

2022

## “Why should the fish feel safe? I don’t feel safe!”: An Audit of Pet Ownership within an NHS Service for Adults with Severe Mental Illness, with Lessons for Service Improvement

Abigail Alfrey

King's College London, Institute of Psychiatry, [abigail.alfrey1@nhs.net](mailto:abigail.alfrey1@nhs.net)

Steve Church

King's College London, Institute of Psychiatry, [Steve.Church@slam.nhs.uk](mailto:Steve.Church@slam.nhs.uk)

Niki Christodoulou

King's College London, Institute of Psychiatry, [niki.christodoulou94@gmail.com](mailto:niki.christodoulou94@gmail.com)

*See next page for additional authors*

Follow this and additional works at: <https://docs.lib.purdue.edu/pajj>



Part of the [Mental and Social Health Commons](#)

---

### Recommended Citation

Alfrey, Abigail; Church, Steve; Christodoulou, Niki; and Harding, Emma (2022) "“Why should the fish feel safe? I don’t feel safe!”: An Audit of Pet Ownership within an NHS Service for Adults with Severe Mental Illness, with Lessons for Service Improvement," *People and Animals: The International Journal of Research and Practice*: Vol. 5 : Iss. 1, Article 2.

Available at: <https://docs.lib.purdue.edu/pajj/vol5/iss1/2>

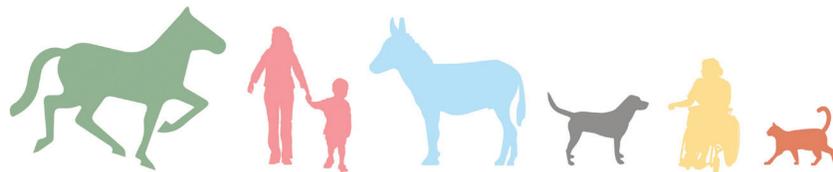
This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact [epubs@purdue.edu](mailto:epubs@purdue.edu) for additional information.

---

**“Why should the fish feel safe? I don’t feel safe!”: An Audit of Pet Ownership within an NHS Service for Adults with Severe Mental Illness, with Lessons for Service Improvement**

**Authors**

Abigail Alfrey, Steve Church, Niki Christodoulou, and Emma Harding



## "Why should the fish feel safe? I don't feel safe!": An Audit of Pet Ownership within an NHS Service for Adults with Severe Mental Illness, with Lessons for Service Improvement

*Abigail Alfrey,<sup>1</sup> Steve Church,<sup>1</sup> Niki Christodoulou,<sup>1</sup> Emma Harding<sup>2</sup>*

**Keywords:** pets, animals, SMI, psychosis, service improvement

**Abstract:** Background—Several studies have identified that pets can promote mental health, wellness, and recovery. However, little is known about the impact of pet ownership upon those with a severe mental illness (SMI), or whether mental health services are offering sufficient support that is specific to the needs of pet-owning service users.

Aims—To identify the proportion of pet owners among an urban, U.K.-based community psychosis service; and to elicit service users' views on pet ownership, to better understand and support this population's particular needs.

Method—The proportion of pet owners among this sample ( $n = 212$ ) was compared with U.K. population data using a z-test. Semistructured interviews were conducted with a volunteer subsample of service users ( $N = 11$ ), and interpretive phenomenological analysis (IPA) was used to explore their idiographic experiences of pet ownership.

Results—The proportion of people with SMI who own pets was significantly lower than the national average. IPA revealed that pet ownership in the context of SMI had both positive and negative influences upon mental health, notions of self and well-being, and social capital.

Conclusions—Pet ownership in the context of SMI is complex, and the associated benefits and challenges are best understood at a case-by-case level. Service providers should note that pet ownership can form an important part of service users' identities and should be actively considered when managing their care. For instance, pets can offer an engaging topic of conversation through which to develop positive, person-centered relationships with service users and can offer an accessible route into more difficult conversations surrounding care and crisis planning.

(1) King's College London, Institute of Psychiatry, (2) South London and Maudsley NHS Foundation Trust

## Introduction

The impact of animal ownership upon human health has been studied extensively among the general population (e.g., Levine et al., 2013; Wells, 2009; Williams, 2016), indicating that pet ownership offers prophylactic and therapeutic benefits. Associations have also been made between pet ownership and social capital (Brown et al., 2016; Wood et al., 2015), mental health (Brooks et al., 2016; Hodgson et al., 2015), and well-being (Bao & Schreer, 2016; Sable, 1995). Dogs, in particular, have been highlighted for the companionship they offer, their anxiolytic effect, their action as social catalysts, and the role they play in health-promoting behaviors through walking and playing (Wells, 2007).

Furthermore, pet ownership appears to be a cultural norm within many Western societies. For example, the *Pet Data Report* (Pet Food Manufacturers' Association, 2017) found that 44% of households in the United Kingdom own at least one pet, and the U.S.-based 2017–2018 APPA National Pet Owners Survey indicates more than two-thirds (68%) of U.S. households are pet owners. Importantly, Hall and colleagues (2016) estimate that pet ownership saves the U.K.'s National Health Service (NHS) almost £2.5 billion through reduced reliance on primary health care.

Notably, a small number of studies do challenge these results (Garrity et al., 1989; Gilbey & Tani, 2015), and some point to the drawbacks of pet ownership, such as reduced opportunities for spontaneity, the impact of bereavement, and the potential for the transmission of infectious diseases from animals to humans (see Hodgson et al., 2015); meriting further exploration of this area. In particular, it is unclear whether these trends in pet ownership and the purported benefits are representative of those with severe mental illness (SMI), as few have assessed the relationship between pet ownership and psychosis (cf. Brooks et al., 2016; Wisdom et al., 2009).

Intuitively, having an SMI may influence the impact of pet ownership; for instance, individuals suffering from low motivation or frequent hospitalization may feel the responsibility of pet ownership to be onerous. Conversely, there may be some unique benefits to pet ownership in this group. For example,

research suggests that companion animals can increase feelings of safety (Blouin, 2013), reduce feelings of isolation and loneliness (Sable, 1995), increase social engagement (Wood et al., 2015), and can be motivational in adherence to treatments (Herrald et al., 2002), as well as offering a sense of acceptance and understanding (Maharaj & Haney, 2015).

In short, little is known about how similar an SMI population is to the wider population in terms of pet ownership. This service audit was conducted to explore this question, first by identifying the proportion of pet owners among service users of a typical inner-city community mental health team (CMHT) to explore the demographics of pet ownership in SMI; and second, by elucidating the perceived advantages and disadvantages of pet ownership within this population so as to consider ways in which services can be improved to accommodate pet-owning service users' needs and preferences.

It is hoped that by speaking with service users about pets, staff can come to better understand whether this topic holds value and/or is of interest to them. If so, conversations on this topic may help service users to feel that health care professionals are interested in them as people, rather than simply "patients." Plausibly, this might impact their motivation to engage with health care professionals, thus improving their outcomes at both an individual and service level. Finally, if health care professionals know which service users own pets, they will be better equipped to offer support in response to the unique risk-benefit profiles that pet ownership entails (Hodgson et al., 2015), which is important for the welfare of both pet owners and the pets themselves.

## Methods

### Participants

The complete caseload<sup>1</sup> ( $n = 212$ ) of a CMHT for psychosis in London, United Kingdom, was audited to establish the proportion of pet owners.

An opportunity sample was used to gather interviews, and everyone who volunteered to take part was interviewed ( $n = 11$ ).

### Procedure

Audit data was collected via survey. Every person on the CMHT caseload was asked, “Do you own a pet?”; “Have you ever owned a pet?”; and “Would you like to own a pet?” Their answers were recorded on a MS Excel spreadsheet.

Interview questions were derived with reference to literature and in consultation with a service user advisor. Eleven volunteers (constituting just over 5% of the overall caseload) participated in semistructured interviews with one of the authors. Ten interviews were conducted face-to-face and were recorded and transcribed verbatim. One interviewee answered in written form.

### Data Analysis

A single-sample  $z$ -test was used to assess whether the proportion of pet owners compared to nonowners in this SMI population was significantly different from the national average.

Interview transcripts were analyzed using interpretive phenomenological analysis (IPA; Smith & Osborn, 2007) supported by the software NVivo 11. The authors each coded a portion of transcripts, and themes were compared for interrater reliability.

### Ethics

This project was conducted in full compliance with the NHS Trust’s policy and procedures. The authors

consulted the Research and Development team who considered the proposal to be a quality improvement project (rather than research), and it was approved as such by the relevant authorities within the Trust. All interviewees were volunteers, who gave written, capacitous, informed consent for their data to be used in the project. Participants’ and pets’ names were changed and identifying information omitted.

## Results

### Quantitative Survey

Of the caseload ( $n = 212$ ), 11% ( $n = 23$ ) were pet owners and 89% ( $n = 189$ ) were non-pet owners (Figure 1). A recent national survey ( $n \approx 8,000$ ) found that 44% of households own a pet (Pet Food Manufacturers’ Association, 2017). A single-sample  $z$ -test indicated that this difference was statistically significant ( $z = 9.68$ ,  $p < 0.001$ , 95% CI 7.13, 16.01).

### Qualitative Survey

Of the 11 ( $f = 8$ ,  $m = 3$ ) participants, seven were current pet owners, three were previous pet owners, and one had never owned a pet. Animal species owned or desired included cats, dogs, fish, and sheep.

Four master themes, supported by nine sub-themes, emerged from the transcripts (Table 1). These themes relate to the impact of pets on (1) mental health, (2) sense of self, (3) social capital, and (4) service improvement. Each theme is discussed

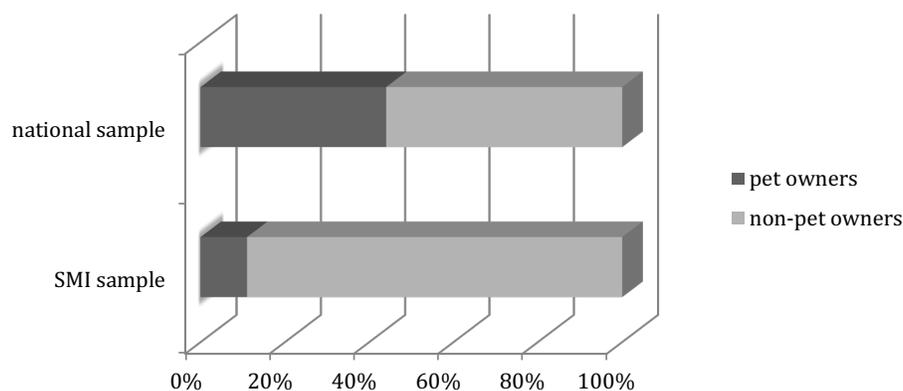


Figure 1. The proportion of pet owners in an SMI and national sample.

**Table 1.** Summary of Master Themes and Subthemes

Master Theme	Subtheme	Topics Addressed
1. Mental health	The benefits of pets on mental health	Feeling happier and more relaxed A source of distraction from distress and voices
	Coping with caregiving during illness	Feelings of guilt pertaining to illness Pets as a reason to persevere The off-putting nature of the caregiving burden
	Coping with pet illness and bereavement	Feeling powerless and distressed The importance of support Bereavement as a precipitant to mental health relapse
2. Self and well-being	Caregiving as an occupation	The impact of caregiving and guardianship Rising to the challenge of responsibility
	Comfort and companionship	Overcoming loneliness Sharing activities Entertainment, emotional support, and togetherness
3. Social wealth	Pets as social conduits	Connecting with friends and family via pets Breaking the ice with strangers
	The negative impact of pet ownership on social relationships	Experiencing behavioral concerns and loss of control Family attitudes
4. Service improvement	The role of mental health professionals	The importance of awareness Practical support Avoiding judgment and criticism
	The place for animals in mental health care environments	Normalizing mental health care environments Protecting pets from harm

below, with reference to, and examples from, the participants' accounts.

**(1) Mental Health**

*(1.1) The benefits of pets on mental health.* A prominent theme across participants' accounts was how pets confer direct benefits on mental health. Participant 9 explained how "stroking the animal and talking to it" brought relief from anxiety, making her "feel happier" and "less stressed." She added, "I used to love fish as well. Just watching them swim around. I found it very therapeutic." Participant 8 likewise linked pet ownership to his mental health. He reported that his dog offers acceptance and "can sense pain." He added, "He calms me down when I am

anxious" and "plays joyfully with me when I'm sad," indicating the mood-stabilizing effect of his pet.

Participants also reported that their pets helped them to cope with first-rank symptoms of psychosis. Participant 9 welcomed the distraction of pet ownership, for in her view, "You're looking after something else, other than worrying about yourself constantly." Similarly, Participant 2 recounted how "when I went to the sheep the voices get away." As ex-cat owner Participant 3 summarized, "I've been missing him more again recently 'cause I haven't been well and it would be quite comforting to have a cat to stroke and look after."

*(1.2) Coping with caregiving during illness.* Despite the benefits of pet ownership, a number of participants

discussed how the responsibility of ownership could be burdensome. Participant 10 explained how “sometimes it takes longer to clean his litter tray [. . .] when I have down times [. . .] and then I feel bad, because I think it’s not really fair on him,” indicating the guilt associated with her illness. Participant 3 echoed these feelings in the context of hospitalization. She reflected, “Luckily I had really nice neighbors downstairs and they went up to feed him twice a day and played with him [. . .] but I felt quite guilty at leaving him. I know that wasn’t my fault.”

Participant 9 indicated that her experience of SMI has made her unsure whether to get another pet. As she explained, “I do get [. . .] bad days, and I’d think to myself, oh the dog’s got to be fed”; yet “on the other hand it gives you [. . .] a purpose to get up and do something.” Participant 6 likewise struggled to weigh up the cost-benefit relationship of pet ownership, stating, “They are like one of the family and you get so much love from them; but then [. . .] if you become mentally unwell and you need to be hospitalized, what will happen to the dog?” These accounts indicate how, despite recognizing the potential benefits of pet ownership, the onus of responsibility can be particularly difficult in the context of chronic illness.

*(1.3) Coping with pet illness and bereavement.* Pet bereavement was discussed as a particularly difficult life event. Participant 3 described how her cat “went off his food in the last six months, [which] was quite traumatic because [. . .] nothing would work,” indicating her feelings of powerlessness and distress. She spoke of gratitude at having support when her cat subsequently died:

It was awful. [. . .] Luckily I hadn’t been into the sitting room by myself. [. . .] My carer came and we went into the sitting room and found him dead on the floor.

Participant 9 spoke further about the emotional impact of pet loss, stating:

Oh my goodness did we cry that day. And I was saying, “I’m crying over a cat, what’s the matter?”

but you’re so used to seeing that animal, constantly, then for it to be gone, [. . .] it’s bereavement. It’s grief, proper grief.

Subsequently, she “went down, depressed” and “felt useless,” indicating the direct impact of this event on her mental health.

## *(2) Sense of Self and Well-being*

*(2.1) Caregiving as an occupation.* Most participants described a strong bond with their pet, akin to that of a close friend or family member. Participant 8 stated, “I love [my dog] like my only son, [. . .] keeping him alive and happy and making him safe on the city streets.” Participant 1 agreed, stating, “I guess it’s like my baby.” She added, “[It’s] something to play with. Something to take care of.” For many, this caregiving responsibility was spoken of as a source of great pride and achievement. For example, cat-owning Participant 4 stated, “I was ready for [the responsibility]. I did not collapse. [. . .] I cope in challenges!”

For Participant 6, one such challenge was nursing her cat through a period of ill health. This was “a good feeling,” for “much as it made me feel sad that he was poorly, it was good that we could treat him and make him well,” indicating the feelings of satisfaction and empowerment she gained from caregiving during what was otherwise a very unpleasant time. Together, these perspectives indicate the role pet ownership can play in developing owners’ sense of purpose, self-efficacy, and resilience.

*(2.2) Comfort and companionship.* Most participants spoke of their pets as their primary source of company. Participant 10 explained how “I don’t feel as desperate as I was before about getting married [. . . because] a big percentage of it was about companionship.” Similarly, Participant 11 spoke of her comfort knowing that “when I come home and nobody is here [. . . the cat] is expecting me.” Ex-cat owner Participant 3 echoed these sentiments, stating, “I miss coming home and [. . .] the cat coming to greet you and purring and wanting to be stroked. [. . .] Because it was just me and the cat, you know?”

Most of the participants also spoke of their pet as fulfilling many roles typical of a human companion. Participant 4 spoke of how she and her cat “listen to music a lot,” and Participant 7 stated, “Every day [. . .] when I drive in car I take [my dog] with me.” Similarly, pets provided emotional support. Participant 4 spoke of being bullied, and how her cat “helped me by being there. [. . .] We stick together! We do not like bullies!” Relatedly, non-pet owner Participant 5 discussed his hopes that a dog would become “a friend, company.” He described how “we could eat together, play together,” and “watch TV” together, again underscoring the essential importance of companionship in pet ownership. These accounts demonstrate the substantial impact of pet ownership on feelings of loneliness and social support, which are often pivotal in SMI.

### (3) Social Wealth/Social Capital

*(3.1) Pets as social conduits.* For several participants, pets offered a good talking point for friends and family. Participant 3 shared that her family “always wanted to hear stories of how [the cats] were getting on, and if they’d done anything particularly entertaining.” Similarly, Participant 10 commented, “I do have people come around a lot, and I find that people want to come around more because of [him].”

For many, pets were also reported to be a way of meeting new people. For instance, Participant 3 reported:

[My neighbor] did look after [the cats] when I was away at times and I’d regard him as a good friend, and I still see him once a week for coffee. And the people who were living downstairs who looked after [the cat] while I was in hospital, I’ve stayed friendly with them although they’ve moved away.

This demonstrates that pets can provide opportunities to meet new people and develop new friendships, as well as sustaining existing relationships. Participant 4 echoed this, commenting, “Once you get a cat there is whole world of cat lovers out there! I can see

that with my neighbors. And it breaks the ice with other people.”

*(3.2) The negative impact of pet ownership on social relationships.* Despite their many benefits, several participants spoke of pets as presenting social difficulties, particularly in the context of behavioral concerns. For instance, Participant 9 recounted that she had “quite an aggressive dog [. . .] so we used to have to muzzle him.” She added that “with the family he was brilliant,” but that “sometimes it was a bit too much” when out in public. Similarly, several cat owners spoke of their cats scratching and biting, which negatively impacted people’s reaction to them. For example, cat owner Participant 11 remarked, “My partner doesn’t like him. Neither do my family. But I do love [him] so that’s why I keep him.” These accounts demonstrate some of the ways in which pets can have a negative impact on social relationships.

### (4) Service Improvement

*(4.1) The role of mental health professionals.* Many service users felt that staff could help them to cope with difficult times. Participant 3 explained the importance of “just being aware of when you do have a pet” and giving “a bit of reassurance [. . .] that it’s not your fault you’re not able to look after your pet at such and such a time.” Similarly, Participant 10 spoke of how services could help owners “come to terms with [bereavement]. And talk about it,” demonstrating the heightened need for emotional support at this time. Others spoke of desiring practical help. For Participant 9, this related to the complicated paperwork required by housing authorities, and Participant 2 hoped that services could provide information on “how to find [a pet], and the sort of things I need to understand to look after it.”

However, mental health professionals were not always seen as a source of support when it came to pet ownership. Participant 3 discussed a time when her friend was unwell, and mental health professionals raised concerns regarding her pet’s welfare. She explained how “she thought [. . .] that she was being criticized for not looking after her cat well enough,”

which Participant 3 felt was a “very negative way of dealing with people’s pets,” as it introduced feelings of judgment and shame. As such, staff might be considered critical or invasive when it comes to pet care, which, if not handled carefully, could have negative implications for the owners’ self-esteem.

*(4.2) The place for animals in mental health care environments.* Many participants indicated that animals could help normalize health care environments. For instance, Participant 6 felt that pets in mental health settings could “make people feel more at ease.” Participant 9 concurred, recounting how “the place [ . . . ] where I used to go [ . . . ] had a big fish tank. And that passed the time because you’re sitting watching the fish.” She added, “It was very soothing [and] I think it helps with conversations as well.”

Relatedly, Participant 3 felt that a social group with a focus on pets might present opportunities to meet like-minded people. As she explained, “The lady I was talking to outside, [ . . . ] we really got talking [ . . . ] years ago, ’cause we found out we both had cats. [ . . . ] I suppose that’s another example of it being an ice-breaker.” These views indicate the various benefits service users perceive in integrating animals into mental health care environments.

However, many participants were concerned about how the volatility of some CMHT service users might frighten or endanger an animal. As Participant 11 explained, “People are very temperamental so I don’t know if it makes me okay with the idea of having a pet there”; and Participant 4 questioned, “Why should the fish feel safe? I don’t feel safe!” Poignantly, these views converge to suggest that despite believing that they would derive social and emotional benefits from having pets in the CMHT building, in practice service users would be hesitant to subject an animal to such a highly charged environment.

## Discussion

### Findings

The SMI population sampled had significantly fewer pets than the national average. A number of factors

may have contributed to this result, and it was beyond the scope of this audit to disentangle these. For example, it was unclear from this data whether the nature of SMI influenced trends in pet ownership directly, or whether this relationship was mediated by factors associated with SMI, such as insecure housing tenancies or financial difficulties.

Likewise, it should be noted that this data was drawn from an inner-city population. As such, it is possible that these results simply reflect the limitations of an urban environment, such as limited indoor and outdoor space within which pets can be cared for. Unfortunately, the *Pet Data Report* (Pet Food Manufacturers’ Association, 2017) does not supply an aggregate figure of pet ownership by region, thus it is not possible to formally test this hypothesis.

Nonetheless, interviews with service users support the notion that SMI does provide an additional barrier to pet ownership that is not explained by logistic factors such as finance or location alone, and analysis of these interviews revealed the complexity of the interaction between pet ownership and mental health.

The first theme explored some of the direct benefits of pet ownership on participants’ mental health. Notably, many participants reported that spending time with their pet reduced feelings of anxiety and distress, in line with findings by Fritz and colleagues (1996). Furthermore, many spoke of their pets as a source of distraction from voice experiences, in accordance with Farhall and colleagues’ (2007) concept of “natural coping strategies.” As such, pets appear to be a valued adjunct to traditional models of health care for SMI.

However, many participants also spoke of ways in which caring for pets in the context of their mental illness could be difficult. Many were troubled by the concept of hospitalization, and everyone acknowledged the difficulty of caring for a pet without adequate support at times of illness, which was many nonowners’ main reason for not owning a pet. Furthermore, pet owners reported how, at times of illness or bereavement, pets could destabilize their mental health. This supports research by Wisdom and colleagues (2009), who found that pet death could trigger preexisting mental health difficulties,

and Stallones's (1994) work surrounding specialist counseling for pet bereavement.

Pet ownership likewise impacted notions of well-being and self-identity. For many participants, the care they provided for their pet was a source of pride and accomplishment, as Llewellyn (1994) argued was the case in the context of parenthood. This aligns with Allen, Kellegrew, and Jaffe's (2000) conclusion that looking after a pet can be considered a meaningful occupation.

Pet owners reported deriving both comfort and emotional support from their pets, as well as the entertainment and togetherness that human company might otherwise offer. This is particularly noteworthy among a population who often experience reduced social networks (Palumbo et al., 2015) and are more likely to live alone than the general population (McManus et al., 2016), particularly as social contact has been found to be important in recovering from episodes of mental illness (Mezzina et al., 2006).

Finally, it was evident across participants' accounts that pets impacted social relationships, for example, by offering a mutual point of interest in conversation. However, in some instances, pets were also highlighted as having particular drawbacks—generally cases wherein people tended to perceive the pet's behavior negatively. This suggests that individuals with SMI should consider the temperament of any potential pet carefully prior to acquisition. Failure to do so may exacerbate feelings of social isolation, and the potential advantages of ownership may become outweighed by the disadvantages.

## Summary for Practitioners

This report suggests that for those who own pets, pet ownership is an important part of service users' identities and should be actively considered when managing their care. It is acknowledged that this could present an additional burden to health care workers, many of whom already work in stretched services; but it is hoped that service users' accounts presented here offer some suggestions for those service providers that do feel able to accommodate changes. Where possible,

services should seek to offer practical and emotional support in line with the service users' preferences, to support the welfare of both service users and their pets. Services might consider integrating pet ownership into patient records to increase staff awareness and should endeavor to facilitate discussions at difficult times such as pet illness, aging, or loss.

This report indicates that service users are often motivated to speak about their pets and that this topic might therefore offer a neutral and an engaging topic of conversation. This may serve to reduce the clinical feel of CMHTs and challenge the illness narrative surrounding mental health care (Yanos et al., 2010), making it feel more holistic and positive. The topic of pets might also offer an accessible route into more challenging discussions, such as crisis planning and advance directives, potentially empowering service users to use their voices so that the treatment they receive at times of crisis is in line with their preferences. Advance directives could also be offered for pet care in case of unforeseen hospitalization, again providing care in line with service users' preferences, which may also result in a better experience for the pets. Finally, the process by which animals are cared for during unforeseen hospitalization could be elucidated to service users who are interested in owning a pet, as accounts in this report indicate that this unknown is off-putting to at least some potential pet owners who might otherwise benefit from pet ownership.

## Future Directions

This audit offers a preliminary insight into the relationship between SMI and pet ownership and may not fully capture the complex interplay of factors surrounding pet ownership in SMI. Research studies could seek to explore these ideas in a controlled manner, using larger, more representative samples in different geographical regions. Such studies could also explore practical ways of incorporating pets into service development to capitalize upon the positive impact this could have on attendance and engagement with services, perhaps using therapy dogs, a staff pet policy, animal interest groups, or vocational

schemes such as dog walking or animal husbandry with charitable organizations. Notably, these principles extend beyond CMHTs, and research should target settings such as hostels and housing associations, as well as inpatient and rehabilitative services.

## Conclusions

This audit indicates that individuals with SMIs were less likely to own a pet than a member of the wider population. Interviews with service users suggest that this difference is attributable to issues linked with SMI and the resultant difficulties managing the additional burden of care, with implications for the welfare of both service users and their pets.

Nonetheless, they also revealed that pets are an important aspect of their owners' lives, impacting on their identity, well-being, and mental health alike. Services can capitalize upon this information by increasing staff awareness of the benefits that service users can derive from pets.

Foremost, services should be mindful of their service users' attachment to their pets and should consider pets as they might a close friend or family member at times of illness or death. Pets offer opportunities for staff to broach difficult topics such as crisis plans and advance directives, and these should also be offered in relation to pet care where appropriate.

Research is now required to explore the validity and reliability of these themes and to explore practical interventions that use pets to improve engagement and outcomes for individuals with SMI. Given the variegated benefits pets can confer, pet owners or enthusiasts should be supported in their interest however services deem possible.

## Conflict of Interest Statement

The authors certify that they have no affiliations with, or involvement in, any organization or entity with any financial interest, or nonfinancial interest, in the subject matter or materials discussed in this manuscript.

## Note

1. Correct as of January 2017.

## References

- Allen, J. M., Kellegrew, D. H., & Jaffe, D. (2000). The experience of pet ownership as a meaningful occupation. *Canadian Journal of Occupational Therapy. Revue Canadienne D'ergotherapie*, 67(4), 271–278.
- American Pet Products Association. (2017). *2017–2018 APPA national pet owners survey*. Retrieved January 28, 2018, from [http://www.americanpetproducts.org/pubs\\_survey.asp](http://www.americanpetproducts.org/pubs_survey.asp)
- Bao, K. J., & Schreer, G. (2016). Pets and happiness: Examining the association between pet ownership and wellbeing. *Anthrozoös*, 29(2), 283–296. <https://doi.org/10.1080/08927936.2016.1152721>
- Blouin, D. D. (2013). Are dogs children, companions, or just animals? Understanding variations in people's orientations toward animals. *Anthrozoös*, 26(2), 279–294. <https://doi.org/10.2752/175303713X13636846944402>
- Brooks, H., Rushton, K., Walker, S., Lovell, K., Rogers, A., Vassilev, I., . . . Richards, D. (2016). Ontological security and connectivity provided by pets: A study in the self-management of the everyday lives of people diagnosed with a long-term mental health condition. *BMC Psychiatry*, 16(1), 409. <https://doi.org/10.1186/s12888-016-1111-3>
- Brown, C. M., Hengy, S. M., & McConnell, A. R. (2016). Thinking about cats or dogs provides relief from social rejection. *Anthrozoös*, 29(1), 47–58. <https://doi.org/10.1080/20414005.2015.1067958>
- Farhall, J., Greenwood, K. M., & Jackson, H. J. (2007). Coping with hallucinated voices in schizophrenia: A review of self-initiated strategies and therapeutic interventions. *Clinical Psychology Review*, 27(4), 476–493. <https://doi.org/10.1016/j.cpr.2006.12.002>
- Fritz, C. L., Hart, L. A., Farver, T. B., & Kass, P. H. (1996). Companion animals and the psychological health of Alzheimer patients' caregivers. *Psychological Reports*, 78(2), 467–481.
- Garrity, T. F., Stallones, L., Marx, M. B., & Johnson, T. P. (1989). Pet ownership and attachment as supportive factors in the health of the elderly. *Anthrozoös*, 3(1), 35–44. <https://doi.org/10.2752/089279390787057829>
- Gilbey, A., & Tani, K. (2015). Companion animals and loneliness: A systematic review of quantitative studies.

- Anthrozoös*, 28(2), 181–197. <https://doi.org/10.1080/08927936.2015.11435396>
- Hall, S., Dolling, L., Bristow, K., Fuller, T., & Mills, D. S. (2016). *Companion animal economics: The economic impact of companion animals in the UK*. CABI.
- Herrald, M. M., Tomaka, J., & Medina, A. Y. (2002). Pet ownership predicts adherence to cardiovascular rehabilitation. *Journal of Applied Social Psychology*, 32(6), 1107–1123. <https://doi.org/10.1111/j.1559-1816.2002.tb01428.x>
- Hodgson, K., Barton, L., Darling, M., Antao, V., Kim, F. A., & Monavvari, A. (2015). Pets' impact on your patients' health: Leveraging benefits and mitigating risk. *Journal of the American Board of Family Medicine: JABFM*, 28(4), 526–34. <https://doi.org/10.3122/jabfm.2015.04.140254>
- Levine, G. N., Allen, K., Braun, L. T., Christian, H. E., Friedmann, E., Taubert, K. A., . . . Lange, R. A. (2013). Pet ownership and cardiovascular risk: A scientific statement from the American Heart Association. *Circulation*, 127(23), 2353–2363. <https://doi.org/10.1161/CIR.0b013e31829201e1>
- Llewellyn, G. (1994). Parenting: A neglected human occupation. Parents' voices not yet heard. *Australian Occupational Therapy Journal*, 41(4), 173–176. <https://doi.org/10.1111/j.1440-1630.1994.tb01825.x>
- Maharaj, N., & Haney, C. J. (2015). A qualitative investigation of the significance of companion dogs. *Western Journal of Nursing Research*, 37(9), 1175–1193. <https://doi.org/10.1177/0193945914545176>
- McManus, S., Bebbington, P., Jenkins, R., & Brugha, T. (2016). Mental health and wellbeing in England: Adult psychiatric morbidity survey 2014. *NHS Digital*, 1–405. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/556596/apms-2014-full-rpt.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/556596/apms-2014-full-rpt.pdf)
- Mezzina, R., Davidson, L., Borg, M., Marin, I., Topor, A., & Sells, D. (2006). The social nature of recovery: Discussion and implications for practice. *American Journal of Psychiatric Rehabilitation*, 9(1), 63–80. <https://doi.org/10.1080/15487760500339436>
- Palumbo, C., Volpe, U., Matanov, A., Priebe, S., & Giacco, D. (2015). Social networks of patients with psychosis: A systematic review. *BMC Research Notes*, 8(1), 560. <https://doi.org/10.1186/s13104-015-1528-7>
- Pet Food Manufacturers' Association. (2017). *Pet data report 2017*, 5–6. Retrieved from [https://www.pfma.org.uk/\\_assets/docs/Datareport/PFMA-Pet-Population-Report2017\\_WEB.pdf](https://www.pfma.org.uk/_assets/docs/Datareport/PFMA-Pet-Population-Report2017_WEB.pdf)
- Sable, P. (1995). Pets, attachment, and well-being across the life cycle. *Social Work*, 40(3), 334–341.
- Stallones, L. (1994). Pet loss and mental health. *Anthrozoös*, 7(1), 43–54. <https://doi.org/10.2752/08927939478702087>
- Wells, D. L. (2007). Domestic dogs and human health: An overview. *British Journal of Health Psychology*, 145–156. <https://doi.org/10.1348/135910706X103284>
- Wells, D. L. (2009). The effects of animals on human health and well-being. *Journal of Social Issues*, 65(3), 523–543. <https://doi.org/10.1111/j.1540-4560.2009.01612.x>
- Williams, B. (2016). The impact of animals on patient wellbeing. *Nursing Times*, 112(25), 2005–2006.
- Wisdom, J. P., Saedi, G. A., & Green, C. A. (2009). Another breed of “service” animals: STARS study findings about pet ownership and recovery from serious mental illness. *American Journal of Orthopsychiatry*, 79(3), 430–436. <https://doi.org/10.1037/a0016812>
- Wood, L., Martin, K., Christian, H., Nathan, A., Lauritsen, C., Houghton, S., . . . McCune, S. (2015). The pet factor—Companion animals as a conduit for getting to know people, friendship formation and social support. *PLoS ONE*, 10(4), 1–17. <https://doi.org/10.1371/journal.pone.0122085>
- Yanos, P. T., Roe, D., & Lysaker, P. H. (2010). The impact of illness identity on recovery from severe mental illness. *American Journal of Psychiatric Rehabilitation*, 13(2), 73–93. <https://doi.org/10.1080/15487761003756860>