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Addressing loneliness and social isolation amongst elderly people through local co-production in Japan

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Abstract

In common with many other societies with ageing populations, loneliness and social isolation have become a significant problem in contemporary Japan. The financial burden associated with an ageing population, together with ongoing fiscal austerity, has severely constrained the ability of local authorities to address the problem. As a result, policymakers have sought cost-effective methods of tackling the problem, including local co-production with community groups. In this article, we consider the impact of loneliness and social isolation on wellbeing and then examine two illustrative case studies of local co-production programs aimed at tackling social isolation amongst older adults in Japan.

KEYWORDS

co-production, Japan, local government, population ageing, social isolation

1 | INTRODUCTION

Whereas almost all developed nations are currently undergoing marked demographic change as their populations age and the proportion of older adults inexorably rises, the process is more advanced in some countries (Carbonaro, Leanza, McCann, & Medda, 2016), notably Japan (Bloom, Kirby, Sevilla, & Stawasz, 2018). A significant problem associated with an ageing population is the increasing prevalence of loneliness and social isolation amongst older people.

Quite apart from its adverse impact on the day-to-day wellbeing of these citizens, loneliness and social isolation have substantial detrimental mental and physical health effects (Steptoe, Shankar, Demakakos, & Wardle, 2013). Consequently, there are strong public policy imperatives for remedial intervention and a wide range of policy instruments that have been used across the world (Dickens, Richards, Greaves, & Campbell, 2011).

The financial burden of effective public policy intervention to address loneliness and social isolation contingent upon demographic change is amplified by the other adverse impacts of ageing (Harper, 2019). These factors include labour shortages flowing from a shrinking working-age population, rising social security and public pension costs, mushrooming health and aged care outlays and additional local infrastructure investment needs (Bloom, Canning, & Fink, 2010), many of which are especially acute in Japan (OECD, 2019). In short, population ageing intensifies the fiscal pressures on the public sector by imposing additional costs, thereby limiting the capacity of all tiers of government, including local government, to respond effectively to its complex policy challenges, not least addressing the problem of loneliness and social isolation.

The sheer magnitude of population ageing in Japan, together with ongoing fiscal constraints on government in an era of austerity (İmrohoroğlu, Kitao, & Yamada, 2016), have compelled municipal policymakers to display considerable ingenuity in seeking cost-effective methods of tackling loneliness and social isolation, including extensive collaboration with local community groups through co-production. This draws on a long and vibrant tradition of civic volunteering in Japanese society, frequently centred on natural disaster management (Dollery, Kinoshita, & Yamazaki, 2020). Co-production aimed at reducing loneliness and social isolation have strong comparative advantages apart from its cost-effectiveness since it not only mobilises empathetic, motivated local volunteers already embedded in a given local community but also offers an avenue for socially isolated older adults to become involved in these community groups (Dollery & Wallis, 2003; Tifenbach & Holdgrun, 2015). Against this background, this article seeks to contribute to the literature on tackling social isolation amongst older people through co-production at the local level by examining the Japanese experience through the prism of two case studies.

The article is divided into five main parts. Section 2 provides a synoptic description of the literature on loneliness and social isolation. By way of institutional background, Section 3 offers a brief description of Japanese local government, whereas Section 4 considers the conceptual and empirical literature on co-production and its application to Japan. Section 5 examines two illustrative case studies of local co-production aimed at reducing social isolation amongst older adults. The article offers brief concluding remarks in Section 6.

2 | LONELINESS, SOCIAL ISOLATION AND WELLBEING

While the terms loneliness and social isolation are often used interchangeably, they are commonly considered among researchers to be distinct, although closely connected concepts (De Jong Gierveld, van Tilburg, & Dykstra, 2006; Grenade & Boldy, 2008). In the literature, loneliness is traditionally defined as an 'unpleasant experience that occurs when a person's network of social relations is deficient in some important way, either quantitatively or qualitatively' (Perlman & Peplau, 1981, p. 31). This definition indicates that loneliness is a personal and unwanted negative experience, which develops because of a mismatch between the desired and actual quantity and quality of interpersonal relationships (De Jong Gierveld et al., 2006; Malcolm, Frost, & Cowie, 2019). On this point, De Jong Gierveld et al. (2006, p. 486) note that 'the opposite of loneliness' is when a person experiences feelings of 'belongingness or embeddedness'. The subjective facet of loneliness is worth emphasising since an individual with an extensive social network (who would not be thought of as being socially isolated) may experience feelings of loneliness. By contrast, an individual with a restricted social network (who may be thought of as being socially isolated) may not experience loneliness (Grenade & Boldy, 2008).

While loneliness is viewed as a subjective state, social isolation is typically viewed as an objective state, where an individual either has limited interpersonal interaction or the 'absence of relationships with other people' (De Jong Gierveld et al., 2006, p. 486). As an objective concept, social isolation can be measured, for instance, in terms of the

size of an individual's social network and frequency of social interactions (De Jong Gierveld et al., 2006; Grenade & Boldy, 2008). Other related measures of social isolation include survey questions that are designed to capture living arrangements (e.g., whether an individual lives alone), the availability of a close friend for an individual to confide in, and the degree to which an individual participates in local community activities and events (Berkman & Syme, 1979; Grenade & Boldy, 2008). Thus, by taking account of these various attributes, an individual with 'a very small number of meaningful ties' is typically defined as being socially isolated (De Jong Gierveld et al., 2006, p. 486).

The adverse impact of loneliness and social isolation on an individual's physical and mental wellbeing is well documented (Grenade & Boldy, 2008). This adverse effect is particularly acute among older individuals whose social networks tend to deteriorate more rapidly due to 'loss of contemporaries, cognitive decline, disability and the loss of social roles' (Malcolm et al., 2019, p. 2). Not surprisingly, researchers have devoted considerable effort to understanding the adverse influence that loneliness and social isolation exerts on the health and wellbeing of older populations (Cacioppo & Cacioppo, 2014). More specifically, loneliness has been linked to poorer physical and mental health outcomes (Australian Psychological Society, 2018), greater dissatisfaction with life in general (Schumaker, Shea, Monfries, & Groth-Marnat, 1993; Shankar, Rafnsson, & Steptoe, 2015) and even premature death (Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015). Similarly, social isolation has also been linked to a range of adverse mental health conditions, like anxiety (Anderson & Harvey, 1988), depression (Cacioppo, Hawkley & Thisted, 2010) and the onset of dementia (Wilson et al., 2007). Moreover, there is also evidence that social isolation adversely affects physical health and has been linked to coronary heart disease (Sorkin, Rook, & Lu, 2002), cancer (Fox, Harper, Hyner, & Lyle, 1994), infectious diseases (Pressman et al., 2005) and poorer immune system functioning (Hawthorne, 2006). Furthermore, relatively high levels of social isolation have been found to be associated with lower levels of wellbeing (Shankar et al., 2015).

The economic costs associated with loneliness and social isolation in elderly populations are likely to be substantial. In an exhaustive survey of the health and medical economics literature, Mihalopoulos et al. (2019, p. 834) found that the majority of cost-of-illness studies on loneliness and social isolation 'reported excess healthcare costs… although one US study found less costs associated with loneliness but higher costs associated with social isolation'. The authors, however, are quick to point out that the estimated economic costs associated with loneliness and social isolation are likely to be underestimated because of the exclusion of productivity losses and younger populations from the economic calculations (Mihalopoulos et al., 2019). Thus, it is worth noting that a report from the UK estimated that the total costs to employers—including the costs associated with lost productivity and absenteeism—from employees experiencing loneliness amounted to £2.5 billion annually (NEF, 2017).

3 | JAPANESE LOCAL GOVERNMENT

Established under its 1947 Constitution, Japan has a tripartite system of government consisting of a central government, 47 prefectural governments and 1,724 local authorities. Under Article 92 (Local Autonomy Law) of the Constitution, Japanese local government has constitutionally protected autonomy (Horiuchi, Saito, & Yamada, 2015). In general, the main functions of Japanese local governments align with those of most other advanced countries and include 'services to property', like local roads and bridges, fire protection services, water and sewerage, and waste management, as well as 'services to people', such as aged care, medical emergency services and public schools.

In common with most developed nations, Japanese local government is funded using a complex mix of local taxes and national government transfers (Miyamoto, 2016). Moreover, around 70% of general government expenditure is channelled through local government. It is thus unsurprising that the national government not only contributes financially to the local government but also sets many of its service standards (Mochida, 2004). One consequence of these arrangements is a blurring of demarcation lines between national, prefectural and municipal government. In this regard, Mochida (2006, p. 155) has argued that the functions of the three tiers of government in Japan are 'not separated clearly' and they operate with 'overlapping and shared responsibilities'. He observed that

the 'policy and standards of main functions such as education, medical treatment, and public works are planned within the central government', with 'oversight of implementation carried out by prefectures', and the services themselves 'implemented or provided by local governments'. Consequently, the Japanese government consists of a complex combination of 'centralised tax assignment' and 'delegated expenditure responsibility'.

For the past three decades, the local government sector has endured harsh financial constraints, many of which arise from factors outside its control. For instance, central government subsidies for many local services, often provided by local private firms, have declined, particularly in public transportation, obliging local authorities to fund these services themselves (Tanaka, 2012). Moreover, the national government imposed a rigorous program of municipal mergers on the Japanese local government system in order to increase the population size of local governments that—in turn—initiated further cuts in local services (Dollery & Yamazaki, 2017). Finally, outside of large metropolitan areas, many local authorities have experienced declining local populations, mostly contingent upon an ageing citizenry (Suzuki & Sakuwa, 2016). Consequently, municipalities across Japan have instituted various policies to limit outlays expenditure, which has spawned a fall in municipal employees and an attendant reduction in local public service provision, often manifested in through the closure of bus routes, local schools and other services (Suzuki, 2017).

An important effect of this straitened fiscal circumstance has been a substantially enhanced role for co-production with local community groups in providing of local services.[1] Relative to most other developed countries, Japanese local government has two decisive comparative advantages in the use of co-production (Haddad, 2006). First, Japan has a long tradition of volunteering through local neighbourhood associations. These organisations have historically cooperated with local authorities and other public agencies to provide a wide range of local public services, such as cultural festivals, fire protection and flood warning services (Pekkanen, 2006). Second, Japanese local authorities typically exhibit homogenous characteristics that foster volunteerism. Suzuki (2017, p. 260) has argued that Japanese local governments frequently have 'relatively homogeneous administrative structures, culture, ethnicity and economic levels' since local areas are 'less diverse with respect to culture, ethnicity and economic levels compared to other developed countries'. The net result of these factors is that (a) social capital is almost uniformly high in Japanese society and (b) administrative uniformity across local government areas makes it easier to design effective community engagement policies.

In line with the empirical evidence on civic participation (Minamoto, 2010), Aoki (2015, p. 198) has argued that high social capital acts as an 'accelerating factor' in determining the level of community collaboration in co-production activities. Accordingly, Japanese local government policymakers have attempted to build on these favourable foundations in policy formulation and implementation (Suzuki, 2017). Moreover, Suzuki (2017, 2020) has demonstrated how the central government and local governments have strived to encourage the voluntary sector through various policy measures, including deregulation.

4 | CO-PRODUCTION IN LOCAL GOVERNMENT

Local co-production emerged in modern public administration through the work of Ostrom (1972, 1996) in an attempt to understand the role played by citizens in the provision of public services, including local government services. However, after its introduction into public administration, work on co-production in the literature virtually ceased until its recent resurgence (Durose & Richardson, 2015; Uzochukwu & Thomas, 2018).

Renewed interest in co-production can perhaps be attributed to the nature of the contemporary environment. For instance, Nabatchi, Sancino, and Sicilia (2017, p. 766) have advanced a tripartite account of the forces involved. Firstly, the emergence of the 'new governance' approach (Bingham, Nabatchi, & O'Leary, 2005), with its focus on the 'multi-sectoral nature of governance', advocates 'a pluralistic model of public service' which stresses the importance of 'inter-organisational relationships, networks, collaborative partnerships, and other forms of multi-actor policymaking and public action'. Secondly, the onset of the global financial crisis and the attendant era of fiscal austerity ensured that co-production would be invoked as an avenue of cost-savings. Thirdly, a weakening of the notion of

citizenship and a concomitant reduction in social capital inspired a quest to develop 'new public service delivery mechanisms that will reinvigorate the role of citizens in their communities beyond simply voter and customer'.

The past few decades have seen a significant expansion of inter-organisational networking, self-regulation and self-management in the public sector (Somerville & Haines, 2008) that has been wrought by a 'hollowing out' of the administrative and technical capacity of the modern state (Rhodes, 1994). In local government, these trends are amplified by the fact that local authorities are frequently no longer monopoly providers of some local public services. Accordingly, they often have joint responsibility with other public agencies and even private firms in various spheres of local service provision (Stoker, 2004). The resultant 'explosion of partnerships' in local government systems worldwide, including Japanese local government, has encompassed not only partnerships between local, regional and national governments but also between local authorities and their respective communities (Jones & Stewart, 2009).

Despite the increasing importance of co-production in local government, a consensus exists that definitional ambiguities over the nature of co-production and the activities which it embraces have led to ongoing confusion (Bix, Krogstrup, & Mortenson, 2019; Brandsen & Honingh, 2015; Nabatchi et al., 2017). In this study, we adopt Alford's (2009, p. 23) tripartite definition that characterises co-production as 'any active behaviour by anyone outside the government agency' that is (a) 'conjoint with agency production' or at least 'independent of it but prompted by some action of the agency'; (b) 'at least partly voluntary' and (c) 'either intentionally or unintentionally creates private and/or public value, in the form of either outputs or outcomes'. However, some scholars contest the notion that the complexities of co-production can be captured by a single definition. For example, Pestoff (2019) contend that instead of a generic definition it is more accurate to examine co-production through the prism of three 'schools of co-production' encompassing an 'input-output school', a 'value-chain school' and a 'public value creation school'.

In the municipal realm, co-production can be accomplished by community groups or by individual residents (Bovaird & Loeffler, 2012). However, Brudney and England (1983) have advanced a tripartite classification comprising 'individual', 'group' and 'collective' co-production. Thus, local residents can play a pivotal role in providing information on the different dimensions of service provision, such as the adequacy of service delivery, perceived problems with service quality and suggestions on how to improve service provision. The same functions can be undertaken by community groups, ratepayer associations, local advisory bodies and other civic associations. Furthermore, local co-production can occur during any of the policy planning, implementation and monitoring phases. Bovaird and Loeffler (2012, p. 1124) have termed co-production of this kind 'co-planning', 'co-delivery' and 'co-monitoring'.

Lowndes and Sullivan (2008, p. 344) offered a taxonomy of the different forces that stimulated the growth of 'sub-council' or community groups as a critical pillar of co-governance in modern local government. First, a 'civic rationale' assumes that 'neighbourhood' groups can engender 'greater opportunities for direct citizen participation and community engagement and empowerment' given that 'neighbourhoods are areas where citizens identify with and feel a sense of belonging'. Second, a 'social rationale' views a 'neighbourhood' as a natural arena for 'a more citizen-centred approach to governance' in which neighbourhood associations can contribute in terms of 'co-production to design and develop services that are more tailored to their needs'. Third, a 'political rationale' stresses improved 'accessibility, accountability and responsiveness' as a consequence of 'decision-making' taken the neighbourhood level. Finally, an 'economic rationale' emphasises the prospective 'effectiveness and efficiency gains which can flow from working with "sub-council" groups'.

The renewed interest in co-production has generated a substantial literature (Bovaird, 2007; Demircioglu, 2017; Durose & Richardson, 2015). However, comparatively little effort has been invested in determining the outcomes of co-production (Bix et al., 2019), with a majority of work focused on the nature and operation of co-production programs rather than their effectiveness (Voorberg, Bekkers, & Tummers, 2015). While the comprehensive evaluation of the outcomes of co-production programs is difficult (Loeffler & Bovaird, 2020), given their inherent complexity in terms of co-planning, co-design, co-production and the like, comprehensive appraisal systems have been developed, such as the recent 'co-production outcome chain' model (Bix et al., 2019).

Given the focus in this article on local co-production in the context of addressing social isolation, it is important to stress that a growing literature exists on co-production in Japanese local government. There have been several studies (written in English) which consider citizen volunteering (Avenell, 2010; Haddad, 2007; Schoppa, 2012), grassroots groups and non-profit organisations (Haddad, 2011; Pekkanen, 2006; Tsujinaka, Pekkanen, & Yamamoto, 2009). However, comparatively little effort has focused on the application of co-production programs in the Japanese context. Since the 1970s, a significant literature (in Japanese) has considered *jumin kyodo* (citizen collaboration), which broadly covers: (a) the promotion of equal partnerships between local governments, citizens, non-profit organisations and private companies to address social problems, and (b) the privatisation of public services (Okubo, 2011). According to Kotagiri (2018), scholarly discourse on *jumin kyodo* in Japan has been fragmented, with most existing work promoting collaboration.

More specifically, this literature has pursued three main lines of inquiry. First, given the frequency of natural disasters in Japanese history, writers have focused on the role of local co-production in disaster management (Aoki, 2018; Suzuki & Kaneko, 2013). Scholars working in this area have examined numerous aspects, including the characteristics of Japanese volunteering in disaster management co-production (Bajek, Matsuda, & Okada, 2008), the impact of disasters on social trust (Toya & Skidmore, 2014) and social capital (Yamamura, 2016), the effects of social capital on the extent of disaster volunteering (Kawamoto & Kim, 2019), assistance rendered by local authorities in the form of seconding workers to disaster afflicted local governments (Aoki, 2017) and the efficiency of area-wide local disaster mitigation efforts (Aoki, 2015).

Second, a growing literature has examined different dimensions of co-production in Japanese local government involving local community groups and volunteers. Several studies have considered the relationship between fiscal austerity and volunteering (Suzuki, 2017, 2020). In a seminal study of the relationship between Japanese municipal expenditure reductions and community group behaviour at the local level, Suzuki (2017) investigated potential 'crowding-out' or 'crowding-in' effects of these cuts on community-based activity. He demonstrated empirically that community involvement rose in the aftermath of expenditure reductions. Given these findings, Suzuki (2017, p. 272) argued that 'local government expenditure cuts measured both by the GPI and municipal expenditure have been positively correlated with citizen group involvement both in community transportation and intermediary activities'. Moreover, he established that 'in municipalities with higher levels of expenditure cuts, citizen organisations are likely to contribute more to intermediary activities which support other voluntary and community groups in their communities'.

Finally, a nascent literature has examined social welfare services through the lens of co-production. For example, Pestoff (2019) advanced models of small group collaboration in co-production in health care services managed by the Japanese Consumer Cooperative Union (JCCU). They focused on the co-production of aged care services between professionals and patients. The JCCU runs 76 hospitals, and its unique care services are partly managed through co-production. Members of the JCCU are divided into small groups which are run by a qualified leader. JCCU members are not passive users of care services since they are encouraged to monitor their health, including blood pressure and heart rate, and to discuss their health in small group settings. Pestoff (2019, p. 109) argued that this kind of active involvement with care users promotes 'a more healthy lifestyle and preventive health care'.

5 | CASE STUDIES

The problem of loneliness and social isolation among older adults has attracted widespread public concern (Dahl, 2020; Ito & Tashiro, 2020). The Japanese word *kodokushi* (lonely death) typically refers to dying alone 'where corpses remain undiscovered for long periods, sometimes even for months or years' (Dahl, 2020, p. 83). Presently, no official data exists on the number of elderly persons who die *kodokushi* or who suffer from loneliness/social isolation (Dahl, 2020). Only two prefectures collect data for people who died *kodokushi*, primarily because of a lack of an official definition (Sugawara, 2018). However, it has been estimated that 50.7% of people who are over 60 (and live

alone) feel anxious about *kodokushi* (COJ, 2019). The NLI Research Institute (2011) has estimated that between 8,604 and 26,821 seniors die *kodokushi* annually.

In Japan, there is no specific national policy, which solely focuses on the question of loneliness and social isolation. Instead, social isolation has been addressed in overarching government policy on the alignment between ageing and local welfare. While these policies do not explicitly invoke the concept of co-production they nonetheless stress the role of local communities and collaboration between local government and non-government actors to deal with social isolation. For example, current government guidelines on the principles for an ageing society, emphasise the role of local residents in building communities where elderly citizens need not fear social isolation or displacement from their local community. The guidelines also stress the importance of cooperation among local governments, volunteers, business operators and welfare commissioners to foster elderly-friendly communities (COJ, 2018).

Historically, Japanese local governments have relied heavily on non-governmental organisations and volunteers to provide welfare services (Haddad, 2011; Yamashita, 2013). For instance, one of the measures to alleviate social isolation among the elderly is *mimamori*, which translates to 'neighbourhood watch'. While there is no widely accepted definition of *mimamori*, it typically involves watching over people who need assistance, including checking in on those living alone through home visits (Dahl, 2020; Takano, 2016). Medical researchers are acutely aware of the value of *mimamori* to alleviate the problem of social isolation among elderly people, noting that '*mimamori* can create a "win-win" community—older people benefit from the community people, and the community people benefit from the act of "*mimamori*" by establishing relationships of mutual trust' (Tadaka et al., 2016, p. 7). Although participants in *mimamori* involve the public, private and non-profit sectors, voluntary welfare commissioners (*minsei-iin*) and local community groups, have historically played a significant role (Kobayashi & Goto, 2016). Previous studies have documented municipal government initiatives to encourage volunteerism and grassroots voluntary organisations for more efficient service delivery (Avenell, 2010; Haddad, 2011; Pekkanen, 2006). Volunteer welfare commissioners are 'elite members of society who had contact with the poor… and charged them with determining and distributing public assistance' (Haddad, 2011, p. 32). In sum, they are private citizens appointed by the Ministry of Health, Labour and Welfare (MHLW).

The Japanese local government has increased its reliance on citizen volunteering, community groups and private actors in the provision of welfare services related to the problem of social isolation among older people. Since the early 2000s, the MHLW has introduced the concept of the community-based integrated care system, which is defined as 'a system in the community which provides appropriate living arrangements and appropriate social care, such as daily life support services, in addition to long-term and medical care to ensure health, safety and peace of mind in everyday life' (Tsutsui, 2014, p. 2). The MHLW aims to develop a comprehensive community-based care system by 2025. It will rest on four pillars of social support: *jijo* (self-help), *kojo* (public assistance), *kyojo* (social support) and *gojo* (mutual support), integrated into a comprehensive community-based system (Dahl, 2020; MHLW, 2016).

5.1 | Zero tolerance to isolation project

Adachi ward is one of 23 special wards in Tokyo. As at 2018, it has a population of 685,447, with 24.8% aged 65 and older, the second highest among the 23 special wards (Tokubetsuku, 2019). In 2010, Adachi ward launched a *Zero Tolerance to Isolation Project* to tackle social isolation. From a perspective of local co-production, the Adachi government's active engagement with citizen volunteering is noteworthy.

The genesis of *Zero Tolerance to Isolation Project* had its roots in 2010, with the shocking discovery of the remains of an older person who had been dead for 30 years. Consequently, Adachi ward established a special department to address the problem (ISH, 2013). A key element of its approach has centred on active citizen involvement. In 2012, the Adachi ward enacted an ordinance to liberalise privacy protection to enable it to provide personal information on senior citizens to all local neighbourhood associations to permit them to monitor these aged residents (ISH, 2013). In 2013, the Adachi ward enacted the *Zero Isolation to Project*. The project defines social isolation as an

inability to interact with relatives or neighbours or receive the support necessary for life. It also empowered the Adachi ward office to share personal information on senior citizens who are defined as being socially isolated with individuals and organisations engaged in support activities (Adachi Ward, 2012). In the Japanese local government context, this represented a novel approach to establishing the requisite environment and legal foundations for social isolation prevention.

From January 2013, the Adachi ward has surveyed single citizens over 70 years of age and households comprised exclusively of persons aged 75 and over. The survey is conducted in collaboration with registered citizen volunteers and welfare commissioners. Survey administrators conduct home visits and ask questions to identify any need for assistance. They ask how often respondents interact with someone outside of their family and if they have someone to consult with on overcoming life problems, and their willingness to be visited at home by local volunteers. Between 2013 and 2018, three surveys were completed covering all 440 neighbourhood districts. In total, 5,703 households were identified as households at risk of isolation (Adachi Ward, 2019).

The Adachi ward called for local citizen volunteers, known as *Kizuna no anshin kyoryokuin* (collaborator for social bonding and sense of security). The volunteers are required to make regular home visits to those at risk of isolation and determine whether anything unusual has occurred. They are asked to report the results of their home visit to the nearest community comprehensive support centre. The official volunteer handbook listed several guidelines for discerning anything unusual, including newspapers and mail accumulating in mailboxes, laundry left outside drying for several days, and residents appearing disordered (Adachi Ward, 2017). As of January 2020, 1,124 citizens and 771 organisations were registered as volunteer collaborators (Adachi Ward, 2020).

Moreover, the Adachi ward encourages local neighbourhood associations to conduct surveillance activities and interact daily with senior citizens at risk of isolation. Accordingly, local neighbourhoods associations conduct various greeting activities, home visits and facilitate the receipt of free items from the ward office, such as posters, stickers, heatstroke prevention paper fans and bandages. As of January 2020, 94 neighbourhood associations were registered as organisational entities in the isolation prevention project, which conducted regular observational activities and organised social events, like karaoke parties (Adachi Ward, 2020).

Finally, the Adachi ward is also actively building networks among important local actors, including isolation prevention project collaborators, welfare commissioners and other participating volunteers. Each of the 25 community comprehensive support centres holds six regular annual meetings to report on their activities, exchange information and discuss relevant questions regarding isolation prevention activities.

5.2 | Partnership with private business operators

Okazaki is located in the eastern part of the Aichi Prefecture, which is in the Chubu region of Honshu Island. Okazaki has long prospered as the political and economic centre of the Mikawa region in the Aichi Prefecture. In 2018, Okazaki city had a population of 387,887 people, of whom 22.83% were over 65 (Okazaki City, 2019). In the overall Japanese demographic context, the proportion of older people in Okazaki city is lower than the 2018 national average of 28.1% (COJ, 2019).

One of Okazaki city's policy initiatives for dealing with social isolation among its elderly population lies in its partnership with private business actors. This partnership is founded on the view that unfortunate incidents, like the lonely deaths of isolated older adults, are difficult to prevent when relying exclusively on municipal structures. Consequently, in 2013 the Okazaki city office initiated a call for assistance from private companies and business operators for its social isolation prevention initiatives. Traditionally, *mimamori* or neighbourhood surveillance of senior citizens has been carried out by volunteers like volunteer welfare commissioners and members of clubs for the elderly. However, it was felt that this surveillance network could be strengthened if private business operators joined the network. In short, this view underpinned Okazaki city's support for the *mimamori* project (Okazaki City, 2016).

Okazaki city recruits and registered collaborating entities for the *mimamori* project. Private business operators that joined the project included newspaper delivery services, postal carriers, electricity, water, and gas supply companies, beverages and food service firms, medical practitioners, dentists, pharmacies, financial institutions, grocery stores and convenience stores (Okazaki City, n.d.). Applicant organisations participated in a brief induction conference and received appropriate training as support entities. Okazaki city office then issued a registered business office certificate, which must be signed by both parties as a formal agreement of partnership.

The primary purpose of the *mimamori* project is to prevent social isolation related deaths (and abuse) among older adults. Registered organisations are expected to report to the city office or a community support centre if they notice something untoward. For example, a participating chiropractic clinic included the question 'do you live alone?' in its regular patient questionnaire. While the main purpose of this questionnaire is to obtain useful medical information, it also enables the chiropractic clinic to introduce to its elderly patients Okazaki city's meal delivery service, medical fee waiver system and other relevant services if the patient lives alone. Moreover, in instances of suspected dementia, the chiropractic clinic provides information on Okazaki city's service to the person's immediate family (Taihoukai, 2019).

As seen from this example, participating private business operators are expected to play an intermediary role between those who are at risk of social isolation and the Okazaki city. It should be noted that Okazaki city has sought cost-effective methods of alleviating the isolation problem amongst its elderly population as part of this project. In 2014, Okazaki city established a 383,000 JPY (around 3,500 USD) budget and 411,000 JPY (around 3,800 USD) budget in 2015 (Okazaki City, 2016), excluding personnel costs, for this project. As of April 2020, some 280 local business operators had registered as collaborating entities (Okazaki City, 2020). From the business operators' perspective, being a registered collaborating entity brings some benefits. For example, the name of registered business operators appears on the Okazaki city's homepage, thereby acting as a form of advertisement. Furthermore, business operators can advertise their own corporate social responsibility agenda by being enrolled in the support project (Okazaki City, n.d.).

6 | CONCLUSION

In this article, we have sought to demonstrate that social isolation not only constrains the wellbeing of elderly persons, but it also has significant adverse health consequences. There are thus robust grounds for public policy intervention to address the problem of social isolation amongst the aged population. In an era of austerity, especially at the local government level, it has proved necessary to try to intervene effectively using limited resources.

In many countries, including Japan, public policymakers have displayed considerable ingenuity in adopting collaborative solutions to tackling social isolation, including co-production models at the local level that combine the resources and administrative expertise of local government with the enthusiasm and detailed knowledge of social networks brought by volunteers, neighbourhood associations and community groups.

In the absence of official data on the effectiveness and impact of local co-production in Japan, we have examined the question through the prism provided by two case studies of local co-production aimed at addressing social isolation amongst older people: the Adachi *Zero Tolerance to Isolation Project* and the Okazaki City *mimamori* project. While not representative of social isolation programs in general in Japan, they nonetheless serve to flesh out the nature of co-production in a real-world context. In both instances, the comparative institutional strengths of local bureaucracies and local volunteer groups are combined in effective, low-cost programs. Moreover, these projects offer potential insights on how co-production could be further developed, refined, and adapted to other advanced nations with ageing populations to combat the growing problem of loneliness and social isolations among older persons. We view this as a potentially rewarding avenue of research.

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ENDNOTE

[1] See Suzuki (2017) for a detailed analysis of official documents on community co-production in Japanese local government.

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