

SHORT COMMUNICATION

Assessment of health and welfare in a small sample of dogs owned by people who are homeless

Louise Scanlon¹ | Pru Hobson-West^{1,2}  | Kate Cobb¹ | Anne McBride³ | Jenny Stavisky¹ 

¹ School of Veterinary Medicine and Science, University of Nottingham, Nottingham, UK

² School of Sociology and Social Policy, University of Nottingham, Nottingham, UK

³ School of Psychology, University of Southampton, Southampton, UK

Correspondence

Jenny Stavisky, Vetpartners, Spitfire House, Aviator Court, YO30 4GY, York, UK.
Email: jenny.stavisky@vetpartners.co.uk

Funding information

Dogs Trust; University of Nottingham School of Veterinary Medicine and Science

Abstract

Background: Pet ownership is common among homeless people, with dogs the most frequently reported pets. However, homeless people receive considerable criticism for keeping pets due to public perception of poor care provision.

Materials and methods: A convenience, cross-sectional sample of 19 homeless people, owning a total of 21 dogs were recruited, and their dogs' health and wellbeing assessed using the PDSA Petwise MOT (P-MOT).

Results: The dogs compared favourably with conventionally owned pets in most areas, including exercise and companionship. Problems included being overweight/obese (although at lower prevalence than the general population). Some owners had difficulty in accessing veterinary care. Behavioural concerns were reported for 61.9% of the dogs, most commonly separation-related distress.

Discussion: Being unable to safely leave their pets may impair owners' access to services. Provision of accessible veterinary care, behavioural support and pet-friendly services could improve the health of homeless owners and their pets.

BACKGROUND

Pet ownership by homeless people is a topic of increasing relevance to the veterinary profession. In the United Kingdom in 2018, approximately 320,000 people (0.5% of the population) were recorded as homeless.¹ This figure will likely rise as the economic impacts of the COVID-19 pandemic, the disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV2), and Brexit are felt.² Although the UK prevalence of pet ownership is unknown, estimates from elsewhere suggest that around 10% of homeless people own pets, mainly dogs,^{3,4} although in some populations prevalence may be as high as 25%.⁵

Pet ownership by homeless people has been associated with reduced loneliness and social isolation,^{6–8} improved mental health and coping skills,⁹ and contribution to a positive self-concept.^{10,11} Pets have been described as a stimulus for self-care and addiction recovery.¹² However, owning a pet when homeless presents a significant barrier accessing services

including housing and medical care.^{4,8,13} There is growing recognition that providing care for these pets and making homelessness services accessible to pet owners, represents a necessary, humane and cost-effective One Welfare approach to intervention for this vulnerable and hard-to-reach population.^{4,11,14}

Williams and Hogg¹⁵ interviewed 50 homeless and 50 conventional pet owners in Cambridge. They found the homeless-owned pets' welfare compared favourably in aspects such as exercise, behaviour and health. However, further research is limited. This may partly be because measuring overall welfare, wellbeing and quality of life in dogs is challenging. Current assessment tools are generally optimised for use in shelters, for specific veterinary conditions or short-term situations.^{16–19} In contrast, the PDSA Petwise MOT (P-MOT) tool was developed to capture a broad range of baseline data, corresponding to physical, mental and social wellbeing of animals visiting the clinic.²⁰ This is divided into five areas, corresponding to the Five Welfare Needs (environment, diet, behaviour, companionship and health).

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2021 The Authors. *Veterinary Record* published by John Wiley & Sons Ltd on behalf of British Veterinary Association

TABLE 1 Petwise MOT categories of dogs ($n = 21$) examined within the study

	Environment <i>n</i> (%)	Diet <i>n</i> (%)	Behaviour <i>n</i> (%)	Companionship <i>n</i> (%)	Health <i>n</i> (%)
Green	20 (95.2)	5 (23.8)	8 (38.1)	21 (100)	7 (33.3)
Amber	1 (4.8)	13 (61.9)	13 (61.9)	0	7 (33.3)
Red	0	3 (14.3)	0	0	7 (33.3)

Objective measurement of the welfare of pets owned by homeless people will allow accurate targeting of interventions, and potentially reduce stigma based on stereotyped assumptions around their care. The aim of this study was to assess the welfare of dogs owned by homeless people, using the PDSA P-MOT.

METHODS

Homeless dog owners were recruited via a variety of homeless service providers of food, accommodation, advice or veterinary care, and by direct approach of potential participants on the street. Participants consented to participate and were interviewed, as previously described, as part of a wider study where homeless dog owners discussed their relationships with their animals and the impacts dog ownership had had on their lives.¹¹ Inclusion criteria stipulated that participants were dog owners who were homeless or vulnerably housed at the time of the interview, or who had previously experienced homelessness with their dog. Each dog was assessed, using the combination of physical examination and questionnaire, which makes up the P-MOT. The P-MOT is a semi-structured consultation guide designed to assess routine health and wellbeing of pets. It uses a traffic light system for scoring current health and welfare status for the five welfare needs: diet, behaviour, companionship, environment and health. Responses were then categorised using the P-MOT predefined specifications into 'Green' (good), 'Amber' (requires attention) or 'Red' (a serious or urgent problem). This was successfully piloted on five homeless owned dogs, before being carried out on dogs belonging to owners recruited around the United Kingdom. The researcher was a veterinary student trained in the use of P-MOT (LS). Responses and clinical findings were recorded using the P-MOT booklet, and later transcribed to a spreadsheet (Microsoft Excel, Microsoft Office 2019, Version 16.23) for descriptive analysis including percentages in each category.

This study was approved by the ethics committee at the School of Veterinary Medicine and Science, University of Nottingham (proposal # 2168 171205).

RESULTS

Twenty-one dogs belonging to 19 participants took part in the Petwise MOT study.¹¹ Eighteen identified as homeless at the time of the interview, and one as vulnerably housed. Seventeen owners were male, and two

female. All owned a single dog, except one female who owned three dogs. Dogs' ages ranged from 10 months to 15 years (median 8 years).

The owners reported that all the dogs were exercised every day, for a median duration of 2 h daily, and a median of two walks. As shown in Table 1, most dogs scored highly in the Environment and Companionship aspects of the P-MOT. A single dog scored as amber for Environment as it was sleeping on a mattress in the street with its owner.

All dogs were reported as having access to fresh water (defined as always available and changed at least once daily). All those scoring red or amber in the Diet category were either overweight or obese, and/or fed scraps or treats. Body condition score (BCS) assessment showed that 12 dogs (57.1%) had a perfect score of 3/5, six dogs (28.6%) were overweight at 4/5, and three dogs (14.3%) were obese at 5/5. No dogs were underweight.

Almost two thirds of the dogs (13/21, 61.9%) were reported to have one or more behavioural problems. Most reported was separation-related distress, by owners of nine (42.9%) of the dogs. Next most common were dog to dog issues (five dogs, 23.8%), with two dogs (9.5%) reported to have the following: 'phobias', issues around people (one strangers; one men in general), and disliking loud noises. Other behavioural concerns mentioned, each for a single dog, included 'being territorial', 'generally nervous', and 'barking at motorcycles'.

All dogs scored green for Companionship. Most owners reported the dogs were rarely left alone for significant periods. Two dogs were occasionally left for up to 4 h. The remaining dogs were left alone for no more than 1–2 h, with one owner reporting a maximum of 20 min, and five owners reporting that their dogs were never left alone.

Dogs were evenly split across scores in the Health category. Of the seven dogs scoring red, five were not neutered (with no owner plans to change this), three had not been vaccinated, two had not recently been dewormed and one not recently flea-treated. One had a health condition under treatment, and two had a health condition not currently under treatment. Of the seven dogs scoring amber, six were not neutered (but the owner reported planning to get them neutered), and five had a health condition under treatment.

DISCUSSION

This study found all the dogs to be in generally good overall health as measured by the P-MOT, which

broadly agrees with previous findings.¹⁵ This contrasts with the self-reported experiences of homeless people, who describe receiving abuse related to a perceived inability to adequately care for their pets.¹¹

In particular, the dogs had high levels of exercise, especially when contrasted with recent data showing 42% of UK dogs were walked for less than 30 min per day, and 13% did not receive daily exercise.²¹

Although prevalence of being overweight (28.6%) and obese (14.3%) were relatively high, it compared favourably to that of conventionally owned pets, where reported estimates of overweight and obesity are 33.5%–65% and 5.1%–40.9%, respectively.^{22–25}

Many of the dogs had at least some health interventions, in the form of preventive procedures such as neutering, booster vaccination or treatment for health conditions. Eighteen dogs (85.7%) had been vaccinated, 19 (90.5%) dewormed and 20 (95.2%) regularly flea-treated, which compares positively with (pre-pandemic) rates in conventionally owned dogs, reported by owners as 78%, 87% and 80%, respectively.²⁶ Only two of the dogs were reported as having untreated health conditions; data were not captured as to the reasons. However, provision of accessible veterinary care is a key opportunity for positive welfare interventions for this population,¹⁵ and the growth in services catering to homeless pet owners is to be welcomed.

The main negative issue identified in the present study was behaviour problems, in particular separation-related distress. This contrasts with the findings of Williams and Hogg's study examining the pets of homeless people in Cambridge, where the authors commented on a lack of behavioural issues identified, but noted that the owners involved may have under-reported behavioural issues.¹⁵ Thus, this discrepancy between the two studies may represent a slightly different method of assessment or some unknown factors. If owners are unable to leave dogs safely due to behavioural concerns, this may directly impact their owners' health, by reducing access to services including healthcare and substance use treatment.^{11,13,27}

The current study is limited by its small sample size and convenience sampling. Recruitment was challenging and time-consuming. This resulted in the relatively small sample, which was unlikely to be fully representative of the overall homeless population. These participants represented those already accessing services, including veterinary care. These persons may be more aware, more motivated and or more able to address issues of their own and their dog's care than other homeless owners. Future research should allow additional time for recruitment from a wider population, as well as collection of data on duration of the owner's homelessness and when pets were obtained, as time spent homeless may affect the health status of both parties. Further exploration of owner experiences of their dog's behaviour when left, with friends or less familiar persons, will inform future strategies for service providers to facilitate access

for these users. Most participants were classified as homeless or vulnerably housed but were not rough sleeping when assessed, which may have affected findings. As two veterinary services for homeless people were involved with recruitment, participants likely had more access to veterinary care than would usually be the case. While selected due to its simplicity and the presence of comparator data, the P-MOT has some limitations in this context. For example, where dogs were rough sleeping with their owners, they would automatically score poorly for Environment, whereas a more tailored assessment may have resulted in a different judgement. Additionally, whereas routine neutering of pets is a common recommendation, there are important risks to this procedure and failure to neuter is not therefore automatically a negative feature.^{28,29} Finally, failure to routinely use endoparasite and ectoparasite prophylaxis would be classified as Red by the P-MOT. However, the issue of routine parasite prophylaxis has prompted veterinary debate, reflecting concerns over resistance and environmental contamination.^{30,31} Therefore, scoring failure to treat as a marker for poor care may not be strictly accurate. However, the physical proximity often seen between homeless owners and their pets could be argued to emphasise the need for preventive healthcare in this population, especially given the zoonotic potential of many endoparasites and ectoparasites.^{32,33}

In conclusion, this study has shown that in contrast with common public perception, the health of homeless people's dogs compares favourably with the general population. Increasing awareness of the typically positive welfare of these animals may help to reduce the stigma experienced by homeless people who own pets. Provision of accessible veterinary care is likely to be helpful in maintaining the health of both dogs and owners. Those working with this unique and vulnerable population need to be mindful of behavioural issues, especially in separation-related contexts.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHOR CONTRIBUTION

JS and LS devised the project. LS carried out data collection with supervisory support from JS, PHW, AMcB and KC. All authors discussed the results and contributed to the final manuscript.


ETHICS STATEMENT


This study was approved by the ethics committee at the School of Veterinary Medicine and Science, University of Nottingham (proposal # 2168 171205).

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in Mendeley Data (<https://data.mendeley.com/datasets/w2m2yktpyb/1>).

ORCID

Pru Hobson-West  <https://orcid.org/0000-0001-6105-0747>

Jenny Stavisky  <https://orcid.org/0000-0002-1220-5690>

REFERENCES

- Reynolds L. Homelessness in Great Britain – the numbers behind the story. Shelter; 2018.
- Stavisky J, Hobson-West P. 'My dog is my home' – the need for pet-friendly accommodation for homeless people [Internet]. The Conversation; 2020 [cited 2021 Feb 3]. Available from: <https://theconversation.com/my-dog-is-my-home-the-need-for-pet-friendly-accommodation-for-homeless-people-140975>
- Henwood B, Dzubur E, Rhoades H, St Clair P, Cox R. Pet ownership in the unsheltered homeless population in Los Angeles. *J Soc Distress Homeless*. 2020;1–4. <https://doi.org/10.1080/10530789.2020.1795791>
- Kerman N, Lem M, Witte M, Kim C, Rhoades H. A multilevel intervention framework for supporting people experiencing homelessness with pets. *Animals*. 2020;10:1869.
- Kidd AH, Kidd RM. Benefits and liabilities of pets for the homeless. *Psychol Rep*. 1994;74:715–22.
- Labreque J, Walsh CA. Homeless women's voices on incorporating companion animals into shelter services. *Anthrozoos*. 2011;24:79–95.
- Rew L. Friends and pets as companions: strategies for coping with loneliness among homeless youth. *J Child Adolesc Psychiatr Nurs*. 2000;13:125–32.
- Cleary M, West S, Visentin D, Phipps M, Westman M, Vesik K, et al. The unbreakable bond: the mental health benefits and challenges of pet ownership for people experiencing homelessness. *Issues Ment Health Nurs*. 2021;42:741–6.
- Bender K, Thompson SJ, Mcmanus H, Lantry J, Flynn PM. Capacity for survival: exploring strengths of homeless street youth. *Child Youth Care Forum*. 2007;36:25–42.
- Irvine L, Kahl KN, Smith JM. Confrontations and donations: encounters between homeless pet owners and the public. *Sociol Q*. 2012;53:25–43.
- Scanlon L, Hobson-West P, McBride EA, Cobb K, Stavisky J. Homeless people and their dogs: exploring the nature and impact of the human-companion animal bond. *Anthrozoos*. 2020;34:77–92.
- Irvine L. Animals as lifechangers and lifesavers: pets in the redemption narratives of homeless people. *J Contemp Ethnogr*. 2013;42:3–30.
- Taylor H, Williams P, Gray D. Homelessness and dog ownership: an investigation into animal empathy, attachment, crime, drug use, health and public opinion. *Anthrozoos*. 2004;17:353–68.
- Pinillos RG, Appleby MC, Manteca X, Scott-Park F, Smith C, Velarde A. One Welfare – a platform for improving human and animal welfare. *Vet Rec*. 2016;179:412–3.
- Williams D, Hogg S. The health and welfare of dogs belonging to homeless people. *Pet Behav Sci*. 2015. <http://doi.org/10.21071/pbs.v0i1.3998>
- Righi C, Menchetti L, Orlandi R, Moscati L, Mancini S, Diverio S. Welfare assessment in shelter dogs by using physiological and immunological parameters. *Animals*. 2019;9:340.
- Dawson LC, Dewey CE, Stone EA, Guerin MT, Niel L. Evaluation of a canine and feline behavioural welfare assessment tool for use in companion animal veterinary practice. *Appl Anim Behav Sci*. 2018;201:67–76.
- Packer RM, Volk HA. Epilepsy beyond seizures: a review of the impact of epilepsy and its comorbidities on health-related quality of life in dogs. *Vet Rec*. 2015;177:306–15.
- Belshaw Z, Asher L, Harvey ND, Dean RS. Quality of life assessment in domestic dogs: an evidence-based rapid review. *Vet J*. 2015;206:203–12.
- Wensley S, Betton V, Martin N, Tipton E. Advancing animal welfare and ethics in veterinary practice through a national pet wellbeing task force, practice-based champions and clinical audit. *Vet Rec*. 2020;187:316.
- PDSA. PDSA Animal Wellbeing (PAW) Report [Internet]. UK: PDSA; 2020 [cited 2021 Apr 19]. Available from: <https://www.pdsa.org.uk/get-involved/our-campaigns/pdsa-animal-wellbeing-report>
- German AJ, Woods GRT, Holden SL, Brennan L, Burke C. Dangerous trends in pet obesity. *Vet Rec*. 2018;182:25.
- Montoya-Alonso JA, Bautista-Castaño I, Peña C, Suárez L, Juste MC, Tvarijonaviciute A. Prevalence of canine obesity, obesity-related metabolic dysfunction, and relationship with owner obesity in an obesogenic region of Spain. *Front Vet Sci*. 2017;4:59.
- Lund E, Armstrong J, Kirk C, Klausner JS. Prevalence and risk factors for obesity in adult dogs from private US veterinary practices. *Int J Appl Res Vet Med*. 2006;4:177–86.
- Mcgreevy PD, Thomson PC, Pride C, Fawcett A, Grassi T, Jones B. Prevalence of obesity in dogs examined by Australian veterinary practices and the risk factors involved. *Vet Rec*. 2005;156:695–702.
- PDSA. PDSA Animal Wellbeing (PAW) Report [Internet]. UK: PDSA; 2019 [cited 2021 Apr 19]. Available from: https://www.pdsa.org.uk/media/7420/2019-paw-report_downloadable.pdf
- Howe L, Easterbrook MJ. The perceived costs and benefits of pet ownership for homeless people in the UK: practical costs, psychological benefits and vulnerability. *J Poverty*. 2018;22:486–99.
- Hart BL, Hart LA, Thigpen AP, Willits NH. Assisting decision-making on age of neutering for 35 breeds of dogs: associated joint disorders, cancers, and urinary incontinence. *Front Vet Sci*. 2020;7. <https://doi.org/10.3389/fvets.2020.00388>
- Mckenzie B. Evaluating the benefits and risks of neutering dogs and cats. *CAB Rev*. 2010;5:1–18.
- Loeb J. What counts as responsible use of 'spot ons'? *Vet Rec*. 2020;187:423.
- Perkins R, Whitehead M, Civil W, Goulson D. Potential role of veterinary flea products in widespread pesticide contamination of English rivers. *Sci Total Environ*. 2021;755:143560.
- Eisen RJ, Gage KL. Transmission of flea-borne zoonotic agents. *Annu Rev Entomol*. 2012;57:61–82.
- Macpherson CN. The epidemiology and public health importance of toxocarasis: a zoonosis of global importance. *Int J Parasitol*. 2013;43:999–1008.

How to cite this article: Scanlon L, Hobson-West P, Cobb K, McBride A, Stavisky J. Assessment of health and welfare in a small sample of dogs owned by people who are homeless. *Vet Rec*. 2021;e776. <https://doi.org/10.1002/vetr.776>