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Paws for Thought? Developing Dog Projects for Older People in Prison

Abstract

Purpose

This small-scale research project aimed to assess the nature and scope of dog-based programmes in prisons, assessing critically the potential opportunities, benefits, challenges and risks of developing innovative dog-based programmes for older prisoners in England & Wales. The paper outlines the potential benefits and challenges of developing dog-based programmes for older prisoners and sets out next steps for future research and practice.

Design/ Methodology/Approach

The article is based on a scoping review of published research literature on prison dog programmes in the US, the UK and other countries, with particular reference to older people in prison, followed by semi-structured interviews with six members of an expert advisory group. The literature review and data from the qualitative interviews were analysed thematically.

Findings

There is a substantial body of published research literature which supports prison dog programmes as having identifiable positive impacts for people and also dogs, and also published research which highlights the benefits to older people of dog ownership or participation in dog-based activities. However, much of this research is small-scale

and qualitative and it has been argued that there is a lack of a quantitative evidence base. This research concludes that findings from the literature review and the semi-structured interviews support further research and the creation of pilot projects to develop dog-based projects for older people in prison.

Practical Implications

This research provides a research-based justification for future dog projects for older prisoners, leading potentially to improved wellbeing for older people in prison.

Originality

This article brings together the published research literature on prison dog programmes with the research literature on the needs and experiences of older people in prison for the first time, and identifies potential directions for future research.

Keywords

Older people; prison; ageing; dogs; prison programmes; wellbeing

Background

Over the last twenty-five years there has been a significant expansion in the quantity, scope and breadth of published research exploring the needs and experiences of older people in prison (Joyce & Maschi, 2016; Hayes et.al., 2013; Kim & Peterson, 2014; Human Rights Watch, 2012; Mann, 2012; Codd, 2018; de Motte, 2021). This has been driven by a rise in the older prison population in the UK, the US, Japan, and other countries (Maschi et. al., 2021). This rise reflects a more punitive sentencing climate and an increased focus on public protection, combined with increased longevity, whole-life tariffs, and the impacts of prosecutions for historical offences including sexual abuse (Howse, 2003; Garland, 2001; Behan & Stark, 2023). In some countries, the abolition of the death penalty and the shift towards forms of 'life without parole' and Whole Life Tariffs has meant that individuals who have been convicted of serious offences, and who remain dangerous, will live out their lives and die in prison. Maschi and Morgen (2020) predict that by 2030, older people will make up one third of the prison population in the US, and although there are differences between US and UK prisons and sentencing, this proportionate increase is likely to be mirrored in a number of countries, and indeed where access to state-funded healthcare is available, the proportion may be even higher due to increased life expectancy (Galvani-Townsend et.al., 2022)

Older people have been recognised by the UN as Special Needs Prisoners (United Nations, 2009). That said, there is no one universal age at which prisoners are deemed 'older' although much of the research focuses on those aged 50+ (Bedard, 2022). Some of the published research explores prison environments and buildings, especially in relation to mobility, access, and participation. While much of this research focuses on healthcare and medical issues (Public Health England, 2017), other

research has highlighted the inadequacies of prison provision in relation to employment, education, social, spiritual, and cultural needs for older prisoners, who experience additional 'pains of imprisonment' (Mann, 2012) . Approaches to older people involved with prison and probation have been characterised as reflecting 'institutional thoughtlessness' (Crawley, 2005: Cadet, 2020). That said, there is wide variation between establishments. In the UK and elsewhere there are some good examples of innovative and positive programmes, many developed and implemented by third sector organisations and non-governmental organisations, including charities, along with several published guides to good practice (Cooney & Braggins, 2010). Research has explored not only prison life, but also the challenges of release and resettlement for older people (Crawley, 2004), some research situating these issues within broader policy approaches promoting age-friendly cities and communities (Codd, 2020).

The COVID-19 pandemic has had, and continues to have, a significant impact on prison life for imprisoned people, staff, and families, including older people. This impact has been described as 'devastating' (Suhomlinova et.al, 2022). Older people in prison have been recognised as being at high risk of suffering adverse outcomes and severe illness as a consequence of COVID-19 (Hwang et.al., 2021), by reason of age and vulnerability and also because of the prevalence of pre-existing conditions including diabetes. Lockdowns have led to long periods of cell confinement, limited opportunities for out of cell activities, and no legal or social visits in person. Although plans were announced in England & Wales to release some prisoners early, the number of eligible prisoners released early was low, being comprised mainly of people in prison Mother and Baby Units and those within two months of their ordinary release date. The total number of people released between March 2020 and August 2020

when the scheme was ended was 316 (Ford, 2020). The impact of the virus in communities outside prisons may mean that older prisoners have experienced multiple bereavements of family members and friends, including loss of partners, parents and adult children. These family members may have provided support, and visited, and indeed may have planned to provide a home for a prisoner after release, but the whole landscape of family, friendship and community relationships may have changed. In addition, COVID-19 has longer term health effects, not only for those living with 'long COVID' but also for those who have recovered from the immediate effects of the illness but have been left with other health conditions such as lung damage and fatigue, meaning that prisoners and their family members may experience disability and chronic health issues. COVID-19 continues to have a range of impacts on mental health which are only now emerging in research, including research in prisons.

At the same time, research on Human-Animal Interaction (HAI) has developed to include research in many diverse contexts, including prisons, drawing on perspectives from physiology, psychology, education, health and animal welfare. A substantial body of literature shows that HAI is linked to a broad range of positive biopsychological impacts (Mercer et.al., 2022; Marvin & McHugh, 2014). These programmes sometimes involve farm animals, dogs, cats, horses and wildlife. Pets as Therapy (PAT) dogs go into a number of prisons in the UK, including HMP Rye Hill and HMP Parc, and during the pandemic some prison staff reported taking their pet dogs in, having a positive and calming effect on both prisoners and staff. (BBC News, 2021).

Method

A scoping review of the literature was conducted to identify research studies and grey literature which investigate and/or discuss the extent, nature and impacts, if any, of dog-based programmes for older people in prisons, with particular reference to the UK. The review of the literature was international in scope but searched only English-language sources published in the 10-year period between 2012 and 2022. EBSCOHost, Scopus and Web of Science were searched. These databases were selected for their breadth of coverage, recognising that research into prisons, dog projects and older people may be published in a diverse range of journals, including social science, health, and psychology journals. The search terms used permutations of keywords and key phrases i.e. 'older people', 'prison', 'older prisoners', 'dogs', 'elderly', 'imprisonment', 'dog', 'incarceration', 'dog project', 'prison', 'program', 'training' and 'animal'. The search terms were modified to reflect the specific requirements of each database and to improve the efficiency of the search in each. The Google and Google Scholar search engines were searched so as to identify books and relevant 'grey literature'. The database results were filtered to exclude non peer-reviewed journals and conference abstracts then filtered for duplicates, initially automatically then manually. Programmes involving animals other than dogs, including prison farm animals, were filtered out manually. The literature identified was then analysed thematically. A summary of the literature is provided in the attached table.

Following the literature review six semi-structured interviews were conducted with experts. These were an academic psychologist with expertise in relation especially to violence, trauma and well-being; an academic researcher with expertise and

experience in community health and well-being interventions; two dog care professionals, a senior manager of an organisation providing services for older people in prison, and a member of a national network representing the voluntary sector working with older people in contact with the criminal justice system. The interviews sought informed opinions on the strengths, weaknesses, challenges and opportunities of dog-programmes for older people in prison, including questions as to feasibility, funding, well-being implications for people and dogs, and the potential form of such programmes in the future. The qualitative data from these interviews was analysed thematically.

Findings from the Literature Review

The initial searches identified no journal articles which focused specifically on prison dog projects which were designed or delivered primarily for older people in prison. A number of systematic reviews have highlighted the positive impacts of animal therapies, including dogs, in relation to particular groups of service users, including people with dementia; detained drug users (Contalbrigo *et al.*, 2017; Yakimicki *et al.*, 2019); young people with or at risk of mental health difficulties; adults with acute mental health conditions; neurodivergent people and people with learning disabilities (Jones *et al.*, 2019; Gee & Mueller, 2019; Narvekar & Narvekar, 2022; L Chang *et al.*, 2021; Virues-Ortega *et al.*, 2012; Matuszek, 2010; Bert *et al.*, 2016; Charry-Sánchez, *et al.*, 2018). One study, based on a cost-benefit analysis in relation to desistance, found that for every criminal justice system US dollar spent on DTPs, between \$2,877 and \$5,353 was saved (Cooke *et al.*, 2021). This cost saving, if replicated, could provide a strong rationale for the development of prison dog projects.

Knight & Edwards (2008) discuss the physical, psychological, and social benefits associated with human–dog interactions in a community rather than a prison context. The average age of their participants was 60, and most were female. The research identified the benefits of dog ownership as perceived by participants, including health benefits from walking and exercising; social rewards in relation to meeting fellow dog walkers, forming new friendships and providing a talking point and psychological benefits such as lower levels of stress and anxiety. Dogs are described as recipients and donors of unconditional love, as family members, sometimes substituting for contact with human family members. These physical, social and emotional benefits intersect and overlap. Within the literature on human-animal interactions, however, as in most research literature on the lives of older people, older people in prison are frequently invisible. Conversely, as became obvious from the literature reviewed for this study, within prison populations where dog-based projects have been introduced, they are more often aimed at meeting the needs of young people, or older people become involved as members of an all-age group of participants.

a) Findings from the Literature Review- Prison Dog Projects (PDPs)

In the US, many correctional institutions have introduced dog-based programmes that involve people in prison in dog care and training, sometimes as service dogs (Jalongo, 2019; Charry-Sánchez et.al., 2018). Over 50 US states have PDPs (Prison Dog Projects/Programs) and such programmes have been developed in other countries including the UK (Mercer, 2015; Mercer et.al.,2022), Australia (Humby & Barclay, 2018; Mulcahy & McLaughlin, 2013), Argentina (Romero et al., 2018) and Japan (Koda et.al. 2015). Some of these programmes are full-time, relatively long-term schemes, where dogs live with and are cared for and trained by one individual. Others

involve dogs visiting regularly. Many involve dogs being trained to become service dogs, or, more commonly, inmates train shelter dogs so as to improve their chances of adoption (Cooke, 2019). Although it appears that these schemes are relatively new, they have their roots nearly a hundred years ago in the US when in August 1924, 'Pep', the governor's pet, made headline news as 'the lovinest dog in Pennsylvania' when he began visiting Eastern State Penitentiary, partly inspired by similar visits by Governor Baxter's dog in Maine (Beamish, 1924).¹ The first organised dog programme in the UK which is similar to the organised programmes seen in the US, is the 'Paws for Progress' programme for young offenders which was introduced at HMYOI Polmont in Scotland in 2011 (Leonardi et.al.. 2017). Unlike some other UK animal-prison programmes, this has been evaluated thoroughly, as it was developed within the '5 Step Approach' of the Scottish criminal justice system, which sets out guidance on designing in a review of the evidence base for programmes from the outset, and then includes ongoing evaluation processes (Bisset & Gilman, 2016).

b) Diversity of programme types

As highlighted by Mercer (2015, 2022) programmes in prisons bringing together prisoners and animals vary widely, from highly structured and organised goal-oriented Animal Assisted Therapy (AAT) programmes, to less structured Animal Assisted Activities (AAA) which may not have set aims, goals and outcomes. The interaction with the animals can be a main focus of the activity, or animals can assist in therapeutic processes by enabling the client to relax and engage with the therapeutic process, acting as what Leonardi refers to as 'catalysts and mediators of human social interaction' (Leonardi 2017 p.1). The terminology varies, also including Animal

Assisted Interventions (AAI) and it is useful to use the term 'Prison Animal Programme (PAP) to encompass the range and scope of prison programmes involving animals.

c) Impacts and Effectiveness

Dog-training programmes have been argued to be particularly effective, especially in relation to mental health and wellbeing, and their use has expanded (Leonardi et.al., 2017; Jaspersen, 2015; Flynn *et al.*, 2020). Recent research has identified positive impacts of dog programmes on imprisoned US veterans' PTSD and trauma (Furst, 2015; Furst, 2016). Prison dog programmes have been linked to decreased recidivism, fewer in-prison disciplinary infractions, and improvements in prisoner attitudes and behaviour (Antonio, Davis and Shutt, 2017). One study links engagement with a prison dog project to prisoner reframing of masculine self-identity, identifying a potential positive impact on desistance and reoffending (Wesely, 2019). A recent systematic review aimed to evaluate the effects of dog-based AAI in prisons, reviewing 20 articles in English, French, Italian, Portuguese, or Spanish (Villafaina-Domínguez et.al. 2020). They concluded overall that dog-based animal-assisted therapy may improve anxiety, stress, recidivism, and other social variables in male or female inmates. Like other researchers, however, they highlight what they describe as 'not optimal' methodological quality, with a wide variation in participants and outcomes, leading them to suggest future research could focus on specific prisoner sub-groups. This systematic review is valuable because unlike previous systematic reviews it used the PRISMA guideline methodology included quantitative and qualitative studies, and also included sources beyond the English-language literature which dominates much research in penology, criminal justice, and indeed published social science research generally. A previous systematic review (Cooke & Farrington, 2016) focused on

recidivism as an outcome, whereas this study explored a broad range of potential outcomes and benefits for participants.

In England and Wales there is relatively little published research evaluating the impacts of animal-based prison programmes. Indeed, it is difficult to assess the extent and nature of animal-human interactions in prisons in England and Wales at all and the status of these initiatives may have been changed by the impacts of COVID-19. Several recent research studies in the UK have explored PAPs in the context of well-being and mental health in custodial settings (Mercer et.al 2015: Durcan, 2018). A good example of work with therapy dogs in a prison setting is that evaluated by the Centre for Mental Health, which assessed the impact of a therapy dog scheme provided by Rethink Mental Illness, as part of initiatives to reduce the risks of self-harm or self-inflicted death in three prisons in the North East of England. This study found that the therapy dogs had a calming influence on prisoners, helped increase coping strategies skills and strategies, and provided a safe space to explore ways of processing and expressing emotions (Durcan, 2018). The project itself was simple and involved prisoners either sitting and petting the dogs or playing with them in the way one would in a park, such as by throwing a ball. The participants were drawn from three establishments, including women, and 97 people initially took part in the scheme, although follow-up data was only available on 87. This study is interesting as it includes information on the ages of prisoners: 10 were aged 45-54 and 5 aged 55+. The dogs were perceived as non-judgmental and being with the dogs helped prisoners talk about emotional and traumatic issues and experiences.

Mercer et.al. (2015) evaluated a dog-based Prison Animal Programme (PAP) run with men assessed as being at risk for self-harm. They identified four key themes as outcomes from the programme: 1) a sense of responsibility; 2) building trust, 3)

enhanced communication and 4) impact on mood and behaviour. The wing's animal centre included several types of animals, including two Labradors which lived on the wing, and it was interacting with these dogs which gave the most benefit to the participants. Although this study was very small-scale, the qualitative findings are vivid and help illustrate the value of the dog interactions. Prisoners reported that caring for the dogs gave them a sense of responsibility, and a sense of meaning. The interaction with the dogs helped manage self-harming behaviour and lessened perceived anxiety and stress.

In a more recent study in the same Category B prison as their previous research (Mercer et.al. 2022) the nature of the dog programme changed from the dogs living on the wing to the dogs visiting. The research evaluated the impact of a short, four-week programme of weekly dog visits for participants with complex mental health needs.. Semi-structured interviews were conducted with eight participants at the end of the programme. The imprisoned men prioritised dog well-being and reflected on how it would not be appropriate, for example, for a dog to be in an 'ordinary' prison environment, The dogs also helped build a better relationship between the men and the staff member who brought in the dogs. The dogs seemed to encourage a protective, 'guardian' identify in the men, the men becoming more selfless, putting the welfare and well-being of the dogs above all else. The men also reflected on how they how they saw themselves as having a positive identity in the eyes of the dogs, unrelated to their status or criminal convictions. The narratives offered a range of perceived benefits which illustrated the potential of dog based PAPs for enhancing well-being which would also be consistent with desistance goals. This research demonstrated the impactful nature of interactions with dogs, even on a short term basis. Although this research focused on working with prisoners with complex mental

health needs, these programmes could be of value to a broad range of people in prison, especially as research has highlighted the extent of mental health issues in prison settings. Most of the research has focused on imprisoned men. Exceptions to this include Minke's (2017) description of a small scale study in a Danish Women's prison, the work of Collica-Cox and colleagues on women and parenting (Collica-Cox & Furst, 2019; Collica-Cox & Day, 2022) and Eaton-Stull and colleagues' (2022) study with women in the US.

A number of commentators contend that there has been insufficient quantitative research to provide a robust evidence base for PDPs, and that more research is needed (Duindam et al., 2020; Offermans et al., 2020; Duindam et al., 2022; Duindam et al., 2021; Mulcahy and McLaughlin, 2013). In particular, the research on Dutch Cell Dogs for young offenders found that the dog project did not predict improvements in detained juveniles' stress and self-esteem. These findings underline the need for more research, especially as these findings may reflect the age group of the participants and also the prison regime, prison regimes in the Netherlands being more humane relative to those in the US, for example. Qualitative studies offer vivid insights into the experiences of people who have engaged with PDPs, and these studies have identified a range of positive outcomes. For example, Leonardi et.al. (2017) identified charitable outcomes, changes in attitudes (including parenting styles), identifying with the dog, patience, calmness and enjoyment. The participants also enjoyed the idea not only of teaching the dogs but also being able to teach other people how to work with dogs; that while they were learning themselves, they were also learning from the dogs. They all enjoyed it and interacting with the dogs made them feel that the environment was almost like being outside the prison. Leonardi makes the point that

Dog Training Programmes (DTPs) differ from other therapeutic animal-assisted interventions because the interaction between the human and the animal is not solely for the benefit of the prisoner, the programme also often including caring for and training the animal (Leonardi, 2017).

Human-dog interaction has been explored as one element of a trauma-informed approach to prisoner health (Dell & Poole, 2015). People ageing in prison may also experience 'disenfranchised grieving', being unable to acknowledge and express their distress or mourn adequately, and this can be linked to other negative consequences for mental health and wellbeing. This is of particular timeliness and relevance in the context of the COVID-19 pandemic. One US study of women in prison experiencing recent and unresolved losses compared grief support groups with and without assistance from therapy dogs (Eaton-Stull, et.al. 2022). They found that the animal-assisted groups experienced more significant decreases in symptoms, lower rates of Prolonged Grief Disorder, and participants perceived higher rates of support and benefit from the groups.

Findings from the Expert Advisory Group

All the experts interviewed expressed positive attitudes towards the potential for developing dog projects for older people in prison. The reasons for viewing such projects as potentially beneficial varied. From the perspective of experts working with older people in prison, dog projects would benefit older people for whom the employability-focused nature of prison education and training is largely irrelevant. Dog projects could broaden the scope of work opportunities for low-risk older people in open conditions who are permitted to leave the prison to work under the ROTL

process. In addition, for some older people who are still of working age, dog-based training and experience may provide new opportunities for employment and self-employment after release, such as in dog-walking or dog grooming businesses. That said, some concerns were expressed by the dog care professionals that members of the public may not want their dogs to be cared for by people with convictions, even if those convictions are not violent, sexual or animal-related,

From a health and well-being perspective, the experts supported dog projects as having the potential to help diminish levels of anxiety, depression and loneliness on older people in prison, especially for older people who have committed stigmatised offences, and/or who are serving long sentences, and who have few family or community connections. Engagement with a dog project may provide new incentives for physical activity, combined with helping to build a positive and non-criminogenic self-image. The engagement with dogs could help promote a calmer prison environment, which would benefit both prisoners and staff. Involvement with dogs could also provide a conduit for communication, between prisoners and staff, and also prisoners, other prisoners, and family members when they visit. The impact of engagement with dogs can prompt other skills and activities. Prison life can be dull, monotonous and boring, and even if prisoners want to express themselves creatively via art, music and writing, for example, there may be few prompts for new expressions, emotions and experiences. As one ages it would be natural to focus on the prison setting and one's past life. However, interacting with a dog, or dogs, can create new opportunities for creativity and hobbies. This could be writing or drawing about the dog but could also include hobby activities such as making toys for dogs or packaging up treats in tissue paper or boxes. It could include, if the resources were available, pottery such as making a dog water bowl, or (depending on risk, of course) making a new dog

lead or chew toy. Prisoners could want to read to learn more about dogs, for example. In addition, the dogs add an element of enrichment to the prison experience which can be discussed and shared with visitors and other friends and family members. Photographs, for example, could be taken and sent out to family members. They could provide for opportunities for new things to talk about during visits. Engagement with dogs can provide a shared language and a shared topic for social interaction, inside and outside the prison itself, dogs acting as a prompt and a conduit for conversation. In addition, as long as the dog activities are appropriate, interaction with dogs could help support reminiscence and memory activities for prisoners experiencing dementia. Indeed, depending on the level of dementia the dog activities being engaged with by the person in prison could also provide a point of connection with aging non-imprisoned family members who are experiencing the early stages of dementia themselves.

Within the prison, involvement in a dog project may reconnect older people to other prisoners and staff, and also provide opportunities for participation in planning and decision-making, such as in relation to evaluation, reflection and amendments to a project. Older people may feel excluded within the prison and thus the dogs may provide reconnection. There may also be scope for developing multi- and inter-generational dog-based activities where younger and older people in prison can work together with dogs, the dogs providing the context for sharing, building friendships and mutual support.

However, concerns were also raised as to the potential risk to dogs, not only from the project participants but from the unstable and unpredictable nature of some prison environments. In addition, interaction with security-focused prison dogs could be sources of stress and anxiety for dogs. The experts with prison experience, whilst

enthusiastic, recognised that, as in all prison-based initiatives, a great deal depends on the attitudes of governors and staff, without whose cooperation and support such initiatives would not be possible. Alongside this, questions were raised as to the available for funding for dog-based initiatives, although there may be new opportunities for innovative practices following the publication of the UK national strategy for older people in prison and there may be funding available linked to health care and wellbeing outcomes.

Discussion

It is difficult to identify the extent to which older prisoners have engaged with DTPs, as many research studies do not provide demographic data about participants, although Durcan (2018) is an exception. This lack of age differentiation, beyond distinguishing between young offenders and adult offenders, is not especially unusual, as the recognition of older people in prison as a specific cohort is relatively recent. Older prisoners have been involved in some of these programmes but at the time of writing the author is not aware of any specific animal programmes designed to meet the needs of older prisoners in particular. This seems surprising, given the research which highlights the value of companion animals to people as they age. However, it is one consequence of a dominant image of prisons as places mostly occupied by young men, and also reflects opportunities and an institutional/political will to try out new initiatives where young offenders are concerned.

Avieli's research on successful ageing in prison contains much of relevance (Avieli, 2021). Learning how to care for a dog, to feed, groom, train them and respond to their needs and feelings, may be entirely new or may allow for taking up previous skills and

experience which have been lost due to imprisonment. An older person in prison may not feel that they are of any significance to anyone, that they either have become ostracised from family, friends and communities, sometimes because of their offending, and yet they may become a significant person in the life of a dog.

In most studies, attention is paid to the benefits for human participants, not for the dogs. However, the idea of mutual benefit underpins the rationale for many such programmes. There are of course methodological challenges in identifying benefits to the dogs involved, or indeed any animals in similar programmes. After all, although user engagement and methods involving co-production of research have been recognised as producing valuable and insightful findings, it is challenging to identify dogs' own perspectives on their involvement, for obvious reasons of language and communication which go beyond recognised strategies for user engagement such as involving peer researchers, or even simple interpreters. This, to some extent, means that we can only deduce dogs' own views from context. The immediacy of benefits to dogs can be assessed at a very basic level in terms of whether dogs display behaviours indicating happiness and enjoyment (which could be called 'the waggy tail test.')

(Palmer, 2022). That said, some studies have adopted scientific veterinary/endocrinal tests, such as measurement of dog cortisol levels, which can assess levels of stress and relaxation (d'Angelo et.al. 2021; Hennessy et.al., 2006).

As it stands, although many programmes claim to make a practical difference to prisoners, the theoretical underpinnings of these programmes are very limited, with the exception of Han et al.'s (2021) application of empowerment theory and the work of Furst and Houser (2021) linking positive outcomes of prisoner dog programmes to Hirschi's social bond theory. Further research could help develop a deeper

understanding of the theoretical explanations for the success, or otherwise, of these programmes.

Bolger (2019), in her research on end of life care in US prisons, referred to the 'transformative power of dogs', including for older prisoners living with PTSD, highlighting exercise, dogs providing a calming influence, stress relief, increased coping and caring skills, increased confidence, a break in monotony and the boredom of prison life, and for some prisoners employment skills for release.. She suggests that dog programs could provide cognitive stimulation and promote exercise. In the light of Eaton-Stull et.al.'s (2022) research, dogs could provide important support to older people through the grieving process.

It is important to recognise differences between older people, and to recognise that it is not appropriate to assume that all older people are frail and vulnerable. Similarly, not all older people, nor indeed prison residents or staff, may be able to engage with dogs, because of allergies, anxiety, or indeed social, religious and cultural attitudes to dogs.

A key question to be explored is why dogs in particular may benefit older people in prison, rather than other animals. Some of the justifications are practical and relate to the possibility of physical frailty and health risks: horse programmes, for example, may provide positive mental and physical benefits but the risks of harm as a consequence of falls, or kicks, may be greater for older people than young people. Cats may promote mental well-being, relaxation and stress-relief, combined with engendering feelings of caring and responsibility in their carers, but there is less scope for the kind of communication, training and mutuality in a relationship which can exist with human-dog interactions.

Conclusions and Recommendations

Limitations of this study

This study was small-scale, and the findings need to be approached with caution. The literature review searched a small number of databases and filtered out articles published in languages other than English, and the review of the grey literature focused on reports from the UK. The number of experts interviewed was small and there was no direct consultation with older people in prison nor with older people with recent personal lived experience of imprisonment and community resettlement. A more extensive future study would benefit from a more extensive literature review, a larger group of participants, and the inclusion of service users, prison managers and government policy-makers, subject to the appropriate ethical and security approvals. At the time the research took place, ongoing COVID-19 restrictions on prison research meant that research with current prisoners and prison managers would not have been approved by the HMPPS NRC.

Implications for future research

A preliminary task for future research is to undertake a comprehensive mapping exercise identifying the nature and scope of animal-based involvement in prisons. At the moment, looking at the limited research literature exploring animal-based prison programmes in England and Wales, it is not possible to identify if older prisoners were involved and they are not identified as a specific participant group. This comprehensive mapping exercise of existing HAI projects in prisons in the UK for needs to identify the nature of the programme; partners in delivery; scope of interactions' aims and level of structure, and outcomes. From the point of view of this

topic it would be helpful to identify any programmes in which older offenders are involved, and whether any are specifically for older offenders.

A national scoping exercise could then follow, identifying prisons where there is sufficient institutional support for developing a pilot project. This could include expanding existing PAT activities into prison settings, amending programme design so as to respond to the needs of older people, building a new partnership with an outside organisation such as a dog rescue which needs volunteers, and for which it would be possible to approve ROTL for low-risk prisoners. In a prison setting, participants do not have to engage with the practical and financial challenges of dog ownership on the outside and thus could be protected from some of the stressors of day-to-day dog care whilst still experiencing the mutual benefits.

If an establishment already has a dog programme then if older people are not already involved then the programme could be reviewed and adjusted so as to be accessible and suitable for older people. This could involve, for example, recognition of the appropriate breed or size of dog to be included, recognising any mobility, health or risk issues for older participants. There could be existing dog programmes which engage older prisoners, or designated programmes for older prisoners specifically, perhaps linked to whether older prisoners live on a particular wing, or engage in a day centre or common room model.

It is axiomatic that evaluation and the development of an evidence base needs to be embedded in any programme from the outset. Indeed, it would be valuable to include longer-term longitudinal research which evaluates the impacts of the dog programme not only while the person is within the programme, but afterwards, including post-release where applicable. This kind of longitudinal approach could not only assess whether engagement with dogs leads to any lasting change, mentally or physically,

but also whether there are longer-lasting impacts for desistance, or indeed post-release employment, engagement and community participation.

The best and most useful resource for any organisation or institution interested in exploring the potential for dog projects for older prisoners is Jalongo (2019). This edited collection combines discussion of the theoretical and evidentiary underpinnings of prison dog programs with practical advice and guidance on how to plan, implement and evaluate prison dog programs. Although it has a US-focus, its research foundation goes beyond research from the US, and in addition the points around planning and implementation, including risk assessment and management, would be of value to anyone interested in exploring the possibilities of dog programmes. The book does not highlight older people as a discrete group, however, but it is a very good place to start.

Potential risks and well-being

In suggesting developing dog projects for older prisoners, the welfare and well-being of the dogs must be one of the most significant considerations: indeed there are justifications for the view that the well-being of the dogs should be the paramount consideration (Johnson & Bruneau, 2019). It is important, not to be naïve about the risks, partly for the prison participants but particularly for the dogs. A significant proportion of older prisoners are serving sentences for sexual and/or violent offences, and clearly any risk to animals should be assessed carefully, even if the person does not have any previous convictions for animal-related harms. There need to be clear participant selection protocols, which recognise and reflect risks, especially where participants with past records of violence or poor impulse control and anger are under consideration.

On a more theoretical level, it is unethical to utilise dogs as 'tools of the resettlement process', prioritising the needs of prisoners over dogs (Collica-Cox and Day, 2021) . There must be mutuality and shared positive benefits. This of course can be challenging to negotiate in prison settings, especially if a residential project is involved, as prisons can be noisy, tense and unpredictable places. However, in some open prisons, it would be possible to create a designated living area so that dogs and their carers could live together, taking advantage of the open setting for exercise and activities, and Release on Temporary Licence (ROTL) for community engagement. It would also be possible, funds permitting, to develop an approach inspired by half-way houses for mothers of young children, as exist in some European countries, where the dogs go out to community 'doggie daycare' settings several times a week. This would be especially appropriate for puppies, for whom early socialisation is essential. Not all dogs are suitable for 'doggie daycare', and there could be challenges for some rescue dogs who may have issues interacting sociably with other dogs, but then to some extent these dogs may not be suitable to be placed within a prison setting. All these issues and challenges are worthy of further discussion, so as to explore fully the possible benefits – to humans and dogs – of dog projects for older people in prison.

Table: Literature Review Results

Authors	Origin	Purpose	Research Design	Target population	Major themes
Antonio, M.E. et al. (2017)	US	Compared responses from inmates and staff associated with DTPs in Pennsylvania's Department of Corrections	Quantitative	Men and women; prisoners and staff	All participants viewed the program positively, agreeing that it reduced recidivism and inmate misconduct, and increased morale and positive social interactions. Women agreed more.
Collica-Cox, K. Furst, G., (2018)	US	Discussion of Parenting, Prison & Pups (PPP) Program	Case study	Women	Outline of program and strategies for implementation
Collica-Cox, K., Day, G., (2022)	US	Examined differences between mothers in prison who completed a parenting course with AAT compared with those who completed the same course without AAT	Mixed-method quasi-experimental design	Women - mothers	Lower rates of parental stress and higher rates of self-esteem and parental knowledge among AAT group. Therapy dogs appeared to encourage communication, trust, and connectedness.
Collica-Cox, K., & Day, G., (2021)	US	Explored the extent of ethics training offered for AAT teams and examined how agencies and handlers promote and ensure the safety of canine partners,	Qualitative interviews	Therapy teams who have worked with Parenting, Prison & Pups (PPP),	Individual organisational protocols can promote safety and comfortability of dogs, including in correctional settings but national standards are a necessity.
Contalbrigo et al., (2017)	Italy	Efficacy of Dog assisted drug therapy in a custody facility	Quantitative	Drug-dependent men	Improved social skills, reducing craving, anxiety and depression symptoms compared to the control group. Need for more research
Cooke, B.J., & Farrington, D.P., (2015)	US	Examined the effect of DTPs on how female offenders experienced prison.	Qualitative interview data from	Women	DTP participation alleviated the women's pains of

			female offenders, program coordinators, and prison staff		imprisonment including psychological and emotional health, motherhood, transferable skills, security & trust.
Cooke, B.J. & Farrington, D.P, (2016)	US	Two meta-analyses on externalizing and internalizing outcomes of dog-training program participation	Systematic review and two meta-analyses of 10 studies	Men, women and young people	Dog-training programs have a desirable effect on offenders
Cooke, B.J. et.al. (2021)	US	Cost-benefit analysis of DTPs using program cost and recidivism results	Quantitative	Men	For every CJS dollar spent on DTPs, between \$2,877 and \$5,353 was saved.
D'angelo, D. et.al. (2021)	Italy	Evaluated the effect of AAI on the cortisol levels of 5 shelter dogs working with adult inmates for two months	Measurement of cortisol levels	Dogs	The results revealed a significant decrease in the cortisol baseline at the end of the program. Transportation increased cortisol levels substantially however.
Dell, C. & Poole, N.(2015)	Canada	Therapy dog assisting in prison trauma recovery	Case report	Prisoner mental health/substance abuse	Sets out six evidence-based trauma principles for service providers.
Dell et.al. (2019)	Canada	Measured the objectives of a canine AAT program in a Canadian psychiatric prison and examines whether the program supported inmates' correctional plans:	Case study - Quantitative and qualitative data	One imprisoned woman and two men plus their mental health clinicians and the therapy dog handlers.	Inmates connected with the therapy dogs through the animals' perceived offering of love and support which supports inmates' correctional plans. Small scale (3 inmates) but found positive impact on well-being- worthy of further research
Doyon-Martin and Gonzalez, (2022)	US	Evaluated the impacts of a non-profit, Service Animal Socialization program in a prison	Secondary data analysis of qualitative survey responses	Men	Facility-wide benefits and personal benefits plus-skill development. Empowerment theory utilised to interpret the findings

Duindam et al., (2020)	Netherlands	Aimed to provide an overview of the effectiveness of PDPs	Meta-analysis	Men and women; adults and young people	Effects significant but study quality low. Small to medium effect on recidivism. Need for more research
Duindam et al., (2021a)	Netherlands	Examined the effectiveness of Dutch Cell Dogs (DCD), a program that aims to improve socioemotional functioning of incarcerated youth by giving them the opportunity to train a shelter dog	Quantitative	Young people	Dutch Cell Dog (DCD) participation not effective. Need for further research.
Duindam et al., (2021b)	Netherlands	Examined the short-term effectiveness of Dutch Cell Dogs (DCD) on anti-social behavioural and wellbeing outcomes	Quantitative	Men and women.	Differential effects – more research needed
Durcan, G. (2018).	UK	Evaluation of a therapy dog scheme to pilot, develop and test initiatives which may reduce the risk of self-harm or self-inflicted death in prison	Quantitative and qualitative	Men and women	The therapy dogs had a calming influence on prisoners, helped increase coping strategies skills and strategies, and provided a safe space to explore ways of processing and expressing emotions
Duindam et al., (2022)	Netherlands	Assessed the effectiveness of Dutch Cell Dogs (DCD) in reducing criminal behaviour and recidivism	Quantitative	Men and women; adults and young people	Initial evidence that subgroups may respond differently to DTPs. More research needed.
Eaton-Stull, Y., et.al. (2022)	US	Study of bereavement support for women in prison. Incarcerated women with recent or unresolved losses were randomly assigned to grief support groups with and without therapy dogs (animal-assisted, AA) or without therapy dogs (non-AA).	Pre- and post-test measures of bereavement symptoms and prolonged grief disorder (PGD) were obtained.	Women-bereavement	Animal-Assisted groups had more significant decreases in symptoms, lower rates of Prolonged Grief Disorder and higher rates of perceived support/benefit from the groups
Flynn et al., (2020)	US	Examined the impacts of prison-based DTPs across Washington	Quantitative	Men and women	PDP infraction rates improved and participants

		State Department of Corrections facilities			had lower levels of anxiety than nonparticipants
Furst and Houser, (2021)	US but theory so not limited to US	AssesseAd relevance of Hirschi's Social Bond Theory to explain effectiveness of PDPs.	Secondary analysis of qualitative data.	Men and women	Found support for the presence of the four components of Hirschi's Social Bond Theory among program participants
Furst, (2015)	US	Outlines how dogs are being trained to assist veterans with post-traumatic stress disorder (PTSD) as part of a grass roots effort to fulfill the mental health needs of veterans.	N/A-	Imprisoned veterans with PTSD	Prisons, veterans and PTSD – grassroots support but efficacy unknown
Furst, (2016)	US	Outlines how dogs are being trained to assist veterans with post-traumatic stress disorder (PTSD) as part of a grass roots effort to fulfill the mental health needs of veterans.	N/A	Imprisoned veterans with PTSD	Prisons, veterans and PTSD – need for regulation and standardisation of programmes
Grommon et.al. , (2020)	USA	Examined effect of a DTP on juveniles in a county juvenile detention facility	Quantitative	Young people.	Young people – did not benefit nor harm participants – raises further questions
Han et al., (2021)	USA-theoretical	Explores utility of empowerment theory,	Qualitative interviews with DTP staff	DTP staff	Outcomes of prison-based DTPs are consistent with empowerment theory
Hediger et al., (2022)	Germany	Investigated the effects of a dog-assisted social- and emotional-competence training on the socioemotional competences of prisoners compared to treatment as usual.	Controlled trial	Quantitative	Therapeutic dog-assisted programmes might be beneficial for prisoners, but more research is needed.
Hill (2020)	US	Analysed the effect of PAPs on inmates' perceptions on the pains/strains of imprisonment	Surveys	Men	Both direct and indirect contact with animals leads to a reduction in perceptions of the pains/strains of imprisonment when compared to a similar group with no animal contact.

Humby & Barclay, (2018)	Australia	Aimed to provide nationwide profile of PDPs	Qualitative survey	Corrections departments and animal welfare agencies	Overview of identifying benefits and barriers
Karkdijk et al., (2022)	Netherlands	Examined to what extent the human-animal bond (HAB) had a positive impact on stress and self-esteem among detained juveniles participating in the Dutch Cell Dogs (DCD) program.	Quantitative	Young people	Did not predict improvements in detained juveniles' stress and self-esteem. Need for more research..
Jasperson (2015)	US	Measured the effects of an animal-assisted therapy group on symptom distress, interpersonal relationships, social role performance, and overall distress of incarcerated women	Quantitative	Women	Having a dog present during the group process did not influence improvements
Koda et. al. (2016)	Japan	Assessment of impacts of dog program on stress levels of people in prison, using salivary cortisol measurement.	Measurement of salivary cortisol	Men	Inmates' cortisol values in most cases decreased following their participation in the sessions
Koda et.al. (2015b)	Japan	Evaluated the stress on dogs and their handlers during animal-assisted therapy in a prison program	Questionnaires and measurement of the dogs' salivary cortisol	Male prisoners, dogs and their volunteer handlers	The dogs did not show serious signs of stress in the programme, which was also the impression of their handlers
Koda et.al. (2015a)	Japan	Investigated the effects of a dog-assisted program for first-time inmates.	Quantitative surveys	Men	Sessions evaluated positively as a whole. Improved mood and improvement in inmates' interaction skills.
Leonardi et.al. (2017)	Scotland UK	Examined the experiences of male young offenders following completion of a DTP.	Qualitative interviews	Male young offenders	Broad range of inter-related experiences as a result and positive outcomes.
Mercer, J. (2015)	Wales UK	Explored the perceived impact of an animal programme including dogs	Qualitative interviews	Men and staff	highlights the therapeutic potential of the presence of animals in prisons.
Mercer et.al. (2022)	Wales UK	Explore the perceived benefits of a short-term PAP on the well-being of	Qualitative interviews	Men	Narratives offered a range of perceived benefits with potential to enhance well-

		individuals assessed as at risk of self-harm			being, consistent with desistance goals
Mims et.al. (2022)	US	Explored the perceptions of jail inmates participating in the Paws and Stripes College program	Qualitative questionnaires	Men and women	Found therapeutic benefits to participants
Minke, (2017)	Denmark	In response to prisoners' requests for contact with animals, an employee brought in her own dog,	Qualitative interviews and participant observation	Women	Dog helped to normalize the prison setting, improved social relations and provided comfort when women were dealing with difficult personal feelings
Minton et.al. (2015)	US	Investigated the effects of training service dogs	Qualitative interviews	Women	Positive effects on the women's emotional and/or physical health, self-concept, goal-directed behaviours, empathy and self-control; and increase in positive social interactions.
Mulcahy & McLaughlin, (2013)	Australia (international literature review)	Literature review of PAPs.	Literature review	Men and women	Few PAPS have been subjected to research or evaluation. More research is needed plus a greater evidence base to guide new programmes.
Offermans et al., (2020)	Netherlands	Assessed effectiveness of Dutch Cell Dogs (DCDs)	Quantitative	Young people	Did not provide convincing evidence for DCD's effectiveness. Further research is needed
Rawleigh & Purc-Stephenson, (2021)	US	Examines whether individuals consider PAP an acceptable treatment option for prisoners, and whether those decisions are influenced by prisoner characteristics	Vignettes followed by quantitative survey	Members of the public	Results highlighted the presence of implicit bias in participant's ratings of treatment acceptability
Romero et al., (2018)	Argentina	Described Federal PDP in Argentina	Case study	Men and women	Outlined the program

Smith & Smith, (2019)	US	Examined the key themes that drive a dog program aimed at incarcerated youth serving time in an adult prison	Qualitative questionnaires	Male young offenders	Supported the potential for utilising rescue dogs in therapeutic interventions in which the vulnerable inmate can discuss early trauma, interpersonal dysfunction and histories of deviance.
Smith,(2019)	US	Assessed rescue dog programs in two maximum- security prisons	Qualitative questionire	Men	The dogs represented a conduit to positive outcomes for participants & broader prison institution. However this relationship requires further testing
Stetina et.al. (2020)	Austria	Aimed to identify differences between participants from the men's and women's section in a specialised prison for criminal offenders suffering from substance dependence syndrome regarding the effects of dog-assisted group therapy.	Quantitative self-report questionnaires	Men and Women	Women participants tended to benefit significantly less from the dog-assisted group therapy in most measured areas than men, especially in terms of emotional status
van Wormer et.al. (2017)	US	Evaluated a state-wide prison-based dog handler program	Quantitative measures of serious infractions, violent infractions, grievances and sanctions	Men and women	Dog handler program inmates experienced significant improvement in three of four areas. Further research needed.
Villafaina-Domínguez, et.al. (2020)	US	Systematic review of research on the effects of dog-based prison AATs	Systematic review	Men and women	Dog-based animal-assisted therapy may improve anxiety, stress, recidivism, and other social variables in male or female inmates.
Wesely (2019)	US	Explored men's perceptions of masculinity, negotiations of identity, and the role of the PAP in how they reframed affect and meaning	Qualitative	Men	PAP has potential to promote desistance.

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¹ The visits by Pep led to headlines about him 'being sentenced to Pen' for allegedly killing the governor's cat, but this was untrue and designed to de-fuse arguments about the governor being 'soft' on the prisoners and 'treating them' to dog visits.