to the mid-2000s particularly from Asian countries such as China, Taiwan, Korea and Hong Kong where apartment living is the norm, as well as exponential growth in the number of international students coming to Auckland which has grown as a centre for international education, boosted demand for inner-city residential apartments. The proximity of New Zealand's two largest universities, the location of Auckland campuses of other New Zealand universities and tertiary institutions, as well as the concentration of English language schools within Auckland's central business district (CBD) have made inner-city apartment living popular with both national and international students.

The appeal of inner-city living has been further enhanced by the liberalization of shopping and licensing hours extending opening hours for inner-city entertainment facilities, a "café culture" which spurred the growth of boutique restaurants and cafes in the inner-city and especially in the water-front areas, and rejuvenation of the inner-city environment to attract more visitors, shoppers and residents into the CBD to counter competition from sub-urban shopping centres.

The quality of apartments varies considerably, characterized by geographical differentiation (Murphy, 2008) from low cost bed-sit studio "shoeboxes" of higher-density, smaller lower value apartments to meet the needs of students and lower income families in the Hobson and Nelson Streets areas, to higher value, multi-million dollar "five star penthouse residences", spacious apartment and townhouse complexes associated with gentrification of the adjoining inner-suburbs (Friesen, 2009) such as Ponsonby, Grey Lynn, Freemans Bay and Grafton as middle- and upper-class residents move closer to the city-centre for easy access to central city entertainment, work places and services. Thus the case of inner-city high-rise apartment living in Auckland does not carry the baggage associated with what Kearns *et al.* (2012) describe as "high-rise occupants in deprived contexts". Auckland's inner-city high-rise apartments are

predominantly private rather than state/government owned, and consists of a good mix of owner occupied and rental. The majority of apartment buildings have good management with live-in managers and functioning body corporations that ensure effective financial management, administration and maintenance of the building and shared communal areas to uphold a high standard of living for owners and tenants. In fact some of the inner-city locations of choice such as the Viaduct, Princess Warf and Wynyard Quarter house some of Auckland's most expensive real estate.

In this paper we critically examine how the factors of location, age, gender and ethnicity implicate the quality of interactions, experience and expressions of social isolation of Auckland's inner-city high-rise residents.

### Research design, methodology and data collection

We used multi-stage-multi-method approach to collect data, including survey questionnaire to collect quantitative data, interviews and focus groups to collect qualitative data. This approach enabled us to critically examine the subject from multiple perspectives and analyse research data at multiple levels. Multi-stage-multi-method approach uses triangulation across different methods, increasing validity and giving a more holistic view from the multiple perspectives of participants. Qualitative data enabled us to capture contextual and complex meanings while quantitative data gave us evidence to derive generalizations.

Quantitative surveys enabled the collection of data from a cross section of the entire inner-city high-rise resident population. The survey consisted of 41 questions and included a mixture of Likert scale, multiple choice, categorical and open-ended questions. It was developed and presented in both English and Mandarin. The questions were derived primarily from some of the key issues raised in the literature review, but also captured basic demographic information about participants. Themes explored in the survey included reasons for living in the inner city; perceptions of safety and accessibility of public and private spaces in the inner-city; relationships with neighbours, family, and civic and community agencies and organizations; sense of belonging and community; knowledge about the availability, access to and use of health and community service; access to transport, communication and urban services, and if respondents felt isolated in the inner-city.

The survey was pre-tested with a small sample of inner-city residents and non-residents who were selected to represent a range of age groups, professions, and gender, to ensure the appropriateness, clarity, and flow of questions, and accuracy of translation in Mandarin. The survey was administered in hard-copy and face-to-face. This approach was selected to ensure we obtained the appropriate statistically significant sample, and covered the pre-determined proportions for the four key pre-determined demographic indicators of place of residence, ethnicity, age and gender.

Upon completing the survey, respondents were invited to indicate if they would be interested in participating in a one-on-one interview and/or a focus group. Those who indicated interest in one or both of these were contacted in December 2011 and formally invited. The selection of participants again followed stratified sampling procedure and is discussed in the following paragraphs that explain the interview and focus group processes.

### Interviews

Interviews were conducted using semi-structured interview guides to ensure that relevant issues were covered yet still allowed for concepts to emerge through interviewee-led discussion (Bryman and Bell, 2007). The interview approach was iterative (Wimpenny and Gass, 2000) to enable research respondents elaborate on their answers, and the interviewer to probe for further experiences and explanations to more fully understand the meaning conveyed.

Each interview took between 60 and 90 minutes, and explored a range of issues including respondents' experiences of isolation, connectedness, community and belonging, activities undertaken with other residents of the apartment buildings; quality of their neighborhood; places

they go for leisure and recreational activities; opportunities for meeting new people; issues of safety in their apartments specifically and the inner-city overall; use of community social services and health facilities, and factors that enhance connectedness among inner-city high-rise residents.

We employed the same stratified sampling strategy as in the surveys to select interview respondents so that the sample of interviewees closely matched the pre-determined demographic indicators of place of residence, ethnicity, age and gender (see Table I).

### Focus groups

Four focus groups were conducted. The selection of participants for focus groups followed similar stratified sampling strategy as with survey and interview respondents. All interview respondents and focus group participants had completed the survey. However, interview respondents were not recruited for the focus groups in order to provide opportunity for a wider group of participants and to broaden the range of views in the qualitative data.

Each focus group was selected to match Auckland's inner-city residents' demographic profile of place of residence, ethnicity, age and gender. Thus the first focus group consisted of both males and females in the age group 16-24 years; the second focus group consisted of 25-34 year olds (both males and females); the third focus group consisted of people 35+ years old (both males and females); and the fourth focus group consisted exclusively of people who identified as Chinese (both males and females and from all age categories). None of the other three focus groups had respondents who identified as of Chinese ethnicity. The Chinese focus group was conducted exclusively in Mandarin to meet the needs of the Chinese participants who also answered the survey questionnaire in Mandarin, and who preferred to communicate in Mandarin.

**Table I** Stratified random sampling strategy for questionnaire surveys and interviews

Questionnaire surveys									
Location	Central East			Central West			Harbour Front		
	Area unit population = 7,158			Area unit population = 7,986			Area unit population = 2,796		
	40 per cent			40 per cent			20 per cent		
Ethnicity	New Zealand European/Pakeha			Chinese			"Other": Maori, Pacific Island and other ethnicities		
	30 per cent			30 per cent			40 per cent		
	16-24 Years old			25-34 years old			35+ years old		
Age groups	33 per cent			34 per cent			33 per cent		
Gender	Female 50 percent			Male 50 percent					
Number of interview respondents by inner-city location, age, gender and ethnicity									
Central East: 10 respondents			Central West: 10 respondents			Harbour Front: 10 respondents			
Ethnicity	Gender	Age (no.)	Ethnicity	Gender	Age (no.)	Ethnicity	Gender	Age (no.)	
Other	Male	16-24 (1)	Other	Male	25-34 (1)	Other	Male	35+ (1)	
Other	Female	35+ (2)	Other	Female	35+ (1)	Other	Female	16-24 (1)	
Other	Male	25-34 (1)	Other	Female	16-24 (2)	Other	Male	25-34 (1)	
European	Male	35+ (1)	European	Male	35+ (2)	European	Male	35+ (2)	
European	Female	16-24 (2)	Chinese	Male	16-24 (1)	European	Female	35+ (2)	
Chinese	Female	25-34 (1)	Chinese	Female	35+ (1)	Chinese	Female	16-24 (1)	
Chinese	Male	35+ (1)	Chinese	Male	25-34 (1)	Chinese	Female	35+ (1)	
Chinese	Male	25-34 (1)	European	Female	25-34 (1)	Chinese	Male	25-34 (1)	
Summary of interview respondents by age, ethnicity and gender									
	Age	Total	Ethnicity	Total	Gender	Total			
16-24	8	30	Chinese	9	Male	15			30
25-34	8		European	10	Female	15			
35+	14		Other	11					

The approach adopted for focus groups discussion was to encourage socialization between participants to build trust through social interaction. This allows ideas to develop through conversation and group construction of meaning with minimum intervention of the research team except to tease out issues and clarify concepts. Focus groups ranged from three to nine participants, and took between 60 and 90 minutes.

## Ethics

This research programme was conducted with approval from Auckland University of Technology Ethics Committee (AUTEC), Ethics Approval Number: 11/62 dated the 18th May 2011. AUTEC is accredited by the New Zealand Health Research Council.

## Data analysis

The survey data was analysed using SPSS statistical software packages to provide mainly descriptive statistics such as frequency tables, means and medians, and standard deviations where relevant. Interviews and focus group discussions were transcribed and analysed using thematic analysis reading and re-reading through the transcripts to identify emerging themes. Initial themes were based on recurrent common topics, variations in respondents' perspectives on concepts such as social isolation, social connectedness, sense of community, and belonging.

We privilege the voices and experiences of research participants in reporting the research findings rather than our own interpretations of what they said. So we use extensive direct quotes to ensure that their voices are clearly articulated. We report the diversity of experiences expressed by respondents because each experience has value, recognizing that each experience is personal, unique and "created in the moment" (Hammond, 1998, p. 52). While we take care to report the findings in ways that do not breach the confidentiality and anonymity of the individual respondents, there may be features in some of the reported statements that may suggest probable links to particular persons, albeit only weakly.

In total, 429 returned questionnaire surveys from inner-city high-rise apartment residents in addition to transcripts of 30 interviews and four focus group discussions form the data set from which analysis and findings for this paper are derived. The most current New Zealand census data (2006) at the time of the study in November-December 2011 was used to develop the population for the survey. The 2006 census figures showed that 19,917 people lived within the area defined as Auckland's inner city (Statistic New Zealand, 2006). In total, 429 completed surveys provide a 5-per cent accuracy and 95 per cent degree of confidence (Sarantakos, 2005, p. 173), based on the total population of 17,917. The ethnic composition of Auckland's inner-city population was 29.1 per cent Zealand European/Pakeha, 28.7 per cent Chinese, while 42.2 per cent consisted of a diverse assortment of other ethnicities. The demographic structure consisted of 13.0 per cent in the age group 0-19 years old, 67.1 per cent 20-39 years old, and 19.9 per cent 40 years and over; and almost 50-50 male-female gender split.

The proportions of required survey respondents were pre-determined in relation to the size of each stratum as outlined in the Statistics New Zealand census data. Place of residence referred to the five "area units" identified in New Zealand Statistics Census mesh block areas (Statistics New Zealand, 2010a, b, c) namely, Central East (population: 7,158), Harbour Front (population: 2,796), Central West (population: 7,986), Newton (population: 522), and Grafton (population: 1,452). Newton and Grafton were excluded because of their comparatively small populations and also because the larger parts of both Newton and Grafton Area Units are located outside of what is officially defined as the inner-city. The pre-determined number of surveys from each area unit was proportional to their population: 40 per cent each from Central East and Central West and 20 per cent from Harbour Front. Table I shows the sampling strategy that attempted to reflect the delicate matrix of the study population.

We asked respondents if they felt isolated in their building, their street and in the inner-city generally. Respondents were asked to specifically answer the question "I feel isolated" by indicating if this was



“Never”, “A little,” “A lot” or “Always”. Table II shows results of participants’ responses. We used multivariate analyses to examine the association between social isolation and key variable, namely age, living alone, being born outside New Zealand, and employment status. The objective was to illuminate the differences between the groups of participants. We use direct quotes from interview respondents that best represent the perspectives expressed by respondents on particular issues raised in the study. Direct quotes from interview respondents are also used to support results from quantitative data in line with mixed method approach to analytical and methodological triangulation (Denzin and Lincoln, 1998; Olsen, 2004; Thurmond, 2001).

For the purposes of this paper we re-classified the entire survey population under three age categories namely 16-34 years old (young adults) 35-59 years old (middle age) and 60+ years old (older adults).

While 42 per cent of respondents reported that they felt isolated in their building, 42.8 per cent in their street, and 43 per cent in the inner-city, only 24.4 per cent (101 of 414 respondents) reported structural isolation, that they lived alone. We assessed functional social isolation by analysing responses to three survey questions namely: “in the last seven days I spent time with family, friends, neighbours, new people”; “I feel accepted by family, friends, neighbours, new people”; and “I like to go to social activities with family, friends, neighbours, new people”.

### Residents’ experience of social isolation

Functional social isolation was expressed through low levels of personal relationships between individuals and members of their families and communities. More than 35 per cent of respondents did not spend time with family in the previous seven-day period while another 19 per cent spent only “a little” time with family. Most significant was the fact that over 50 per cent of respondents did not spend time with neighbours and another nearly 37 per cent spent only “a little” time with neighbours in the previous seven-day period. Taken together the findings for these three questions show very high levels of functional social isolation for Auckland’s inner-city high-rise apartment residents (Table III).

**Table II** Expressions of social isolation by Auckland’s inner-city residents

<i>I feel isolated in</i>	<i>My block or building</i>		<i>My street</i>		<i>Inner-city</i>	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Never	235	58.0	231	57.2	230	57.0
A little	126	31.1	135	33.4	135	33.5
A lot	25	6.2	21	5.2	24	6.0
Always	19	4.7	17	4.2	14	3.5
Total	405	100.0	404	100.0	403	100.0

**Table III** Expressions of social isolation by Auckland’s inner-city residents

<i>Variable</i>	<i>Family</i>		<i>Friends</i>		<i>Neighbours</i>		<i>New people</i>	
	<i>Never (%)</i>	<i>A little (%)</i>	<i>Never (%)</i>	<i>A little (%)</i>	<i>Never (%)</i>	<i>A little (%)</i>	<i>Never (%)</i>	<i>A little (%)</i>
In the last seven days I spent time with:								
I feel accepted by:								
I like to go to social activities with:								
	35.5	19.1	5.6	36.5	50.5	32.6	26.8	55.8
	6.8	9.2	2.2	11.1	19.1	31.9	11.6	38.2
	12.3	24.9	1.7	24.9	40.6	30.7	18.6	47.8

Interview respondents expressed functional social isolation in various ways such as “I don’t have much contact with people. Nothing” [INT 11], “hundreds of neighbours in the building and I don’t know neighbours on my floor” [INT 19], while another expressed that:

INT 21: I think for a lot of people it’s a place where they go back to have their meal, shower, sleep and go again and is what is being used as and I think the majority of the apartments around here are in that area [sic].

Thus some inner-city residents treated their apartments as hotel rooms where they came and went without the desire to establish long-term social contact with other residents. Concerned respondents reported some residents were quite isolated: “a lot of these people feel quite isolated” [INT 14], expressing concern that socially isolated residents could “die alone”: “She might die alone. If anything happens in her house nobody would come to know about it. She has been living there for three years” [INT 11], in a case where a resident suffered both functional and structural social isolation.

Structural social isolation was assessed by asking respondents if they lived alone. In total, 24 per cent of survey respondents reported they lived alone. Although those who reported they lived alone were not necessarily more likely to report experience of functional social isolation, respondents who reported structural social isolation were more likely to be unmarried older adults in the lower income quintile. Thus the association between structural social isolation and functional social isolation was weak in the general survey population, but highest amongst single older adults (60+ years) and students. Of those who lived with others, single parents and students were more likely to report functional social isolation.

Functional social isolation was also associated with length of tenure in current apartment and length of time residents have lived in the inner-city. Significantly those with health issues and/or disability were less likely to report functional social isolation than all survey respondents. It is not clear if this was because of the support provided by inner-city social services agencies, because most of those who reported health issues and/or disability also reported they were most regular users of health and social services.

Being student was a significant factor in expression of functional social isolation. A number of interview respondents reported that while they wanted to be actively engaged with other residents and in the neighbourhood community focusing on their study left them little time to socialize:

INT 11: Before I was studying so had to have my concentration on my studies so would stay in the apartment.

INT 21: Their purpose here is mainly for the commercial or financial benefit of the place. So they come here they pay for the education and they go away. They finish and go back so they come to New Zealand but nothing got through to them.

INT 12: No not all. I like to meet people but because of the time I don’t have time so that’s the main reason.

Age was a significant factor in the experience and expression of functional social isolation in a number of ways. Descriptive statistics from surveys supported the association between being student and functional social isolation (Table IV). This was further implied in the strong correlation between functional social isolation, being born overseas, length of time in current accommodation/apartment. The majority of those who had spent <12 months in their current accommodation were in the age group 16-34 years old, and were also born overseas. Being in transition provided little opportunity to establish meaningful social contacts as reported by interview respondents:

INT 17: It was a wee bit difficult because most of the people are transient they are here for a few months then they go.

INT 22: I think most of the people come and stay for three months then they leave. There is no activity in the apartment even in the corridor we just say hello and finish.

We further interrogated the factors that caused functional social isolation for respondents in the 16-34 years age group and found that apart from being student, those in employment in this age

**Table IV** Correlation between social isolation and respondents' variables

Social isolation		<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>r</i>	<i>p</i>
Employment status	FT study	173	3.512	0.935	0.024	<0.01
	PT work	173	1.651	2.155		
	FT work	173	2.024	1.631		
	Not employed	173	1.950	0.783		
Age	16-34 years old	173	2.47	0.612	0.016	<0.01
	35-59 years old	170	1.68	1.741		
	60+ years old	170	3.47	0.972		
Time lived in apartment	< 12 months	170	3.620	0.753	0.018	<0.01
	12-24 months	170	1.671	2.652		
	> 24 months	170	3.179	1.208		
Place of birth	NZ born	173	1.822	1.761	0.014	=0.05
	Overseas born	173	3.114	1.782		

group who were born overseas were also more likely to experience functional social isolation. Interview respondents adduced a number of reasons ranging from the nature of their work to perceptions of social discrimination and issues of personal safety. One of the respondents reported that the nature of his work in the IT industry meant that he had less social interaction even with work colleagues:

INT 14: In IT it's mixed up and you don't meet specific people. I travel and start working on day one; you don't need to take a few days before starting work. You are talking to machines more than you talk to people. IT people are quite secluded, that is what I feel. They are more connected to the net. The person next to me is more connected via facebook, he is not connected to me. He txts or chats on line but he is not interested about me sitting next to him.

Other respondents suggested that functional social isolation was accentuated by the difficulty of breaking into local social networks:

INT 12: I like that neighbours should know each other, should talk to each other but nobody wants to. I tried sometime to talk to them but they were not interested so I thought keep away that's good.

INT 14: I would really want to connect with people [but] you go to a gathering and you are still alone in the community. Small groups of two-to-three people but you still feel alone in that group. You move into the group but you are not part of the group and you feel yeah I am alone.

INT 22: We always think we are lonely and separate – not totally separate but even my daughter who has been here for five years she still thinks she does not have a lot of kiwi friends. You see none of them invite her and she is very shy to join in. She said if no one invites me why should I join in? She has that kind of feeling. I said – sometime I joke- we say we'd love you to have a boyfriend who is kiwi I don't mind. She said I have no confidence – she said none of them want to talk to me.

INT 19: [...] have hundreds of neighbours in the building and I don't know neighbours on my floor. I saw them a few times in the lift but they never say hello and I sort of nodded but didn't get any sort of response so that sort of – I am not unhappy about it – it's just different and again in the city centre you get probably more international people there and people who are there temporary rather than permanent.

The common features of these four respondents were that they were all in full-time employment in professional roles, born overseas, and except for one [INT 22] were in the age group 25-34 years old. So it may not be that they lack the skills for social engagement, hence some respondents suggested that functional social isolation for inner-city residents could be associated with ethno-cultural differences:

INT 08: [...] and you know kiwis because that person looks strange and we're not used to that. I think honestly we used to be so monocultural and we wouldn't let anyone in. Like I think they are still in that ilk if you look different you are different, if you look black you are different, Maori I am scared of you, if you look PI [Pacific Island] I am even more scared of you.

Functional social isolation for some residents was so strong that one of the respondents reported she did not have much opportunity to talk to other people, thus at the conclusion of the

interview, which took over one hour, this respondent thanked the researchers for their time stating that “I’ve enjoyed a lot – I don’t have a lot of chance to talk to others” [INT 22]. She was a single mother whose teenage daughter was struggling with issues of identity which compounded their experience of functional social isolation.

Another significant factor that reportedly caused functional social isolation was perceptions of personal and community safety in the inner-city. Respondents reported being isolated because they felt unsafe around apartment buildings due to insecurity at inner-city open spaces and streets both during the daytime and at night:

INT 2: Auckland city is not safe anymore. When I started living in the city four years ago when I walked through Myers Park some girls came to me and swore to me [...] they were quite young and violent kids walking around the park. I went to the Council and complained about them. [...] My husband and I we never go to the park at night time after 8o’clock.

INT 3: Those people they used to live in the same flat six of them or seven and yeah most of those people they used to live in my building so I did not feel safe. [...] We were trying to not show ourselves to them you know just go out for a walk and come back home and sleeping and not being in front of their eyes [sic].

INT 11: But it’s unsafe you can’t walk along. I had an incident. It’s okay this area but there are some places down Queen Street areas that are unsafe. We had many incidents like robbery and that sort of stuff.

The experience and expressions of functional social isolation in Auckland’s inner-city may therefore be associated with a number of factors including ethno-cultural, perceptions of personal and community safety, and individual circumstances.

## Findings

We found the experience and expressions of social isolation consistent across all age groups, genders and geographic locations within Auckland’s inner-city. However, students and people not currently employed were more likely to report that they experienced functional social isolation ( $m = 3.51$ ;  $p < 0.01$ ), although this does not necessarily establish a causal relationship. The coefficient of correlation between social isolation and being full-time student was 0.02381 which is significant at 0.01 level of confidence (0.181) (Table IV).

The three most important variables associated with social isolation in Auckland’s inner-city were age, employment status, and place of birth. Social isolation was positively correlated with age, those in the age group 16-34 years old (young adults) and 60+ years old (older adults) were more likely to report functional social isolation. The coefficient of correlation between isolation and age is 0.016 which is significant at 0.1 level of confidence (0.181).

Because of the extensive literature examining the links between social isolation and health outcomes for older adults, we tested the significance of the association between isolation and those in the age group 60+ years. In total, 46 (11.2 per cent) survey respondents reported they were born in 1951 or earlier, which put them in the age group 60+ years at the time of the study. All together 171 respondents reported that they experienced social isolation. We used this number to undertake further detailed analysis of the association between age and social isolation.

Results in Table IV suggest that there is age influence on social isolation, (older adults:  $m = 3.47$ ; middle age:  $m = 1.68$ ; young adults:  $m = 2.47$ ). Therefore, older adults had the highest mean of social isolation and therefore were more likely than the other age groups to report social isolation. We then introduced the variable “living alone” to see if the association of social isolation with age changed markedly the experience of functional social isolation. This did not significantly affect the experience of social isolation so we conclude that structural isolation has no strong correlation with functional isolation.

The introduction of country of birth made a significant difference in the experience of social isolation to the young adult and older adult populations who reported feeling isolated. In total, 40 (23.1 per cent) young adult respondents born in China and 58 (33.5 per cent) young adult

respondents born in countries other than New Zealand and China reported functional social isolation. It was also revealing that the association between structural social isolation and functional social isolation for older adults born in China and in countries other than New Zealand was weak. It is clear from the preceding analysis that young adults born in China and in countries other than New Zealand were most likely to be students, and while they lived with other people and so were not structurally isolated, lacked established social connections and on-going social engagement and experienced functional social isolation.

Older adults born in China and in countries other than New Zealand though living with family experienced functional social isolation, because their young adult children spend considerable amount of time at work and/or study leaving older adult family members alone. With limited English language they have considerable difficulty establishing and maintaining social relations with residents, neighbours and inner-city organizations. This finding suggests that older adult migrants may constitute a sub-population at higher risk of functional social isolation and may require specific forms of intervention.

Older adult migrants often come to a new country to reunite with family members, usually children and grandchildren. They may not have strong English language skills to actively engage in social connections outside of the family to establish networks independent of their children. Furthermore, they may be burdened by domestic responsibilities to support their young adult children, such as childcare for grandchildren and housekeeping, which leave them little time to develop social relationships outside of the family. This has implications for their quality of life as the networks on which they can fall back on for support in times of need is greatly reduced.

### Conclusions: policy and practice implications

In this study we identified links between social isolation and age, length of tenure, employment status and being born overseas. By identifying two forms of social isolation, namely functional and structural isolation we have extended previous analysis of social isolation and found that “living alone” or structural social isolation did not necessarily lead to functional social isolation. The strong association between short-term tenure particularly international students and young professionals whose experience of functional social isolation was explained by their focus on studies and/or work and little need to invest time to establish long-term relationships with resident neighbours.

We have also shown in this study that high-rise living is an important element of urban housing for young professionals working in CBDs, older adults moving into inner cities to be close to services, and for international students seeking to stay close to places of study to maximize study time and reduce travel time and costs. The strong association between these population groups and social isolation in inner-city high-rise living has important implications for professionals, agencies and organizations working with inner-city high-rise residents to enhance opportunities for social connection to reduce social isolation. For example, the design and physical environment of apartment buildings influence how residents engage with each other and within their neighbourhood community environment, as well as their perceptions of safety in their buildings and the inner-city generally (Henderson-Wilson, 2008; Hopkins and Ewing, 2002).

To enhance opportunities for social connectedness and reduce social isolation, City authorities may require developers of inner-city high-rise apartments to dedicate good amounts of apartment buildings' square footage to high quality common amenity areas, shared leisure facilities, parks and playgrounds for children. Already some buildings provide community recreation spaces such as gymnasiums, fitness centres and even libraries which are open to the public through membership. In addition, City authorities may demand specific design requirements such as prescribe minimum size for apartments to reduce the risks associated with “shoe-box” type developments and cramped living conditions which have associated health and well-being risks.

Social connectedness reduces loneliness and feelings of isolation which may result in serious psychosocial and other associated health issues. To reduce the potential for social isolation particularly among older adults and new immigrants, community social service agencies, body corporations of high-rise apartment buildings, and City authorities may consider developing

engagement activities that create opportunities for social connectedness at the neighbourhood level. While community libraries, gymnasiums and cafes may serve as good points of contact, access for some residents may be limited by language fluency and purchasing power. Small-scale intimate activities such as neighbourhood community “food festivals” organized by community-service agencies and body corporations, where individuals and groups share “traditional” “home-made” meals or barbeques may in fact provide opportunities for encounters between the diverse groups of residents from international students, to single parents and older adults.

In a study on “reducing social isolation and promoting well-being in older people” Hemingway and Jack (2013, p. 33) suggest that forming “friendship clubs can help tackle the challenge and subsequent effects of social isolation for the older age group”. These authors further observe that the usefulness of Friendship Club experience depends on access and support for participants “to meet and engage so that they may form significant friendships and support each other” (p. 33). Community service agencies working in inner-city high-rise communities may consider programmes that combine elements of friendship club and befriending (Mead *et al.*, 2010; Mentoring and Befriending Foundation, 2011) as useful interventions to reduce social isolation for older adults and new immigrants.

In a review of interventions to reduce social isolation Windle *et al.* (2011) report that group interventions that support “people to widen their social circles (p. 4) provide more effective outcomes, but found “no conclusive empirical evidence that computer and/or internet usage impacts on loneliness” (p. 5). Their findings probably relate to individual private use of computers and the internet. However, the use of communal-based computer and internet activities that bring people together to share experiences have been shown to create opportunities for engagement, communication, and social connectedness and reduce social isolation (Hopkins and Ewing, 2002; Cotten *et al.*, 2013).

The importance of social isolation for inner-city high-rise residents demands that community service organizations tasked with developing services and programmes for inner-city communities should treat service provision activities as opportunities to enhance social connectedness. Health professionals working with students, young professionals and older adults in inner-city high-rise communities must devise means of identifying early symptoms of isolation to reduce possible health risks. Educational institutions also need to become more aware that students, particularly international students, may experience isolation, and develop programmes that enable academic and support staff to identify early warning systems to enable prompt referrals to appropriate services.

### Areas for further research

This is only one case study of residents of high-rise apartments in Auckland's inner-city. Despite the strong association between some of the variables, it will be a stretch to make general recommendations based on a single case study as this research did not seek to compare the experience and expressions of social isolation in different inner-city contexts. There is opportunity to undertake similar case studies to examine some of the issues raised in this study in both inner-city and sub-urban contexts in New Zealand and other countries. This is particularly relevant in contexts of interventions that will help support young adults and older adults, and the links between functional social isolation and self-efficacy of older adults, particularly those from immigrant backgrounds. There is also scope to extend this study to international level to examine some of the concepts, constructs and variables, and also to introduce other variables such as different locations and contexts which are not dissimilar to inner-city high-rise residents such as itinerant workers, indigenous people, and new immigrants.

### References

Adejuwon, G.A. and Balogun, S.K. (2004), “Resiliency among inner-city youths from selected areas of Ibadan City, Nigeria: intervening protective factors in response to risk and disadvantage”, *Journal of Social Science*, Vol. 9 No. 3, pp. 177-84.

- Bayleys (2008), *Residential Property Research Auckland CBD Apartments*, Bayleys Research, Auckland.
- Beautrais, A.L. (2001), "Child and young adolescent suicide in New Zealand", *Australian and New Zealand Journal of Psychiatry*, Vol. 35 No. 5, pp. 647-53.
- Bernat, D.H. and Resnick, M.D. (2006), "Healthy youth development: science and strategies", *Journal of Public Health Management*, Vol. 12 No. 6, pp. S10-S16.
- Bolland, J.M., Lian, B.E. and Formichella, C.M. (2005), "The origins of hopelessness among inner-city African-American adolescents", *American Journal of Community Psychology*, Vol. 36 Nos 3/4, pp. 293-305.
- Bryman, A. and Bell, E. (2007), *Business Research Methods*, 2nd ed., Oxford University Press, Oxford.
- Caspi, A., Harrington, H., Moffitt, T.E., Milne, B.J. and Poulton, R. (2006), "Socially isolated children 20 years later", *Archives of Pediatrics and Adolescent Medicine*, Vol. 160 No. 8, pp. 805-11, available at: <http://archpedi.jamanetwork.com/article.aspx?articleid=205331> (accessed 8 May 2013).
- Cattan, M., White, M., Bond, J. and Learmouth, A. (2005), "Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions", *Ageing & Society*, Vol. 25 No. 1, pp. 41-67.
- Chile, L.M., Mason, N., Neill, C. and Black, X.M. (2012), *Connectedness in Auckland's Inner City*, Parnell Trust, Auckland.
- Cohen, C.I. and Sokolovsky, J. (1978), "Schizophrenia and social networks: ex-patients in the inner city", *Schizophrenia Bulletin*, Vol. 4 No. 4, pp. 546-60.
- Cotten, S.R., Anderson, W.A. and McCullough, B.M. (2013), "Impact of internet use on loneliness and contact with others among older adults: cross-sectional analysis", *Journal of Medical Internet Research*, Vol. 15 No. 2, pp. e39.1-e3913.
- Denzin, N.K. and Lincoln, Y.S. (1998), *The Landscape of Qualitative Research*, Sage Publishing, Thousand Oaks, CA.
- Ensminger, M.E., Juon, H.-S., Lee, R. and Lo, S.Y. (2009), "Social connections in the inner city: examination across the life course", *Longitudinal and Life Course Studies*, Vol. 1 No. 1, pp. 11-26.
- Friesen, W. (2009), "The demographic transformation of the inner city Auckland", *New Zealand Population Review*, Vol. 35 No. 1, pp. 55-74.
- Frumkin, H., Frank, L.D. and Jackson, R. (2004), *Urban Sprawl and Public Health: Designing, Planning and Building for Healthy Communities*, Island Press, Washington, DC.
- Ginsburg, K.R., Alexander, P.M., Hunt, J., Sullivan, M., Zhao, H. and Cnaan, A. (2002), "Enhancing their likelihood for a positive future: the perspective of inner-city youth", *Pediatrics*, Vol. 109 No. 6, pp. 1136-42.
- Halpern, R. (2005), "Instrumental relationships: a potential relational model for inner-city youth programs", *Journal of Community Psychology*, Vol. 33 No. 1, pp. 11-20.
- Hammond, S. (1998), *The Thin Book of Appreciative Inquiry*, Thin Book Publishing Company, Plano, TX.
- Hemingway, A. and Jack, E. (2013), "Reducing social isolation and promoting well-being in older people", *Quality in Ageing and Older Adults*, Vol. 14 No. 1, pp. 25-35.
- Henderson-Wilson, C. (2008), "Inner city high-rise living: a catalyst for social exclusion and social connectedness?", paper presented at the 3rd meeting of the Australasian Housing Researchers' Conference, June 2008, Melbourne.
- Hill, D.L. (2006), "Sense of belonging as connectedness, American Indian worldview, and mental health", *Archives of Psychiatric Nursing*, Vol. 20 No. 5, pp. 210-16.
- Hill, D.L. (2009), "Relationship between sense of belonging as connectedness and suicide in American Indians", *Archives of Psychiatric Nursing*, Vol. 23 No. 1, pp. 65-74.
- Hopkins, L. and Ewing, S. (2002), "Wired high-rise: using technology to combat social isolation on an inner city public housing estate", paper presented at the meeting of the ITiRA Conference, August, Rockhampton.
- Joiner, T. (2006), *Why People Die by Suicide*, Harvard University Press, Boston, MA.
- Kearns, A., Whitley, E., Mason, P. and Bond, L. (2012), "'Living the High Life'? Social and psychological outcomes for high-rise occupants in a deprived context", *Housing Studies*, Vol. 27 No. 1, pp. 97-126.

- Landau, J., Cole, R.E., Tuttle, J., Clementes, C.D. and Stanton, M.D. (2000), "Family connectedness and women's sexual risk behaviours: implications for prevention/intervention of STD/HIV infection", *Family Process*, Vol. 39 No. 4, pp. 461-75.
- Markham, C.M., Lormand, D., Gloppen, K.M., Peskin, M.F., Flores, B., Low, B. and House, L.D. (2010), "Connectedness as a predictor of sexual and reproductive health outcomes for youth", *Journal of Adolescent Health*, Vol. 46 No. 3S1, pp. S23-S41.
- Mayer, F.S., Frantz, C.M., Bruehlman-Senecal, E. and Dolliver, K. (2009), "Why is nature beneficial", *Environment and Behavior*, Vol. 41 No. 5, pp. 607-43.
- Mead, N., Lester, H., Chew-Graham, C., Gask, L. and Bower, P. (2010), "Effects of befriending on depressive symptoms and distress: systematic review and meta-analysis", *The British Journal of Psychiatry*, Vol. 196, pp. 96-101.
- Mentoring and Befriending Foundation (2011), "Befriending works: building resilience in local communities", available at: [www.thinklocalactpersonal.org.uk/\\_library/Resources/BCC/Befriending\\_Works.pdf](http://www.thinklocalactpersonal.org.uk/_library/Resources/BCC/Befriending_Works.pdf) (accessed 12 April 2012).
- Morrison, P.S. and McMurray, S. (1999), "The inner-city apartment versus the suburb: housing sub-markets in a New Zealand City", *Urban Studies*, Vol. 36 No. 2, pp. 377-97.
- Murphy, L. (2008), "Third-wave gentrification in New Zealand: the case of Auckland", *Urban Studies*, Vol. 36 No. 12, pp. 2521-40.
- Nicholson, N.R. (2012), "A review of social isolation an important but underassessed condition in older adults", *The Journal of Primary Prevention*, Vol. 33 Nos 2-3, pp. 137-52.
- Olsen, W. (2004), "Triangulation in social research: qualitative and quantitative method can really be mixed", in Holborn, M. (Ed.), *Developments in Sociology*, Causeway Press, Ormskirk, available at: [www.ccsr.ac.uk/staff/Triangulation.pdf](http://www.ccsr.ac.uk/staff/Triangulation.pdf) (accessed 18 May 2011).
- Sarantakos, S. (2005), *Social Research*, 3rd ed., Macmillan Education, Melbourne.
- Statistics New Zealand (2006), "2006 Census of population and dwellings", available at: [www.stats.govt.nz/Census/2006CensusHomePage.aspx](http://www.stats.govt.nz/Census/2006CensusHomePage.aspx) (accessed 18 May 2011).
- Statistics New Zealand (2010a), "Quickstats about Auckland Central East", available at: [www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?id=3514103&type=au&ParentID=1000002&expand=2000007&scrollLeft=0&scrollTopequals;1222&ss=y](http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?id=3514103&type=au&ParentID=1000002&expand=2000007&scrollLeft=0&scrollTopequals;1222&ss=y) (accessed 18 May 2011).
- Statistics New Zealand (2010b), "Quickstats about Auckland Central West", available at: [www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?id=3514102&type=au&ParentID=1000002&expand=2000007&scrollLeft=0&scrollTop=1222&ss=y](http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?id=3514102&type=au&ParentID=1000002&expand=2000007&scrollLeft=0&scrollTop=1222&ss=y) (accessed 18 May 2011).
- Statistics New Zealand (2010c), "Quickstats about Auckland Harbourside", available at: [www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?id=3514101&type=au&ParentID=1000002&expand=2000007&scrollLeft=0&scrollTop=1222&ss=y](http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?id=3514101&type=au&ParentID=1000002&expand=2000007&scrollLeft=0&scrollTop=1222&ss=y) (accessed 18 May 2011).
- Steptoe, A., Shankar, A., Demakakos, P. and Wardle, J. (2012), "Social isolation, loneliness and all-cause mortality in older men and women", *Proceedings of the National Academy of Sciences*, Vol. 110 No. 15, pp. 5797-801 available at: [www.pnas.org/content/110/15/5797.full.pdf+html](http://www.pnas.org/content/110/15/5797.full.pdf+html) (accessed 17 February 2014).
- Thurmond, A.V. (2001), "The point of triangulation", *Journal of Nursing Scholarship*, Vol. 33 No. 3, pp. 253-8.
- Wilson, W.J. (1987), *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*, University of Chicago Press, Chicago, IL.
- Wimpenny, P. and Gass, J. (2000), "Interviewing in phenomenology and grounded theory: is there a difference?", *Journal of Advanced Nursing*, Vol. 31 No. 6, pp. 1485-92.
- Windle, K., Francis, J. and Coomber, C. (2011), "Preventing loneliness and social isolation: interventions and outcomes", Social Care Institute for Excellence, Research Briefing, Paper No. 39.

### Further reading

- Rankin, R.H. and Quane, J.M. (2000), "Neighbourhood poverty and social isolation of inner city African American families", *Social Forces*, Vol. 79 No. 1, pp. 139-64.



Statistics New Zealand (2012), "Subnational population projections: 2006 (base) – 2031 (October 2012 update)" Media release published, 8 October, available at: [www.stats.govt.nz/browse\\_for\\_stats/population/estimates\\_and\\_projections/SubnationalPopulationProjections\\_MR0631UpdateOct12.aspx](http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/SubnationalPopulationProjections_MR0631UpdateOct12.aspx) (accessed 12 April 2012).

Stavros, J.M. and Torres, C.B. (2005), *Dynamic Relationships: Unleashing the Power of Appreciative Inquiry*, Taos Institute Publications, Chagrin Fall, OH.

### About the authors

Love M. Chile is an Associate Professor and Equity Leader in the School of Social Sciences and Public Policy, Auckland University of Technology. His areas of research, teaching and practice include community development and community investment, community health, not-for-profit organizations and their contribution to community transformation, refugee and migrant settlement. He has supervised over 20 PhD and Masters candidates on a range of topics in these areas. Associate Professor Love M. Chile is the corresponding author and can be contacted at: [love.chile@aut.ac.nz](mailto:love.chile@aut.ac.nz)

Xavier M. Black works in corporate responsibility at Deloitte New Zealand, and previously was a Research Officer in the Institute of Public Policy, Auckland University of Technology. Her main areas of research include education on and implementation of social responsibility, community engagement and community investment strategies. She also worked as researcher with Robin Hood Foundation and corporate relations manager at Fly Ltd.

Dr Carol Neill is a Senior Lecturer in the School of Social Sciences and Public Policy, Auckland University of Technology. Her primary areas of teaching and research include politics and public policy, and economic, community and social development with particular emphasis on cities.

---

To purchase reprints of this article please e-mail: [reprints@emeraldinsight.com](mailto:reprints@emeraldinsight.com)  
Or visit our web site for further details: [www.emeraldinsight.com/reprints](http://www.emeraldinsight.com/reprints)