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Habitus and Responsible Dog-ownership: reconsidering the health promotion implications of 'dog-shaped' holes in people's lives

Degeling C, Rock M, Rogers W, Riley T. (2015)

ABSTRACT

Responsible dog-ownership has been identified as a point of intervention to promote physical activity, based upon an expectation of dog-walking in public space. Nevertheless, quantitative research has found variability among owners in their dog-walking. In this study, we explore the implications for health promotion of such variability. We do so by drawing on the concepts of *habitus* and social capital to analyze qualitative interviews. Participants were recruited from a social network in a cosmopolitan city with a policy framework intended to ensure equitable access to public space for dog-walkers. The analysis confirms dog-ownership can promote both physical activity and social capital, to the extent of mutual reinforcement. Yet we identified patterns of care in which dogs could influence people's emotional well-being without promoting physical activity. In particular, some owners were not capable of extensive dog-walking but still benefited emotionally from dog-ownership and from interpersonal interactions facilitated by dog-ownership. Some participants' dogs, however, could not be walked in public without risking public safety and social sanctions. Responsible dog ownership can therefore also entail not exercising dogs. Contra to the emerging ideal in health promotion, a "dog-shaped hole" in someone's life does not always take the form of a walking companion.

Keywords: health promotion; dog-walking; habitus; social capital; social networks

INTRODUCTION

Dog-ownership, which is integral to daily life for millions of people worldwide, is of increasing interest to the field of health promotion because dog-ownership has been associated consistently and positively with regular physical activity. Dog-walking is a commonplace occurrence, irrespective of whether dog-owners live in urban settings conducive to walking, in general, or to dog-walking, in particular (Cutt, Giles-Corti, & Knuiman, 2008; McCormack et al., 2011). Because physical inactivity is associated with ill-health and given that not all dog-owners regularly walk their dogs, a growing body of health promotion research on dog-ownership is focused on physical activity informed by socio-ecological and psychological theories of behavioral change (Christian et al., 2013; Westgarth, Christley, & Christian, 2014).

Promising yet inconsistent results in health promotion research on dog-walking have led to calls for stronger epidemiologically-oriented designs (Westgarth, Christley, & Christian, 2014). In setting the agenda for this work, Christian (2008) highlights the importance of contextual interventions to support dog-walking, including relevant policies, access to appropriate spaces, and inculcating behavioural norms about the need for regular exercise for dogs without inconveniencing others in public spaces (Cutt et al., 2007; Rock, 2013). Against this background, contributions in the health promotion literature have argued in favour of policies to facilitate regular dog-walking, and for measures that increase social pressure to walk dogs regularly – especially from veterinarians, family members, and fellow dog-owners (Cutt, Giles-Corti, & Knuiman, 2008; Rhodes et al., 2012; Byers et al., 2014). At the same time, the most recent review on dog-walking “highlights that there has been little explicit research as to what dog walking actually is, to both the owner and the dog; what actually happens on a ‘dog walk’ and what functions it performs” (Westgarth, Christley, & Christian, 2014).

As well as physical activity, relevant health promotion research on dog-walking indicates potentially broader benefits. Experimental research shows that being accompanied by a dog tends to elicit positive interactions between strangers in public spaces, yet not all people or dogs are equally likely to elicit positive reactions (McNicholas & Collis, 2000; Wells, 2004). These studies are important for health promotion in two ways. First, they indicate that dog-walking is not a uniform experience. Depending on how both owners and dogs behave or look, some people may be perceived as irresponsible dog-owners and limit their dog-walking in response. Second, for those perceived as responsible dog owners, benefits may extend beyond physical activity to encompass emotional well-being.

Experimental studies on dog-facilitated interactions in public space complement health promotion research that links Putnam’s (1996) account of social capital with dog-ownership. Wood and colleagues (2005; 2007) report that the daily presence of canine companions is a positive influence on dog-owners’ relationships with neighbours and fellow citizens. In this research, “social capital” was conceptualised “as the features of social life— networks, norms and social trust—that enable participants to act together more effectively to pursue shared objectives (Putnam 1996), or, to facilitate coordination and cooperation for mutual benefit” (Wood & Giles-Corti, 2005, p.159).

“Social capital,” however, can also be conceptualised as the resources that people can obtain and influence through direct connections and diffuse associations with one another (as per Bourdieu, 1985 [1980]). When conceptualised in this manner, social capital can be exclusionary as well as communitarian. The health promotion literature has pointed to positive reinforcements between physical activity and social interactions for dog-owners.

Nonetheless, research from within health promotion and from anthropology, political science, and sociology challenges a wholly positive view.

Recent health promotion literature reviews report negative associations in mixed and disadvantaged neighbourhoods between the presence of dogs in public space and physical activity. This is attributable to unattended dogs and litter from dog feces, affecting some dog owners as well as non-owners, particularly women and older adults (McCormack et al., 2010; Toohey & Rock 2011). The symbolic importance of dog-waste, furthermore, was a salient finding in qualitative research with residents of disadvantaged neighbourhoods (Derges et al., 2012). Studies of policies on dog-ownership in cities also point to simmering tensions and overt conflicts concerning which people gain access to and exert influence over public space (Brandow, 2008; Walsh, 2011). Indeed, practices of inclusion and exclusion have been found to be central to the establishment and dynamics of dog-owning communities (Graham & Glover, 2014; Power, 2013).

A sophisticated contribution in this vein extends Bourdieu's concept of *habitus* to consider how ideas and practices associated with responsible dog-ownership have influenced the process of gentrification in an inner-city US neighbourhood. Tissot's (2011) ethnographic and historical analysis focuses on how one neighbourhood park came to be re-designed and officially re-designated as a "dog-run" used mainly by newly arrived higher-income white residents. Dog-owners who are less affluent, reports Tissot, tend to frequent another park where they unleash their dogs illegally. Rather than portraying the use of public space for dog-walking as inherently in the public interest, these studies point instead to morally complex situations.

The concept of *habitus* has been used repeatedly by contributors to critical public health scholarship, describing heterogeneity in the practices and experiences of smokers (e.g. Poland et al., 2006), drug users (e.g. Bourgois & Schonberg, 2007), and, relevant to this study, urban residents who visit rural or wilderness areas for recreational walking (Green, 2009). Our study expands on Green's (2009) observations about the relevance of the *habitus* concept for health promotion research on walking. Our investigation of dog-walking and dog-ownership is, therefore, founded on the premise that people's everyday corporeal practices comprise a set of learned dispositions, forms of social differentiation, and moral judgements.

We regard dog-walking as a set of embodied practices that, ideally if not always in practice, are motivated by caring for oneself and others. This approach meant collecting and synthesizing information about the ways in which people use their bodies and other resources to 'look after' dogs, thoroughly embedding canine bodies in the settings of everyday life. Bourdieu's conceptualization of *habitus* allows us to examine how dog-care can be practiced in ways that may generate positive as well as negative dimensions of social capital. Thus, the concept of *habitus* can assist in examining how ideological distinctions such as "responsible" and "irresponsible" dog-owners are concretized through social sanctions and privileges, and how social networks and cultural politics contribute to differences in people's capacity to appropriate symbolic and material resources.

Our Bourdieusian approach to social capital emphasizes power relations, symbolic forms of distinction and control over social resources, and the preconditions of and tensions inherent to social consensus (Bourdieu 1985, [1980]). This orientation is consistent with putting the concept of *habitus* into practice to guide empirical investigation (Reay, 2004), with a focus on the everyday reflexive practices of dog owners and their interrelationship with broader structures of social capital. We collected detailed descriptions about the day-to-day experiences of dog-care drawn from a social network embedded in one locality in a

large city. Our analysis pays particular attention to how participants make sense of the use of resources (social, cultural, symbolic or material) in their daily practices.

METHODS

Research design and the research team

Our research design consisted of a multiple case study (Yin, 2002), with the household as the main unit of analysis. The research team consists of a veterinarian-philosopher (CD), two social scientists (MR and TR), and a physician-philosopher (WR). CD and WR are resident in the research setting, where CD has practiced as a community-based veterinarian for more than 20 years. Our analytic approach was iterative, involving constant comparison across cases, within cases, and with examples from our personal lives and respective areas of professional expertise. Our reporting in this article is limited to the information gathered under the auspices of research ethics certification. However, the analysis drew on aspects of daily life to the extent of comprising a variant of informal ethnography (Katz 2006). The research process centred on in-depth interviews, supplemented by documentary sources including maps, brochures, and policy statements. Members of the team visited the parks, streets, and beachfronts described in the interviews before, during, and after the formal study.

Setting, recruitment, and ethical considerations

The research setting is a rapidly gentrifying area of Sydney, a large metropolitan city in Australia, where approximately a third of households own dogs (Franklin 2007). The study district is commonly considered to be “dog-friendly” with several designated off-leash spaces, including 154 hectares in a large mixed-use public parkland area.

We recruited participants through chain referrals (‘network’ sampling). The chain referral process began with an interview organised in response to a recruitment flier posted in the waiting room of a local veterinary hospital. At the end of this and each subsequent interview, participants were asked to think of other dog-owners or dog-walkers who might be interested in the study. We ended recruitment after 10 households completed interviews as preliminary analysis confirmed sufficient heterogeneity within our sample for meaningful comparisons and insightful contrasts (as per Yin 2002). One owner volunteered to be interviewed with his family, resulting in 15 participants. The Human Research Ethics Committee at the host institution approved all recruitment and participant information materials, and the interview guide.

Data collection

One interview was conducted per household. First-Author conducted all the interviews between November 2011 and February 2012. Interviews took place at the convenience of the participants: either in their homes (n=5), at their place of work (n=3), or in a casual restaurant (n=1), with one interview conducted via Skype®. All interviews lasted over forty minutes, and many took more than an hour. Interviews began with open-ended overview questions, including: ‘What is involved in looking after this dog on a day-to-day basis?’; ‘What do you do?’; ‘Where do you go?’; and ‘What is it like to take care of a dog here in Sydney?’ First-Author followed up on responses by asking for more detail, inviting participants to compare their experience of looking after different animals, and encouraging them to reflect on their understanding of the experiences and motivations of others. These comparative responses moved back and forth from analogies rooted in experience to more

general explanatory statements. This approach also allowed us to collect narratives centred on concrete events and sequences (as per Spradley, 1979).

Data analysis

Data analysis took place iteratively, in parallel with data collection and conceptual engagement with Bourdieu's conceptualization of social capital and *habitus*. Notes taken during each interview and immediately afterwards were summarised into key observations and reflections. The transcripts from the first four interviews were annotated and cross-compared aided by review of key segments of the interview recordings. This process led us to articulate an explanatory framework and a coding map, which was later refined with comparisons against the whole set of in-depth interviews (Yin 2002). The transcripts were re-reviewed focusing specifically on dog-walking in public space to identify circumstances, times and places in which specific modes of dog-care were described as shaping the participants' interactions with other people in public space. These details were illustrated with direct quotes from participants, and journeys to specific locations recorded on a local map. All of this information was entered into a tabular matrix (Miles & Huberman, 1994, pp. 178-79). The final stage of analysis took place during the course of writing, and in the process of revising drafts in light of the research team's local knowledge and respective professional experiences.

RESULTS

First we describe our sample, the participants' social network (table 1), and the most salient features of their shared material environment (figure 1). We then report on how participants describe their every-day dog-care arrangements, and how they conceptualise responsible dog ownership across public and private spaces. Finally, using this data we identify two distinct modes of responsible dog-care: focalised and distributed (table 2).

Characteristics of the sample and the social network

Our sample was heterogeneous regarding occupation and life stage, but relatively homogenous regarding ethnicity and socio-economic status. All participants could be described as white and middle-class. Consistent with the concept of *habitus* (Bourdieu 2005), by middle-class, we mean that daily life is organized around a stable home, higher levels of educational attainment and professional employment. Households ranged from empty-nesters, to couples with children in school and post-secondary colleges, to couples without children (table 1). Their dogs were heterogeneous in terms of breed, age, health status, and disposition (table 1). All lived in households with mid- to high-incomes, and in neighbourhoods with higher-than-average levels of income and education, although some of these neighbourhoods were more socio-demographically variable than others.

Table 1. Sample characteristics.

Case example	Gender of interview participant(s)	Age group	Household composition	Inventory of people who are involve in caring for the dog(s)	Housing type and inventory of technologies employed to control the pet dog(s)
#1	Male	45–59 years	Couple and children	All members of the family:	Detached house with yard
	Female				
	Male and Female	18–25 years	Current dog: young medium-sized crossbreed	Other study participants on occasion	Security fencing
	Male and Female	12–18 years		Friend of family housesits when needed	Self-closing gate Leash Council rangers
#2	Male	45–59 years	Couple and 1 adult child Current dog: older medium-sized pure-breed dog	The couple Child Neighbours Wife’s parents	Terraced housing with yard Leash
#3	Female	45–59 years	Couple and 1 adult child 1 adult child living away from home Current dog: young large-sized pure-breed dog	The couple Dog walker Adult child Adult child not living at home	Detached house with yard Leash Leash used inside at elderly parent’s house Choose the right breed Treats
#4	Female	60–69 years	Couple with 2 adult children living away from home Current dog: older small pure-breed dog	Mainly the female member of the couple Sometimes the male	Ground-floor Apartment with a ‘small’ yard Leash Choose the right age/breed of dog
#5	Female	45–49 years	Couple with 1 adult child living at home 1 adult child living away from home Current dog: young large-sized pure-breed dog	The couple Professional dog walker Adult son, on occasion	Detached housing with yard Leash Food provided as ‘a treat’ when dog alone at home Training crate The yard

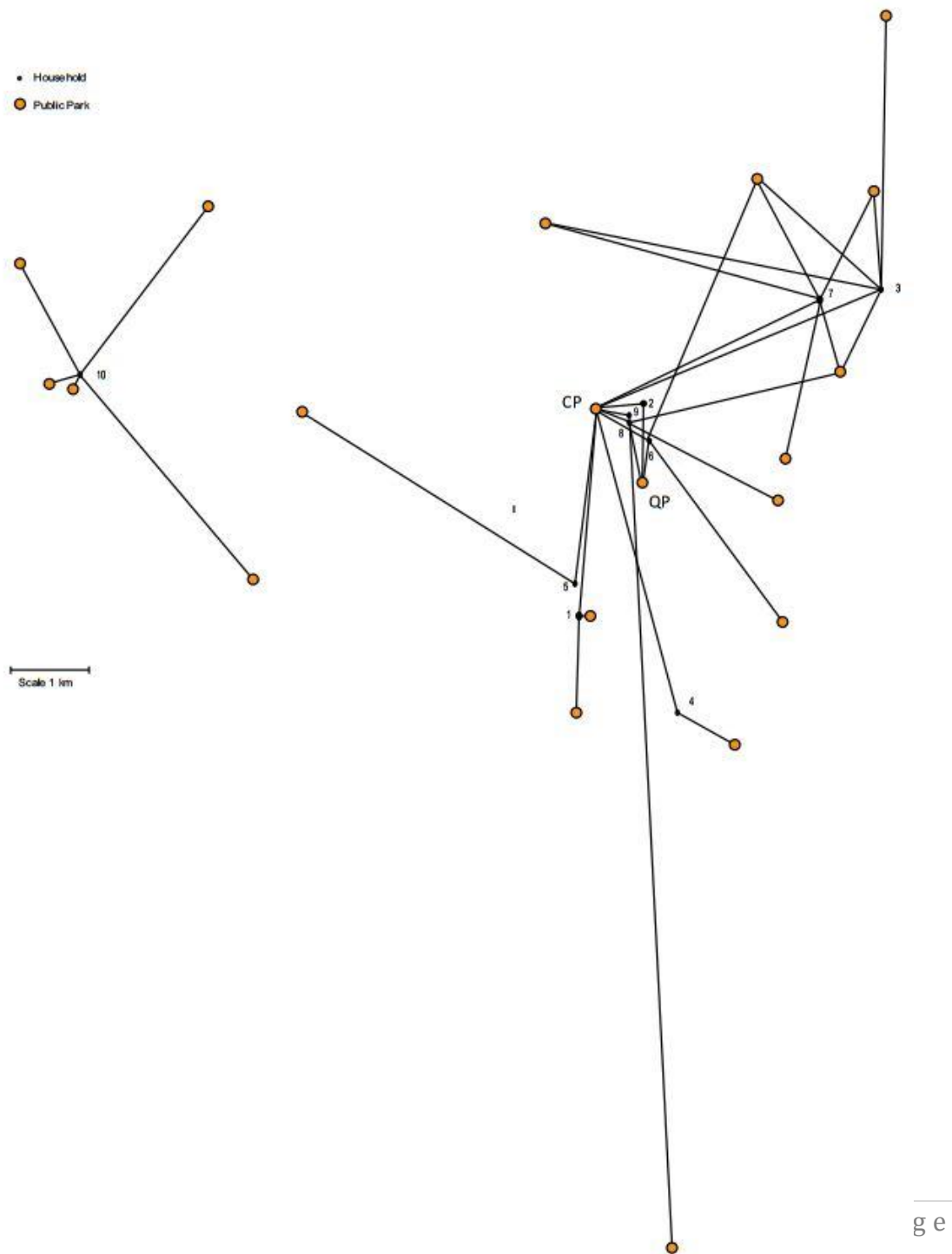
Table 1 continued

Case example	Gender of interview participant(s)	Age group	Household composition	Inventory of people who are involve in caring for the dog(s)	Housing type and inventory of technologies employed to control the pet dog(s)
#6	Female	60–69 years	Couple with 2 adult children living away from home Current dog: older large-sized pure-breed dog	Mainly the female member of the couple Sometimes the male Sister Son will walk dog ‘at a pinch’	Detached housing with yard Leash Backyard
#7	Female	50–59 years	Couple No children Current dog: young medium-sized crossbreed dog	The couple Professional dog walker [Biweekly] Neighbouring couple also without children Friend from work	Attached housing (terraced) with a courtyard Courtyard Leash The car Council rangers
8	Female	50–59 years	Single mother with 1 adult live at home son 1 adult son living away from home Current dog: older medium-sized crossbreed dog	Female owner Neighbouring couple INT #9 Live at home son Occasionally other son will help out	Attached housing (terraced) with a courtyard Leash Back courtyard Child gate
#9	Female	40–49 years	Couple No children Current dog: shares care of dog owned by #8	Couple – she looks after walks etc. when staying with them	Attached housing (‘terraced) with a courtyard Leash
#10	Female	40–49 years	Couple with 2 children in high school Current dog: young medium-sized pure-breed dog	Female owner Live at home sons often take dog to park when going there to play (ad hoc) Elderly parents Elderly neighbour that owner suspects dog goes to visit when alone during the day	Detached house with yard Leash Council rangers Fenced yard

Because we were recruiting from within a social network, most of the participants were known to each other. Participants who knew one another described themselves as being on friendly terms. To the extent that activities were shared, they tended to be dog-related, for example, individuals or families getting together on a regular basis and spending time with each other and their dogs in a local park (see Figure 1).

Figure 1 maps each of the case study households with the public parks they frequent and the distance travelled to get there. It shows how households are connected to each other and to parks. For example, Case 5 attends two parks. One park [CP on fig.1] is frequented by 8 of the other Case households; the second is not frequented by other households in the network.

Figure 1. The social network of dog-owners and their use of public space



Responsible dog-care in public space

Dogs were variously described by participants as “work,” a source of joy in themselves, and a way to connect to other people. “So far, everybody we know who's lost a dog, has got another dog,” one middle-aged male participant observed, “so there's clearly a dog-shaped hole in their life.” [Case 2] He went on to list several benefits of dog ownership:

We certainly get out more, than we would if we didn't have a dog. Ah, and we also – we walk him together. [Spouse] and I would walk him together four or five times a week ... So that's probably four or five hours of casual interaction, that may not happen. [Case 2]

The benefits of dog-ownership for this participant extended beyond physical activity to encompass emotional well-being in the context of a spousal relationship. In describing dog-ownership, all participants spoke of how obligations to their dog, other people and other animals shaped their dog-care arrangements and the way in which they occupied and used public spaces.

According to our participants, ensuring the safety of others is central to responsible dog-care in an urbanized society. One male participant interviewed in the company of his children commented: “to take responsibility is to have him [the dog] under control” [Case 1]. Participants told us control can be achieved in two ways: through dog training; and through technologies such as leashes and fences (Table 1). As one middle-aged female owner told us: “You should train your dog, or restrain your dog. One or the other.” [Case 3] These technologies were not only drawn into general dog care practices, but were ascribed specific roles or functions (such as security or restraint) in keeping with the participant’s approach to responsible dog ownership.

All participants told us they were mindful of the impact that poorly-controlled dogs might have on other people and animals. Trust and a mutual sense of responsibility were seen as being essential for safely managing canine encounters in public spaces. Owners adopted a pragmatic tone, acknowledging that sometimes their dog was the aggressor and sometimes the victim. If a dog was consistently problematic when in public, however, participants indicated that being a responsible owner meant seeking out isolation and walking with their dogs at times and in places when few other people or dogs were likely to be present.

Our participants told us clearly that dog-ownership can problematize social interactions with neighbours and in public space. Even with one-to-one training and elaborate containment technologies (e.g. 10 foot-high fences fitted with self-closing gates), adequate dog control could not always be achieved. Five participants told us that at some stage, they had been forced to change their living arrangements or re-home a dog that posed a risk, either to their children, or to people or dogs outside the immediate family. Seven participants described past events where a poorly-controlled dog had harassed or bitten them or their dog, in a public space, leading to significant distress, physical injury or both.

Responsible dog-care takes different forms

We identified a spectrum of dog-care practices that mobilised a range of symbolic and material resources. These varied from arrangements in which one or two individuals assume responsibility, to those where responsibility was shared amongst a larger group.

Table 2: Modes of Care, Modes of Interaction & Use of Material Resources

Case Example	Primary Mode of Care	Primary Mode of Interaction	Material Resources activated in dog-care	Direct quotes
#1	Distributed	Supervisory Auditing Companionship	Public Park	So I tell the kids, "If Nat, or Sam, and even-." Have you taken him? # Informant: #1 So usually someone in the family takes him for a walk. That may be just out at the park here for a run around? # Informant 2 : #1 Usually if I go to the shops, I take him to the shops. #
	Distributed	Supervisory Auditing Giving Kids responsibility	House and Yard	I guess with two at Uni, two at school, and we both work... There's no one- . Liv is supposed to be sort of responsible for him, but we can't be sure that he's actually getting exercise everyday. I mean I think he is.
	Distributed	Control	House and Yard Gates / Fences	we had to have um, one of those closing gates. We put up a special grill outside the entrance... the entrance to the park.
#2	Distributed	Structured Contingency	Public space	We have a sort of natural flow that fits in around who does what... I'm sure he doesn't know who's going to be walking him today, but he certainly knows that he gets a walk every morning and evening... And that the walk precedes being fed.
	Distributed shifting to Focalized	Giving Kids responsibility shift to Companionship	Home	It's kind of having another child in lots of ways... we got the dog when the kids were about ten, and they could actively participate in caring for him and walking him, and that kind of thing... And now they're in their mid twenties, and they've moved on, and we've still got the dog.

#3	Focalized	Systematized Obligation Delegation	Off leash Public Spaces	When I go walking, I feel like if I have a dog I've got a purpose to walking. Otherwise it feels a bit like, 'What's the point?'" ... And then my son who's away at university, ... he will take her for a run. Um, if pressed.
	Focalized	Obligation to Wellbeing Control	Public Spaces	Yes, because I'm always mindful of the fact that I have to take her out again. ... Ruby has quite a high energy... I have to really take her out, or provide some sort of um, like stimulation, ... and she indicates that she needs- that she wants exercise.
	Focalized	Control & Consideration of others	Public Spaces	"I can always tell people who've never had a dog. ... I just think it's quite interesting that they have never-, never been socialized to animals, and um, the way they treat them makes the-, tends to make the more animals nervous
#4	Focalized	Companionship & Obligation Life-stage Choice	Unit / Apartment	I didn't want to go back to puppies. Um, because ah, just not a puppy stage of my life. Um, and I thought it'd be nice to give an older dog a nice few years at the end. ... My husband's not a big dog person....So the dogs are basically my dogs... Um, so you know, being that old he doesn't need a lot of exercise.
#5	Focalized	Control & Consideration of others Dog-smarts	Off leash Public Spaces	there's one woman ... I only know her because of the dogs. Yeah. And um, and our dogs don't socialize anymore because she's got a rat bag. So, she won't go to the park at the same time because she finds it too hard to deal with her dog in public
	Focalized	Owner dog bond	House	And now, I've got the time to enjoy my puppy, and spend time with her without having to worry about getting two small boys ready for school, and sandwiches and all that kind of stuff. So, I'm really really enjoying the chance to just spend time with her, and put the time into her.
#6	Focalized	Systematized Care	Off leash Public Space	first thing I do is I get up ... then she waits for me ..then we go for a walk,... between 6:30 and 7:00 and I generally walk her five mornings a week and my husband walks her two mornings a week

	Focalized	Delegation Dog-smarts	Public Space	I'm sort of, I control all that. I mean, if somebody said, can I come by and take her with me to such and such, I'm I would consider that before saying yes.
#7	Focalized	Systematized Care	Off leash area Home	on Tuesdays and Thursdays she has a dog walker so she goes out three times, but, I wouldn't she's a... only because I think it's very boring for her being on her own all day, ... so she gets three walks a day on Tuesdays and Thursdays, otherwise she gets a minimum of two, and I'm talking leash free park, an hour minimum ... he's back by 7:30, because on Mondays, Wednesdays and Fridays a friend's dog comes and stays with Freda,
	Focalized	Control of Other People & Dogs	Off leash area	Every time he see [dog], he's on top of her, biting her ... I sort of had to really push with [the] council, because they'd had a few complaints, ... they issued a notice to these people...this is the second problematic dog this same family's had apparently which makes me wonder what's going on
#8	Distributed	Structured Contingency	Public Space	quite often if she and her husband are going for a walk in the evening, they'll knock on the door, and say "does [Dog 2] want to come for a walk" ... and when um, when I go on holidays she sort of shares responsibility for [Dog 1], and now [Dog 2], so I chose, when I decided to get [Dog 2], she was part of choosing it
#9	Distributed	Structured Contingency	House	it's flexible, and it's just whatever each of us needs, really. So I have a key to her house, so I go, I just let myself in, and if Willow's there, I just take her If not, I put her back
#10	Distributed	Assigned Roles Companionship Control	House	she knows that I feed her, and it's that nurturing relationship,..., with the two boys it's more like a play mate, and there's lots of growling and action and stuff like that and with my husband it's more respect for the head dog!! kind of thing, she seems to discriminate!

Table 2 describes each of the cases according to several attributes. The first (column 2) is the Primary Mode of Care. This refers to how the dog is cared for, which relates to its position in the household. For example, distributed care identifies the situation in which a range of people look after and walk the dog who is seen as a household member rather than being central to how the household functions. The second attribute (column 3), is the Primary Mode of Interaction. This refers to the core characteristic of the exchange between the dog and the household. For example Obligation to Wellbeing is a disposition towards placing the health and welfare needs of the dog at the forefront of household / dog interactions. The third attribute (column 4) identifies Material Resources activated in dog-care, referring to the spaces and objects, such as fences, parks and leashes that are drawn into the daily practices of dog-care.

While variation existed within and between Cases there was a clear distinction between those that practised distributed modes of care and those that practised focalised modes of care. These can be viewed as two *habitus* differentiated by the position of the dog in the household network and the relationships of care instantiated. We now describe these two modes of care in detail.

Focalised dog-care: One or two people take responsibility

In arrangements where only one or two people managed dog-care it was typically 'dog-centred.' The emphasis was on individuation in relation to the life stage, disposition, and preferences of the dog. These people took full responsibility for the dog, and entrusted dog-care and dog-control to other people in a way that could be described as a temporary delegation of authority. These participants repeatedly used words such as "consistency," "discipline," and "watching" in the sense of surveillance, with reference to their dogs and any delegated authorities. The care arrangements were described as involving significant organisation to ensure the dog's needs and preferences were met in an appropriate manner. Owners spoke of enlisting and coordinating with trusted others, with distinct 'hand-over' periods for the sharing of information to facilitate continuity of care. For example a woman who shared care with her spouse noted:

[H]e reports back on more other dogs that are there, or dogs that she's played with, or dogs that she didn't get along with or whatever that may be... [Case 7]

These participants described the frequency of contacts with friends, family, and neighbours as being strongly influenced by their dogs, and expressed concern that certain dogs or people might negatively influence their pet.

When only one or two people took full responsibility for dog-care, dog-walking was typically described as a twice-daily routine, with additional and longer bouts of dog-walking during weekends. Owners practicing this type of care felt obliged to take their pet to public spaces to facilitate off-leash exercise and provide opportunities for play and other forms of dog socialisation. Overall, dog-care (oriented towards the animal's well-being) and dog-control (oriented towards the safety and well-being of others) were closely enmeshed in these participants' descriptions of daily life.

Distributed dog-care: More than two people take responsibility

When participants were part of a larger group who shared responsibility for care, their dogs were described as being expected to "fit in", and their presence was valued as a contributor to well-being in daily life for the group. Therefore, there was significantly less emphasis on individualizing care to suit the dog. Rather than being central to household routines and use of

public space, dogs whose care was shared amongst a larger group were called upon to adapt to an ever-evolving set of contingencies and cast of characters.

Pets in households practicing distributed care were described as “family dogs,” and as an essential part of the family’s history and identity as a unit. For example, the mother of two teenage boys noted:

[S]he's one of the gang. ...she's one of the tribe, and she's part of the family... and that's how she lives. [Case 10]

Rather than delegating authority to their children, as in more dog-centric forms of dog care, these parents took on the role of auditors. At various times over the course of a day or week, the parents would ask their children whether the dog had been fed, given water, taken for a walk, and so on. While this approach retains a supervisory role for the parents as the locus of ultimate responsibility for the dog’s welfare and social impact, there was deliberate emphasis on socializing their children to become considerate persons. In other words, dog-ownership was framed as an opportunity that could help to cultivate responsible citizenship.

Notably, our sample includes descriptions of dog-care that involved more than one household. For example, Case 8 described how she and her adult son currently shared custody of their dog with a neighbour. This arrangement had started with a previous dog and now continued with the new pet [see Table 2 - Case 8 and 9]. Other than this shared custody arrangement, and in direct contrast to arrangements where only one or two people shared responsibility, participants practicing distributed arrangements did not describe care of a dog as a major factor in shaping social networks or as exerting significant influence over any household member’s level of physical activity. In circumstances where a larger group shared dog-care, dog-ownership still encompassed responsibility for ensuring the safety of others through dog control, as well as for the dog’s well-being. Nevertheless, regular visits to parks and other public spaces to facilitate off-leash exercise and dog socialisation were not construed as obligations to the dog, or necessary components of responsible dog care.

Responsible use of public space in dog-care

Participants who practiced focalised care actively sought out public spaces suited to their dog’s needs and proclivities. As one female participant put it, “I feel that they don't really get enough exercise if they're on the lead the whole time.” [Case 3] Facilitating positive social interactions was seen to be important for both dogs and people. Some participants who were currently practicing focalised care said they purposely visited narrow corridor-shaped parks to facilitate both canine and human interactions. These participants regarded human-animal bonds as a primary means of ensuring safety for others. Dog training was essential to focalised forms of care such that control is constant and direct. In cases of “family dogs,” by contrast, there was more emphasis on routinely entrusting technologies such as doors, and household fences and gates within private space, as at-a-distance instantiations of caring about the safety and well-being of others beyond the immediate household and in public space.

Personal stress and conflict were features of both focalised and distributed modes of dog care. Those practicing focalised care saw conflict as being more likely to occur in public space when there was miscommunication, a failure by themselves or other owners to train their dogs properly. For example, as the owner of an aggressor dog in a recent incident, one participant told us:

I don't want a dog that, ... I don't want to feel stressed when I go to the dog park. I want to feel comfortable in the knowledge that she won't pick a fight...
[Case 7]

In distributed arrangements, problems were more likely to be ascribed to a failure of containment technologies within private space. For example, one participant who had spent a considerable amount of time and money trying to 'dog-proof' fences around the family home noted:

Our main problem was because we got kids coming and going. ... With all the best intentions, and he'd get out. And it was just like unknown when he got out, he'd go in the park and bail someone up. Bite them, or scare them in some way. That was always at the back of our minds., if he got out, he was going to cause havoc. [Case 1]

Most of the conflicts or 'incidents' described in the interviews were short-lived and had few consequences, but there were exceptions. Three participants told us they had interacted with rangers and other municipal government authorities in official complaints related to their dogs, both as alleged perpetrators and as victims of aggression.

DISCUSSION

This interview-based study adds contextual detail and nuance to health promotion research on dog-ownership. There are many reasons why participants perceived a "dog-shaped hole" in their lives, which is to say, some needs or preferences that a dog might help them to meet. In some cases, a "dog-shaped hole" took the form of a walking companion, but not necessarily and not throughout a dog's lifespan. Dog-owners sometimes arranged for a family member or neighbour to walk their dog, and such arrangements promoted emotional well-being for all concerned. In other cases, differential access to and influence over public space orchestrated through dog-ownership and related norms could detract from physical activity and emotional well-being. Consistent with the symbolic and practical salience for public health of differences in how and why actual people walk (Green, 2009), the present study uncovered differences in modes of dog-care, to the extent that regular dog-walking was crucial for some but not all participants. Both focalised and distributed modes of dog-care entailed reflexivity, which manifested in our study through participants' internal dialogues when commenting on current and previous situations. These dialogues and comments are embedded more broadly in rhetoric and in practices of exclusion and inclusion regarding private as well as public space.

In *focalised* techniques of care, responsibility was individuated to the needs and preferences of their dogs. In this mode, dog-care was reflected in the substantiation of disciplined behaviour and oriented towards the regular use of public space for dog-walking. In contrast, *distributed* care involved responsibility being shared between household members and sometimes beyond. In this mode, dog-care was embodied through the creation of a collective identity and oriented towards canine companionship and maintaining group integrity. Stated concerns included avoiding neighbourhood nuisances and ensuring public safety, not so much through human-canine bonds and direct supervision as through coordination of human relationships and through privately-owned technologies, such as leashes, fences and gates. The literature on the health benefits associated with physical activity through dog-walking maps onto what we have identified as *focalised* care (Christian et al., 2013; Westgarth, Christley, & Christian, 2014; Byers et al., 2014). However, *distributed* dog-care may be equally important for emotional well-being through human-animal bonds and family dynamics. We suggest that survey instruments be designed to anticipate both focalised and distributed modes of dog-care because both have implications for dog-related research and population health interventions.

This observation highlights how detailed qualitative research grounded in critical theory can help bring about change in health promotion research on sociocultural practices (Green & Thorogood, 2013), dog-walking in our case. We agree with Westgarth, Christian and colleagues

(2014; 2013) that more robust research designs are needed. Because *habitus* is not a discrete variable in the same sense as ‘physical activity’ or ‘walking’, quantitative as well as qualitative studies that ask a broad range of questions about time-use could identify an array of practices associated with dog-care practices and entailing trade-offs (Bourdieu, 1984).

Different modes of care were practiced within the network. Therefore, the way social capital was accumulated and shared across the network depended on the dispositions of the dog, the composition, orientation and resources of the household, and their resulting capacity to create and fulfil obligations and exchange favours. Our attention to the use of social, material and cultural resources highlights how social networks are more-than-human entities. The non-human components or features in people’s social networks are not ones to which health promotion has paid much attention, but surely should.

Previous research on dog-walking as drawn attention to the possible importance of collaborating with veterinarians (Christian et al., 2013; Byers et al., 2014; Westgarth et al., 2014). Our findings suggest that the potential for dogs to intimidate, annoy, or harm others remains important to consider, for example, when designing survey questionnaires on dog-walking (see also Cutt et al., 2007; Toohey & Rock, 2011), delivering veterinary services, designing community interventions, or reframing policies on dogs in urban areas.

Previous investigations in health promotion acknowledge that dog-ownership practices may have negative as well as positive effects on communities (Wood & Giles-Corti, 2005; Cutt et al., 2007), yet maintain that “the weight of evidence supports their health-enhancing potential” (Wood et al., 2007, p. 44; see also Christian et al., 2013; Westgarth, Christley, & Christian, 2014). We agree with this assessment, yet call for further attention to people’s everyday strategies for mitigating negativity when considering why some dog-owners are not regular dog-walkers (see also Graham & Glover, 2014). In this study, Bourdieu’s conceptualization of social capital and *habitus* helped us to appreciate the importance of subtlety in the configuration and deployment of domestic and public spaces. In doing so, we uncovered a regularity of preferences (or dispositions) towards certain forms of care that can be tested by others in future research.

Tissot (2011) highlighted a dynamic tension between inclusionary and exclusionary facets of community-building in relation to dog-ownership. More recently, Power (2013) conducted qualitative research with dog-owning apartment dwellers in Sydney, and has provided a fine-grained analysis of how the ‘ripple effects’ (Wood et al., 2007) of social interactions involving dogs are communitarian, but can include exclusionary practices, entail various forms of discipline, and lead to social sanctions. Our study indicates that dog-walking in public spaces cannot be fully appreciated without reference to domestic spaces. Furthermore, community relations implicating pet dogs might be overwhelmingly positive at the scale of populations, but exclusionary and disciplining for individuals on the basis of socially-undesirable canine behaviours.

Our results disrupt an emerging ideal in health promotion of responsible owners as individuals who consistently walk their dogs. Differences in how our relatively homogenous sample of white middle-class participants described the role of their dogs in daily life are suggestive of considerable heterogeneity in the ways that dog-ownership is practiced, given that neighbourhood characteristics, ethnicity and socioeconomic status appear to influence who derives benefit from the presence of dogs in urban settings (McCormack et al., 2010; Derges et al., 2012).

CONCLUSION

Previous examinations of social capital via dog-ownership concern themselves with social networks (Wood & Giles-Corti, 2005), by emphasizing communitarianism (as per Putnam, 1996). Yet the communitarian approach to social capital assumes that public resources are common

property whose benefits are distributed equitably amongst a large interconnected community. This assumption obscures the effects of intra-community dynamics. Caring about a dog's own welfare and consideration for the well-being of others may lead to a decision to leave a dog at home, walk a dog in isolation, or relinquish a dog altogether. As shown by our investigation of *habitus* in a social network exhibiting variability in middle-class practices of dog-care, the potential for health-promoting linkages between social capital, dog-ownership, and dog-walking are not always realised to their full potential. A focus on dog-related physical activity could actually direct the attention of public health practitioners and policymakers away from some of the most salient features of the relationship between dog-ownership, population health and social capital. Acknowledging that tension and conflict are inherent to many people's ideas about and efforts to practice responsible dog-care opens up further opportunities to understand, strengthen and fairly distribute the benefits that can accrue from sharing space in cities and towns with dogs and other animals.

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