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The Impact of Companion Animals on Social Capital and Community Violence: Setting Research, Policy and Program Agendas

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The term social capital has been used to describe the networks and other forces that build social cohesion, personal investment, reciprocity, civic engagement, and interpersonal trust among residents in a community. With the exception of three Australian reports describing positive associations between companion animal ownership and social capital, the literature has neglected to include the presence or absence of companion animal residents of communities as factors that could potentially affect social capital and serve as protective factors for community well-being. Companion animals are present in significantly large numbers in most communities, where they have considerable economic impact and provide emotional and physiologic health benefits and social support to their owners. Companion animals may mitigate the stresses of urban living and counteract what has been called "nature-deficit disorder." Conversely, they may also be the victims of cruelty, abuse and neglect which can adversely affect the quality of life and social capital of a community. Efforts to measure the impact of companion animals on social capital are constrained by a lack of accurate data on companion animal populations and by gaps in our knowledge of attitudes toward companion animal ownership, particularly in communities of color. An agenda for research, public policy and programmatic activities to address these gaps is proposed to help determine whether the resilience and protective factors which companion animals can offer individuals extend to community populations as well.

Key words: social capital, companion animals, pets, program agendas, research, policy

In his mainstream book *Bowling Alone*, Putnam (2000) popularized and renewed academic and public interest in the

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concept of social capital, a term variously used by Coleman (1988), Bourdieu (1977), Jacobs (1961), Hanifan (1916), and others to describe the networks and other forces that build social cohesion, personal investment, reciprocity, civic engagement, and interpersonal trust among residents in a community. Social capital (as contrasted with human capital, economic capital, cultural capital, technological capital, or other resources of a community) is the connectivity among people which enhances cooperation for mutual benefit. Social capital promotes social, economic and physical well-being as a result of trusting, supportive relationships among residents.

Putnam's descriptions of social and technological forces that disengage Americans from societal institutions and relationships were matters of academic interest and were also embraced by civic leaders who sought practical keys to reducing civic erosion. His national lecture tours were sponsored by many community foundations seeking to improve community cohesiveness, political participation, neighborhood development, and civic engagement (e.g., Winston-Salem Foundation, 2005).

Notably absent in his study, or other social capital literature, were references to a significantly large population of residents found in most American communities, namely the companion animals that cohabit the human ecosystem. The failure to include animal populations is consistent with most social science literature, which generally denies any possibility that interactions with nonhuman animals could be considered relevant (Taylor, 2007). It has only been relatively recently that an ever-growing body of literature has begun to demonstrate the relevance of "what are often dismissed as insignificant (or even objectionable) relationships between humans and their pets" (Hurn, 2012, p. 99). Consequently, there are many gaps in our knowledge of how companion animals positively or negatively impact community well-being and whether they serve as exacerbating or protective factors against the deleterious effects of deterioration, crime and violence in distressed communities.

Quantitative Impact of Companion Animals on Communities

Companion animals represent a significant population whose impact can be measured in quantitative and economic terms, although the mechanisms to do so have been inadequate. Accounting for companion animals' qualitative impact is even more challenging.

Although the number of companion animals in American communities is very large, no exact figures are available, estimates vary greatly, and data collection and analysis on both the national and local levels are limited. The two most widely cited estimates come from the American Pet Products Association (APPA) and the American Veterinary Medical Association (AVMA). APPA (2012a) estimated that 62% of U.S. households, or 72.9 million homes, own a companion animal, creating a market of 86.4 million cats, 78.2 million dogs, 16.2 million birds, 13.0 million reptiles, 16.0 million small animals, and 159.7 million fish. AVMA (2012) estimated that 56.0% of households owned companion animals, putting the 2011 companion animal population at 74 million cats, 69.9 million dogs, 8.3 million birds, and 4.8 million horses. A U.S. Department of Agriculture comparison between the two organizations' past estimates notes discrepant ranges in companion animal populations from 177,882,000 to 203,991,000 (Dennison, 2010).

Even accounting for discrepancies between these estimates, based upon surveys having been taken in different years and utilizing different research methodologies, the APPA and AVMA figures reveal several intriguing commonalities. It would appear that the companion animal cat population of the U.S. is greater than the human population of all European nations, and that the companion animal dog population is greater than the number of humans in all European nations except Germany (Population Reference Bureau, 2010). It is notable that both estimates come from the private sector, largely to help guide marketing decisions for their respective industries, rather than from the public sector, as there are no government Census data that include animal populations.

While the APPA figures are solely national and regional estimates, AVMA also details companion animal populations by state. AVMA reported the lowest rates of companion

animal ownership to be in the densely populated, highly urbanized and multi-cultural New England and Middle Atlantic states; the highest rates are in more rural, and less ethnically diverse, Midwest and Mountain states. Rates of companion animal ownership decrease as the size of community increases (American Veterinary Medical Association, 2012). However, neither survey is broken out by the urban, suburban or rural nature of community composition, nor by specific ZIP Codes or Census tracts.

Economic Impact of Companion Animals on Communities

The economic impact of companion animals is significantly large. APPA (2012b) estimated that Americans spent \$50.96 billion in 2011 on pet food, supplies, veterinary care, medications, and services. If this figure is accurate, Americans' expenditures on their companion animals rank greater than the gross domestic product of all but 64 countries in the world and more than what is spent on movies, video games and recorded music combined; after consumer electronics, pet care is the fastest-growing category in retail (Brady & Palmeri, 2007).

Emotional Impact of Companion Animals on Communities

The potential for companion animals to affect individuals' and communities' quality of life and emotions is strong, though difficult to quantify. AVMA (2012) reported that 63.2% of households considered their pets to be family members and another 35.8% considered them companions.

Jalongo (2004) reported that for a majority of children and families, companion animals are an integral part of their lives, part of the construct of childhood and autobiographical memory, and powerful influences on children's overall development. Childhood bonds formed or broken with companion animals reverberate and resonate across the lifespan and are not pale imitations of bonds with human beings, but rather relationships that are important in their own right.

Growing interest in the attachments humans may feel for animals has led to the development of specialized interventions called animal-assisted therapy and animal-assisted activities that promote the physical, emotional and psychological health of individuals (Franklin, Emmison, Haraway, & Travers, 2007). Though animal-assisted interventions are currently best

described as a category of promising complementary practices that are still struggling to demonstrate their efficacy and validity (Kruger & Serpell, 2006), companion animals are widely cited as offering healthful opportunities for play and exercise, as psychological symbionts who help individuals cope with stress, and whose presence can reduce blood pressure, obesity and risk factors for cardiovascular diseases (Arkow, 2011).

A recurring theme in the literature is that companion animals are what Messent (1983, p. 37) first called "social lubricants" who facilitate social support and interpersonal communications (Garrity & Stallones, 1998). McNicholas et al. (2005) observed that companion animals may not convey measurable physical benefits as much as they contribute to owners' quality of life, with animals serving as social catalysts providing a sense of social integration and enhanced interactions with other people that alleviate feelings of loneliness and isolation. Serpell (2010) said the concept of companion animals serving as sources of social support seems to offer a convincing explanation for the long-term benefits of animal companionship.

The mediatory capacity of companion animals to serve as social icebreakers and to enhance the social integration of their owners, however, is contingent on the culturally perceived value of the animal in question. Hurn (2012) observed that while a friendly dog can help alleviate social awkwardness, a dog perceived to be potentially dangerous will have the opposite effect. How vicious dogs, whose anti-social identity or reputation for fighting may make them desirable status symbols in certain cultures, affect interpersonal relationships in communities warrants further exploration.

Another strand of research and programs concerning companion animals' qualitative impact on communities revolves around how criminal and morally objectionable acts of cruelty, abuse and neglect of animals damage societal norms and presage or indicate situations of domestic violence, child maltreatment or elder abuse (Merz-Perez & Heide, 2004). Much research into what is called "The Link" (Arkow & Lockwood, 2012) between animal abuse and interpersonal violence addresses the etiology of individual psychopathologies (Ascione, 2005). Lockwood (2008) described the deleterious effects of cruelty to animals in destabilizing communities but cautioned that the prevalence of animal abuse is nearly impossible

to measure due to challenges in reporting violence against animals.

Companion Animals as Contributors to Social Capital

The potential health benefits of companion animals and the links between animal cruelty and interpersonal violence have been studied primarily for their impact upon individuals as opposed to social groups. It was not until Wood, Giles-Corti & Bulsara (2005) surveyed residents of a suburb of Perth, Western Australia, that the role of companion animals in enhancing social capital was explored.

Wood et al. (2005) reported companion animal ownership to be positively associated with social capital, civic engagement, perceptions of neighborhood friendliness, and a sense of community. They reported that the social lubricant effect of companion animals was more than just interpersonal exchanges among people walking their dogs: the visible presence of people walking dogs and the impetus dogs provide for people to be outdoors and use park areas ameliorated negative mental health conditions and gave residents a feeling of greater collective safety and sense of community. Companion animal owners were found to be more likely to participate in volunteer, school and sports activities, professional associations and environmental campaigns. They were also reported to be more likely to exchange favors with neighbors. Animal-related favors can be particularly symbolic of trust. There is, after all, more emotional investment in asking your neighbor to look after your cat while you are away on vacation than in borrowing a cup of sugar.

If civic engagement can enhance the development of trust, reduce the fear of crime, and be a protective factor for mental health, the possibility that positive interactions with companion animals may improve community health warrants further study. Though not everyone has the desire or capacity for companion animals, neighborhoods that are pet-friendly may have much to gain for their human and nonhuman residents.

Rates of criminal violence are reported to be higher in mobile and heterogeneous societies where it is difficult to put down roots and establish the social glue that binds people into a community (Begley, 2007). If companion animals are catalysts for communication that facilitate social interactions

among strangers (Arkow, 2011), they may be the first drop of that glue to connect people in a community.

The converse to this argument also warrants exploration: what happens to social capital in communities that do not have high rates of companion animal residency? If the presence of companion animals provides benefits, does it necessarily follow that a lack of such deprives communities of those benefits? While it is arguably difficult to measure something that is not there, can a case be made that an absence of companion animals decreases social capital? Is violence more prevalent in communities with lower rates of companion animal ownership and social norms that may not favor compassion toward animals? Are companion animals a protective factor for community health?

Companion Animals as Calming Ambassadors of Nature

Companion animals have been described as an aspect of nature having a calming effect on people (Kellert & Wilson, 1993). Arkow (2011) observed that companion animals are widely seen to provide people with unconditional affection and warmth, opportunities for amusement, diversion from everyday problems, and feelings of being needed. They can serve as “ambassadors from the natural world who bring a sense of calm and natural cycles into an increasingly urbanized, mechanized world” (p. 2). In the early years of human-animal studies, Beck (1983) observed that, despite the municipal costs of public health, safety, animal control, and nuisance abatement programs resulting from animals, people consistently demonstrate a desire to have contact with the natural environment and living things. People counteract the effects of urban environments by sharing their homes with companion animals. He noted that this phenomenon is an ancient one, and that the domestication of the dog coincided with the time that people started living in villages.

Seminal literature has described the presence of companion animals in urban communities as a social class issue. Ritvo (1987), Rowan (1988), and Serpell (1996) described the rise of pet-keeping in the 19th century as a previous upper-class luxury which was only extended to middle- and lower-class residents as a result of rapid urbanization accompanying the Industrial Revolution. This phenomenon occurred once animals came

to symbolize a nature that was no longer perceived as threatening. A tame, accommodating ambassador from the natural world became reassuring evidence of man's power, rather than a troublesome reminder of human vulnerability to the natural world. Pet-keeping became an emotionally rich and complex practice that replaced traditional animal-human interactions associated with farming and transportation for formerly rural residents who migrated to new centers of urban commerce and residence (Grier, 2006). Where dogs had long been kept for purely utilitarian purposes as the exclusive province of a privileged upper class, animals began joining households in unprecedented numbers to provide companionship and affection for people who had moved from the country to the city: for many people, companion animals became the most immediate, and often the only, source of regular contact with animals.

Urban communities today may compensate for the absence of natural surroundings not only with household companion animals but also with what Melson & Fine (2006) called "intentional wildlife experiences" (p. 209) such as parks, green spaces and zoos. They reported that while zoos and aquaria draw large audiences disproportionately overrepresented by families and groups with children, companion animals may be the most readily available and continual source of affective bonds for children in contemporary families, and a majority of children said they had seen more wild animals on television and in the movies than in the wild.

Louv (2006) described a condition he called "nature-deficit disorder" (p. 10) where "suburban manifest destiny" (p. 18) has deprived youth from healing contact with the living environment. He said exposure to nature may reduce the symptoms of attention deficit and hyperactivity disorder and increase resistance to negative stresses and depression. He observed that "nature offers healing for a child living in a destructive family or neighborhood" (p. 7) and that "access to public parks and recreational facilities has been strongly linked to reductions in crime and in particular to reduced juvenile delinquency" (p. 177). Louv surmised that the proliferation of companion animals and animal imagery may be how an increasingly urban society compensates for a "de-natured" childhood (p. 26).

Aggressive Animals and Community Violence

If a calming influence of animals is said to reduce violence, then one might surmise that the presence of animals emblematic of aggression might somehow be correlated with increased levels of community violence. Hughes, Maher, & Lawson (2011) examined the links between ownership of reputedly aggressive status dogs with criminal and violent behavior. Youths' criminality was linked to these dogs in four ways: committing an offense with the dog; committing an offense on the dog; theft of a dog; and committing an offense to protect or avenge their dog. They argued that status dogs are a way for urban youth to establish their masculinity while being on the periphery of violence, and that owning a dog perceived to be socially deviant perhaps indicates the owner has a deviant identity as well.

Barnes, Boat, Putnam, Dates, and Mahlman (2006) examined the association between ownership of high-risk dogs and those with histories of attacking persons with the presence of deviant behaviors in their owners. In a matched sample of 355 owners of dogs that represented high- or low-risk breeds, owners of high-risk dogs had significantly more criminal convictions for aggressive crimes, drugs, alcohol, domestic violence, crimes involving children, firearms offenses, and traffic citations. Findings suggested that ownership of an aggressive dog can be a significant marker for general deviance and should be an element considered when assessing risk for child endangerment. Meanwhile, in many rural, Hispanic and Asian communities, cock fighting is considered a normative behavior and a cultural heritage (Jaramillo, 2010). These animal activities may actually contribute to community violence rather than mitigate the risk of violence.

The popularity of status and fighting dog breeds widely perceived as being aggressive and emblematic of their owners' desires for macho status has soared in recent years. More than 5,000 pit bulls have been seized in dogfighting raids since 2000. About 19% of the dogs who have been reported stolen since 2005 have been pit bulls. Since 2005, 21% of dogs impounded in cases of severe and profound neglect, 21% of dogs impounded in cases of violent abuse, 49% of dogs set on fire, and 14% of dogs raped in bestiality cases have been pit bulls (Clifton,

2011). Statistics such as these prompt a question as to whether the types and behaviors of certain companion animals may be diagnostic of or correlated with urban violence. A review of animal cruelty arrests in Chicago supports correlations between fighting dogs and violent crime. Arkow (2005) reported that police authorities directly connect dogfighting to the violent world of guns, gangs and drugs, with 35% of search warrants executed in these investigations resulting in seizure of narcotics or guns, and 82% of offenders having prior arrests for battery, weapons or drugs charges.

It is unknown whether status dogs with reputations for aggressiveness, often kept for guard duties and fighting purposes rather than for intimate personal attachment, are over-represented in communities with high rates of crime. Anecdotally, animal shelter officials suspect inner-city neighborhoods of such trends. Cleveland (2006) reported that as many as 31% of inner-city high school students in Chicago had attended a dogfight.

In a dissertation, Levinthal (2010) correlated incidence of animal cruelty with demographic and neighborhood factors in an urban environment. Using a dataset of animal maltreatment cases from the Pennsylvania Society for the Prevention of Cruelty to Animals (SPCA), the distribution and prevalence of animal neglect, abuse, and dog fighting in Philadelphia were mapped with Geographic Information Systems. Statistical analysis of the relationship between animal maltreatment and neighborhood factors, domestic violence, and child maltreatment found a high crime neighborhood seemed to predict animal abuse, although with a very low strength, suggesting that animal abuse may be better explained as an individual phenomenon than a behavior that is a function of neighborhoods. However, animal neglect did correlate with demographic, cultural, and structural aspects of block groups, suggesting social disorganization may lead to animal neglect. Dog fighting correlated with other forms of deviance, highly disorganized neighborhoods, the availability of abandoned properties, and percentage of Hispanic population. The unknown propensity of neighborhoods to report instances of animal cruelty and neglect, false reporting of animal nuisance cases as cruelty, and fewer eyewitnesses willing to step forward in

neighborhoods undergoing structural decline were cited as limitations compromising the validity of the SPCA data.

Aggressive behaviors involving animals may involve other types of animals besides companion animals. Fitzgerald, Kalof & Dietz (2009) reported dramatic increases in total numbers of arrests and arrests for violent crimes, rape and other sex offenses in communities marked with the institutionalized, but socially acceptable, violence of slaughterhouses. While such increases may be linked to the demographic characteristics of the workers, social disorganization in these communities and increased unemployment rates, additional research is needed to address the possibility of a link between increased crime rates and the violent work that occurs in the meatpacking industry.

Animal Cruelty and Interpersonal Violence

Emotional attachments to companion animals may be exploited by abusers in violence-prone households to control and coerce victims in domestic violence, sexual assault, child abuse, and elder abuse situations (Ascione & Arkow, 1999). Batterers' actual or threatened cruelty to animals serves as a barrier to keep women and children from extricating themselves from abusive situations (Roguski, 2012). A dozen studies in domestic violence shelters have reported a range of 18% to 45% of battered women who say their partners killed, harmed or threatened family animals (Ascione, 2007). Childhood acts of animal cruelty may be sentinel behaviors that provide an early warning a child is living in a dysfunctional environment and may be exhibiting other antisocial behaviors (Gullone, 2012).

Viewing animal abuse for its impact upon human well-being and the societal norms of a community extends a long-standing paradigm, as described by Beirne (2009), who noted that the purpose of animal cruelty legislation since the 17th century "has never been to create a direct duty to exercise care toward animals as such but rather to prevent outrage to the sensibilities of the community" (p. 10).

Animal protection organizations have begun to modify their traditional animals-only focus to address human problems underlying crises with animals. Some shelters' philosophies now recognize that treating symptoms of animal welfare

problems, such as animal homelessness, abuse and neglect, is only a stopgap solution until underlying causes such as community and family dysfunction and violence are addressed (PetLynx, 2011).

Several theories have been advanced that attempt to identify causal and co-relational links between animal abuse and interpersonal violence: to date, much of the research in this area has been equivocal and subjected to methodological criticisms. Zilney (2007) described three such possible mechanisms: a graduation hypothesis (violence against animals desensitizes individuals, who escalate further violence in range and severity against human victims); a generality of deviance hypothesis (acts of animal abuse are part of a continuum of family violence and antisocial behaviors; see Gullone, 2012); and a masculinities hypothesis (acts of animal cruelty are performed predominantly by men). Whether these are accurate descriptors, or whether there are other factors yet to be identified, are subjects for much-needed future research. What is clear is that there is a “dark side” to the human-animal bond and that until recently the social sciences have not addressed cruelty against animals other than in terms of their legal status as the property of human masters (Beirne, 2009).

Challenges to Our Understanding

The above issues present many new opportunities for research by social scientists, public policy by government officials and programs by professionals concerned with community well-being. These opportunities, however, are constrained by a number of challenges. These include: lack of interest in animal issues by the social sciences; inadequate data regarding companion animal populations; inadequate statistical mechanisms; and unknown demographic forces at work regarding patterns of companion animal ownership.

Companion Animals Ignored by the Social Sciences

Animal concerns remain largely ignored by the social sciences. Flynn (2012) identified six reasons for this: society tends to value animals less than people; other issues are seen as more important; only a small fraction of cruelty cases are reported in the media, leading to public perception that animal abuse

is rare; crimes against animals are seen as isolated incidents rather than linked to social and cultural factors; socially-acceptable forms of violence against animals contribute to indifference about socially unacceptable forms of violence; and animal victims cannot speak on their own behalf.

Researchers, policy makers and program specialists addressing the links between animal abuse and interpersonal and community violence, and medical specialists working in the “One Health” field that bridges human and veterinary medicine (Burns, 2012), respond to this challenge by pointing out that animal welfare is also a human welfare concern. When animals are abused, people are at risk, and when people are abused, animals are at risk (Arkow, 2003).

Estimating Community Companion Animal Populations

As noted above, companion animal population estimates are notoriously problematic and have not been refined to quantify such populations in specific communities, particularly those marked by low social capital. A logical place to begin exploring the impact of companion animals or their absence upon social capital would be to track rates of animal ownership by ZIP Code, Standard Metropolitan Statistical Area, Census tract, or other standard geographical entities. Human-animal bond researchers were rebuffed in requests to include companion animal ownership questions in the 1980 and 1990 U.S. Censuses. Companion animal-related questions were neither included in the 2000 or 2010 Censuses, nor in the Census Bureau’s annual American Community Surveys.

Companion animal ownership rates increase directly with household income and home ownership and inversely to human population density, with large cities having the lowest per capita rates of companion animal ownership (AVMA, 2012). Beck (1983) attributed declines in dog populations in large cities to large numbers of working wives, inflationary forces and people living in compact residences. It may be speculated that other factors limiting pet-keeping in urban areas could include: more single-parent or dual-income households with less time to devote to companion animals; greater numbers of elderly residents who are the cohort with the lowest rates of animal ownership; greater populations of minority ethnic and immigrant groups for whom companion animals may not

be culturally relevant; and higher housing costs and poverty rates creating less disposable income to spend on companion animals. Poverty alone, however, may not be a determinant: homeless persons living on the streets have been documented to have inordinately strong emotional attachments to their companion animals (Irvine, 2013).

Inadequate Local Mechanisms

Few mechanisms are available on the local level to provide accurate data on whether the presence or absence of companion animals may be factors in community crime rates and social capital. Municipal animal care and control agencies are a disparate, uncoordinated network of public health, code enforcement, public works, law enforcement, and autonomous humane organizations with few mandates or expertise for gathering accurate statistics (Arkow, 1987).

Data that could determine companion animal ownership rates are notoriously unreliable or nonexistent. Dog licensing, for example, should be a valid indicator, but because of poor compliance and widely variable rates of enforcement, few localities can reliably estimate their resident companion animal populations. The licensing component of municipal animal regulation is so de-emphasized that even the National Animal Control Association's training manual (Larson, 2000) omits the topic.

Because so many variables affect licensing, dog licenses are a highly problematic indicator of canine populations. Animal control agencies report even lower rates of compliance with cat licensing in those relatively few communities in which cat licenses are in effect, making this statistic an even less reliable source for accurate companion animal demographics.

Rabies vaccinations, which are mandated by law for dogs in virtually all jurisdictions, are likewise statistically unreliable due to wide variations in rates of compliance, turnover and enforcement. In addition, veterinary resources may not be adequately deployed in distressed communities. The author once observed an animal control agency in Houston, TX where a wall map depicted the location of all veterinary clinics in the service area: the map pins created a doughnut effect with dozens of facilities located in more affluent suburbs, leaving the inner city core virtually devoid of veterinary services and,

by extension, underrepresented in any possible canine or feline censuses.

Unknown Demographic Variables

Our understanding of how human-animal interactions impact social capital and levels of community violence is further constrained by limited data regarding rates of pet ownership among various ethnic and cultural demographic cohorts (Signal & Taylor, 2006). Ory & Goldberg (1983) were among the first to report that interactions with and attachments to companion animals may vary by racial affiliations. Risley-Curtiss, Holley & Kodiene (2011) reported cultural differences in how families are perceived that could affect whether companion animals are considered family members. Numerous studies have found significant disparities of rates of pet ownership by race, with White populations having the highest rates, followed by Hispanics and African Americans (Brown, 2002; Marx, Stallones, Garrity & Johnson, 1988; Melson, 2001; Pew Research Center, 2006; Risley-Curtiss, Holley & Wolf, 2006; Siegel, 1995), with one study calling minority groups “sorely underrepresented” as companion animal owners (Petfood Industry, 2011, p. 41).

Kellert (1989) reported higher rates of negative attitudes toward animals among residents of larger cities, the elderly, and those of limited education. Hart (2006) reported that pet-keeping practices vary with neighborhoods and could be correlated with ZIP Codes to predict pet ownership practices.

Setting a Research, Program and Public Policy Agenda

Such limited data as exist suggest that companion animal ownership is markedly lower in distressed communities at greater risk of violent crime and reduced social capital. It is unclear whether the reduced presence of companion animals that could represent a softening influence of nature or that could provide mitigating emotional bonds with their humans is a contributing factor to violence in these communities. Greater understanding of pet-keeping practices and the connections between animal abuse and human violence may indicate whether companion animals are a protective factor that could help reduce violence in these communities.

Animal abuse is clearly a part of the pattern of family violence and its early identification can save lives and protect families (Roguski, 2012). Research into the sentinel roles of animals in community ecosystems and social capital is confounded, however, by numerous unknowns. A wide variety of environmental stresses and potential triggering mechanisms contribute to violence (Widom, 1989). If low rates of companion animal ownership co-occur in low-income and high-crime communities, it is difficult to determine the relative influence of any or all of these factors as well as the causal direction of the relationships. For example, is it the absence of companion animals, the absence of emotional attachment and bonding to them, or the types of animals preferred that may deprive members of that community of social capital? Do the demographics, economic realities, housing conditions, family systems, cultural preferences, socioeconomic status, or innumerable other factors make companion animal ownership unlikely to begin with?

Do high rates of companion animal ownership necessarily lead to higher social capital and lower rates of violence in all communities? Are these factors at play equally in urban, suburban and rural communities? While attempting to disentangle the many factors affecting distressed communities with the effects of companion animal ownership is challenging, a conscientious and multi-faceted research, policy and program agenda could help answer these many questions.

The field is fertile for researchers, policy makers and program specialists from many disciplines. A preliminary list of opportunities includes:

Replicate the Wood et al. (2005, 2007) social capital research, undertaken in a suburban community in Australia, in several American middle-class suburbs and in distressed inner-city communities marked by high levels of violent crime and compare findings.

Survey communities identified as having high levels of violence and diverse populations to establish baseline rates of ownership of various breeds and species of companion animals, and residents' attitudes toward pet-keeping, among ethnic and cultural populations.

Enlist pet industry officials and veterinary groups to expand and release market research data to include specific Census tracts, ZIP Codes, or other geographic entities to obtain more accurate estimates of the numbers and types of companion animals maintained in minority communities and in those marked by low levels of social capital.

Using data that describe animal abuse as a potential indicator and predictor of human violence, and market research demonstrating high prevalence and economic impact of companion animals, persuade the U.S. Census Bureau to include questions regarding companion animal populations in the annual American Community Survey and decennial Census.

The role of veterinarians in public health is long established. This role is being expanded through the "One Health" concept which applies veterinary and human medical disciplines to the study of human-animal interactions. The veterinary profession could be enlisted to address the links between animal abuse and interpersonal violence as a public health issue with particular attention to animal well-being in distressed communities which may not be receiving adequate veterinary services (Arkow, 2013).

Institutionalize data-gathering techniques in social services agencies by routinely including questions about clients' companion animals and their welfare in intake forms, risk assessments and interview processes. This switch from a "humanocentric" to a "biocentric" perspective (Melson, 2001) recognizes the impact of companion animals in the lives of clients. A more accurate description of the familial and community contexts of pet-keeping practices characteristic in clients receiving social services will improve the understanding of the impact upon social capital.

In 2004, the nation's leading municipal and nonprofit animal shelters signed an agreement called the Asilomar Accords to compile uniform reporting of intake and outgo statistics for animals. More than 400 shelters are currently participating (Maddie's Fund, 2004). No similar standardized

reporting systems are believed to exist regarding cases of cruelty to animals. A private individual has maintained www.pet-abuse.com as a searchable database and aggregate statistics of animal cruelty cases since 2002, but the accumulated records are not official, their accuracy and reliability are unknown, and the database is admittedly incomplete. Animal cruelty incidents are not routinely included in the FBI's Uniform Crime Reporting system. The Animal Welfare Institute reported that the FBI is aware of the value of including such cases, but technical data gathering, financial and procedural barriers must be overcome at the state level (Addington & Randour, 2012). A few local cities, such as Baltimore, MD, have begun tracking cruelty cases geographically (Mayor's Anti-Animal Abuse Advisory Commission, 2012), but there is as yet no systematic effort to compile and analyze these data nationally. These avenues offer researchers starting points to begin to accumulate data on incidence of animal cruelty and its impact on social capital.

Conclusion

Analysis of the relationship of pet-keeping and cruelty to animals to social capital provides many opportunities for new perspectives on the study of violence. Such study, heretofore concentrated on individual psychopathologies that may generate other antisocial behaviors, can be expanded to investigate the familial, community and societal stabilizing influences that prevent such acts from progressing into other antisocial acts, and the social capital elements that motivate widespread outpourings of public concern following high-profile animal cruelty cases (Arluke & Lockwood, 1997).

Pioneering research by Beck (1973) observed that the study of urban animals is pertinent to humans for several reasons. In addition to animals potentially serving as epidemiological indicators and vectors for disease, they can provide insight into the effects of urbanization on man. "Once their ecology is understood, urban dogs may serve as indicators of stress, pollution, environmental deterioration, and as models for behavioral adaptations to urban life," he wrote (p. xi). A reinterpretation of urban environments that includes animal components may be indicated (Bjerke & Østdahl, 2004).

A growing body of literature suggests that positive attachments to companion animals can have health-enhancing effects on individuals and enrich one's quality of life. Additional research can help determine whether the resilience and protective factors which companion animals may offer individuals extend to community populations as well. Sustained presence of companion animals with which strong positive emotional attachments have been developed may be acceptable substitutes for restorative contact with nature in urban areas at greatest risk of violence and as relief for "nature-deficit disorder" (Louv, 2006).

In a follow-up handbook to her original research, Wood (2009) described "how pets and their owners make measurable social contributions to our communities" (p. 6) and contribute positively to social capital. She cited dog park interactions, celebrations involving animals, the presence of service animals and other companion animal activities that can create community linkages, address the problem of obesity, facilitate social interactions, break down social barriers, and provide outreach to isolated residents. She encouraged the expansion of animal-friendly practices and accommodations as being good for community business.

If community involvement can enhance development of trust, reduce fear of crime, and be a protective factor for mental health, the possibility that positive interactions with companion animals may improve community well-being warrants further exploration. There is intuitive appeal to the potential of animals to mitigate harsh environments of distressed communities marked by low social capital. Academic scrutiny is needed to fill in the gaps in our knowledge and to explore the potential role of animals as protective factors enhancing the health of violence-prone communities. Such studies will help academicians and practitioners to better understand both the positive and negative components of the human-animal bonds in the communities in which they work.

References

- Addington, L. A., & Randour, M. L. (2012). *Animal cruelty crime statistics: Findings from a survey of state Uniform Crime Reporting programs*. Washington DC: Animal Welfare Institute.

- American Pet Products Association (2012a). *2011/2012 national pet owners survey*. Greenwich, CT: Author.
- American Pet Products Association (2012b). *Pet owners are estimated to spend more than \$52 billion on their pets in 2012*. Greenwich, CT: Author. Retrieved June 5, 2012 from www.americanpetproducts.org
- American Veterinary Medical Association (2012). *U.S. pet ownership & demographics sourcebook*. Schaumburg, IL: Author.
- Arkow, P. (1987). Animal control, animal welfare, and the veterinarian. *Journal of the American Veterinary Medical Association*, 191(8), 937-942.
- Arkow, P. (2003). *Breaking the cycles of violence: A guide to multi-disciplinary interventions for child protection, domestic violence and animal protection agencies*. Alameda, CA: Latham Foundation.
- Arkow, P. (2005). "Link" activities come to the Windy City. *Latham Letter*, 26(3), 18.
- Arkow, P. (2011). *Animal-assisted therapy and activities: A study and research resource guide for the use of companion animals in animal-assisted interventions* (10th ed.). Stratford, NJ: Ideas.
- Arkow, P. (2013). One health. In C. Tiplady (Ed.), *Animal abuse: Helping animals and people* (pp. 83-92). Boston: CAB International.
- Arkow, P., & Lockwood, R. (2012). *Animal abuse and human violence: Toolkit for starting a Link coalition in your community*. Stratford, NJ: National Link Coalition.
- Arluke, A., & Lockwood, R. (1997). Understanding cruelty to animals. *Society and Animals*, 5(3), 183-193.
- Ascione, F. R. (2005). *Children and animals: Exploring the roots of kindness and cruelty*. West Lafayette, IN: Purdue University Press.
- Ascione, F. R. (2007). Emerging research on animal abuse as a risk factor for intimate partner violence. In K. Kendall-Tackett & S. Giacomoni (Eds.), *Intimate partner violence* (pp. 3-1 – 3-17). Kingston, NJ: Civic Research Institute.
- Ascione, F. R., & Arkow, P. (Eds.). (1999). *Child abuse, animal abuse and domestic violence: Linking the circles of compassion for prevention and intervention*. West Lafayette, IN: Purdue University Press.
- Barnes, J. E., Boat, B. W., Putnam, F. W., Dates, H. F., & Mahlman, A. R. (2006). Ownership of high-risk ("vicious") dogs as a marker for deviant behaviors. *Journal of Interpersonal Violence*, 21(12), 1616-1634.
- Beck, A. M. (1973). *The ecology of stray dogs: A study of free-ranging urban animals*. Baltimore: York Press.
- Beck, A. M. (1983). Animals in the city. In A. H. Katcher & A. M. Beck (Eds.), *New perspectives on our lives with companion animals* (pp. 237-243). Philadelphia, PA: University of Pennsylvania Press.
- Begley, S. (2007, April 30). The anatomy of violence. *Newsweek*, 149(18), 40-46.
- Beirne, P. (2009). *Confronting animal abuse: Law, criminology and human-animal relationships*. Lanham, MD: Rowman & Littlefield.

- Bjerke, T., & Østdahl, T. (2004). Animal-related attitudes and activities in an urban population. *Anthrozoös*, 17(2), 109-129.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge, UK: Cambridge University Press.
- Brady, D., & Palmeri, C. (2007, Aug. 6). The pet economy. *Bloomberg Business Week*. Retrieved June 5, 2012 from www.businessweek.com
- Brown, S. E. (2002). Ethnic variations in pet attachment among students at an American school of veterinary medicine. *Society and Animals*, 10(3), 455-456.
- Burns, K. (2012). Spreading the one-health concept. *Journal of the American Veterinary Medical Association*, 240(2), 112-142.
- Cleveland, S. (2006). *Dog fighting and youth: Effects, consequences, and tools for intervention*. Presentation at 2006 American Humane Annual Conference, Schaumburg, IL, Sept. 28-30.
- Clifton, M. (2011). More adoptions will not end shelter killing of pit bulls. *Animal People*, 20(8), 3-6.
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, Supp. 94, S95-S120.
- Dennison, K. (2010, Feb. 19). *U.S. pet population estimate using AVMA and APPA national surveys*. Bethesda, MD: USDA APHIS Animal Care Emergency Programs. Retrieved June 5, 2012 from http://jerconsultingllc.com/US_Pet_Population_Estimates_2-2010.pdf
- Fitzgerald, A. J., Kalof, L., & Dietz, T. (2009). Slaughterhouses and increased crime rates: An empirical analysis of the spillover from "The Jungle" into the surrounding community. *Organization and Environment*, 22(2), 158-184.
- Flynn, C. P. (2012). *Understanding animal abuse: A sociological analysis*. Brooklyn, NY: Lantern Books.
- Franklin, A., Emmison, M., Haraway, D., & Travers, M. (2007). Investigating the therapeutic benefits of companion animals: Problems and challenges. *Qualitative Sociology Review*, 3(1), 42-58.
- Garrity, T., & Stallones, L. (1998). Effects of pet contact on human well-being. In C. C. Wilson & D. C. Turner (Eds.), *Companion animals in human health* (pp. 3-22). Thousand Oaks, CA: Sage Publications.
- Grier, K. C. (2006). *Pets in America: A history*. Chapel Hill: University of North Carolina Press.
- Gullone, E. (2012). *Animal cruelty, antisocial behavior and aggression: More than a link*. New York: Palgrave Macmillan.
- Hanifan, L. J. (1916). The rural school community center. *Annals of the American Academy of Political and Social Science*, 67, 130-138.
- Hart, L. A. (2006). Community context and psychosocial benefits of animal companionship. In A. H. Fine (Ed.), *Handbook of animal-assisted therapy: Theoretical foundations and guidelines for practice* (2nd ed., pp. 73-94). San Diego, CA: Academic Press.
- Hughes, G., Maher, J., & Lawson, C. (2011, April). *Research project report: Status dogs, young people and criminalization: Towards a preventative strategy*. Horsham, UK: Royal Society for the Prevention of Cruelty to Animals.

- Hurn, S. (2012). *Humans and other animals: Cross-cultural perspectives on human-animal interactions*. London, UK: Pluto Press.
- Irvine, L. (2013). *My dog always eats first: Homeless people and their animals*. Boulder, CO: Lynne Rienner Publishers.
- Jacobs, J. (1961). *The death and life of great American cities*. New York: Random House.
- Jalongo, M. R. (2004). *The world's children and their companion animals: Developmental and educational significance of the child/pet bond*. Olney, MD: Association for Childhood Education International.
- Jaramillo, A. (2010, January/February). Bloodsports: History and growth. *NACA News*, 11-30.
- Kellert, S. R. (1989). Perceptions of animals in America. In R. J. Hoage (Ed.), *Perceptions of animals in American culture* (pp. 5-24). Washington, DC: Smithsonian Institution Press.
- Kellert, S. R., & Wilson, E. O. (Eds.). (1993). *The biophilia hypothesis*. Washington, DC: Island Press.
- Kruger, K. A., & Serpell, J. A. (2006). Animal-assisted interventions in mental health: Definitions and theoretical foundations. In A. H. Fine (Ed.), *Handbook of animal-assisted therapy: Theoretical foundations and guidelines for practice* (2nd ed., pp. 21-38). San Diego, CA: Academic Press.
- Larson, D. W. (Ed.). (2000). *National animal control association training guide*. Olathe, KS: National Animal Control Association.
- Levinthal, J. (2010). The community context of animal and human maltreatment: Is there a relationship between animal maltreatment and human maltreatment: Does neighborhood context matter? Philadelphia, PA: *Publicly accessible Penn Dissertations*, Paper 274. Retrieved from <http://repository.upenn.edu/edissertations/274>
- Lockwood, R. (2008). Counting cruelty: Challenges and opportunities in assessing animal abuse and neglect in America. In F. R. Ascione (Ed.), *The international handbook of animal abuse and cruelty: Theory, research and application* (pp. 87-109). West Lafayette, IN: Purdue University Press.
- Louv, R. (2006). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, NC: Algonquin Books.
- Maddie's Fund (2004). *The Asilomar accords*. Retrieved June 21, 2012 from www.maddiesfund.org
- Marx, M. B., Stallones, L., Garrity, T. F., & Johnson, T. P. (1988). Demographics of pet ownership among U.S. adults 21 to 64 years of age. *Anthrozoös*, 2(1), 33-37.
- Mayor's Anti-Animal Abuse Advisory Commission (2012, Mar. 15). *2011 Report of the Mayor's Anti-Animal Abuse Advisory Commission*. Baltimore, MD: Author.
- McNicholas, J., Gilbey, A., Rennie, A., Ahmedzai, S., Dono, J.-A., & Ormerod, E. (2005). Pet ownership and human health: A brief review of evidence and issues. *BMJ*, 331, 1252-1254.
- Melson, G. F. (2001). *Why the wild things are: Animals in the lives of children*. Cambridge, MA: Harvard University Press.

- Melson, G. F., & Fine, A. H. (2006). Animals in the lives of children. In A. H. Fine (Ed.), *Handbook of animal-assisted therapy: Theoretical foundations and guidelines for practice* (2nd ed., pp. 207-226). San Diego, CA: Academic Press.
- Merz-Perez, L., & Heide, K. M. (2004). *Animal cruelty: Pathway to violence against people*. Walnut Creek, CA: AltaMira Press.
- Messent, P. (1983). Social facilitation of contact with other people by pet dogs. In A. H. Katcher, & A. M. Beck (Eds.), *New perspectives on our lives with companion animals* (pp. 37-46). Philadelphia, PA: University of Pennsylvania Press.
- Ory, M. G., & Goldberg, E. L. (1983). Pet possession and life satisfaction in elderly women. In A. H. Katcher & A. M. Beck (Eds.), *New perspectives on our lives with companion animals* (pp. 303-317). Philadelphia, PA: University of Pennsylvania Press.
- Petfood Industry (2011). Market report: Growth in US pet ownership slows with economy. *Petfood Industry*, 53(6), 40-41.
- PetLynx (2011). *2010 national urban animal report*. Edmonton, AB, Canada: Author.
- Pew Research Center (2006). *Gauging family intimacy: Dogs edge cats (dads trail both)*. Washington, DC: Author.
- Population Reference Bureau (2010). *2010 world population data sheet*. Retrieved June 7, 2012 from <http://www.nationsonline.org/oneworld/europe.htm>
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*. Cambridge, MA: Harvard University Press.
- Risley-Curtiss, C., Holley, L. C., & Kодиene, S. (2011). "They're there for you": Men's relationships with companion animals. *Families in Society*, 92(4), 1-7.
- Risley-Curtiss, C., Holley, L. C., & Wolf, S. (2006). The animal-human bond and ethnic diversity. *Social Work*, 51, 257-268.
- Ritvo, H. (1987). *The animal estate: The English and other creatures in the Victorian age*. Cambridge, MA: Harvard University Press.
- Roguski, M. (2012). *Pets as pawns: The co-existence of animal cruelty and family violence*. Auckland: Royal New Zealand Society for the Prevention of Cruelty to Animals.
- Rowan, A. N. (1988). *Animals and people sharing the world*. Hanover, NH: University Press of New England.
- Serpell, J. A. (1996). *In the company of animals: A study of human-animal relationships*. Cambridge, UK: Cambridge University Press.
- Serpell, J. A. (2010). Animal-assisted interventions in historical perspective. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (3rd ed., pp. 17-32). San Diego, CA: Academic Press.
- Siegel, J. M. (1995). Pet ownership and the importance of pets among adolescents. *Anthrozoös*, 8(4), 217-223.
- Signal, T. D., & Taylor, N. (2006). Attitudes to animals in the animal protection community compared to a normative community sample. *Society and Animals*, 14(3), 265-274.

- Taylor, N. (2007). "Never an it": Intersubjectivity and the creation of animal personhood in animal shelters. *Qualitative Sociology Review*, 3(1), 59-73
- Widom, C. S. (1989). Does violence beget violence? A critical examination of the literature. *Psychological Bulletin*, 106(1), 3-28.
- Winston-Salem Foundation (2005). *Strategies for building social capital: Lessons from the Winston-Salem foundation's ECHO fund*. Winston-Salem, NC: Author.
- Wood, L. (2009). *Living well together: How companion animals can help strengthen social fabric*. Perth: Petcare Information & Advisory Service and the Centre for the Built Environment and Health (School of Population Health), University of Western Australia.
- Wood, L., Giles-Corti, B., Bulsara, M. K., & Bosch, D. A. (2007). More than a furry companion: The ripple effect of companion animals on neighborhood interactions and sense of community. *Society and Animals*, 15(1), 43-56.
- Wood, L., Giles-Corti, B., & Bulsara, M. K., (2005). The pet connection: Pets as a conduit for social capital? *Social Science & Medicine*, 61, 1159-1173.
- Zilney, L. A. (2007). *Linking animal cruelty and family violence*. Youngstown, NY: Cambria Press.