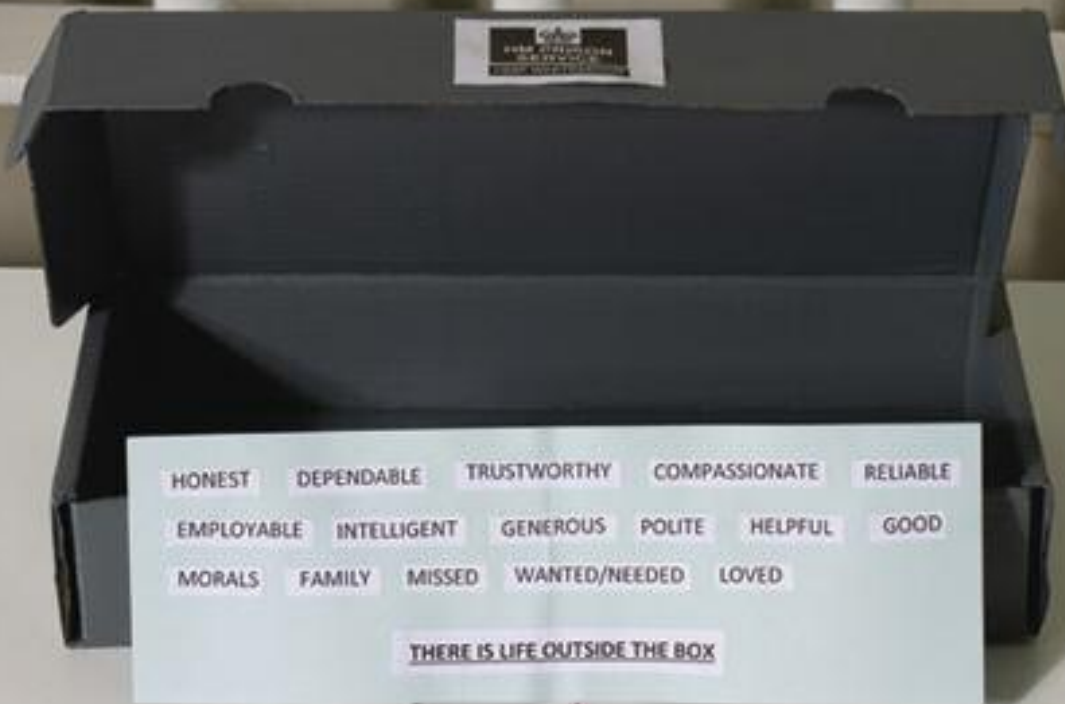


PRISON SERVICE JOURNAL

September 2019 No 245



Animal Visitation Programs as a Therapeutic Intervention for Jailed Women with a Mental Health Diagnosis

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Introduction

In his introductory piece in a special issue of *The Prison Journal* dedicated to mental health issues and jails, Lurigio¹ compiled statistics that reflect why the Vera Institute of Justice declared, 'Jails matter'.² He reports that in the United States jails process nearly 12 million admissions each year³ — 20 times higher than the number of admissions to prisons.⁴ Lurigio goes on to call jails a 'critical resource for the criminal justice system (CJS) and the larger community'.⁵ At the same time, however, he says 'they have been given short shrift, compared with prisons.'⁶ 'Jails are often the community resource of last resort' when all other forms of informal social control are exhausted, they are tasked with 'housing and providing security for and, in some cases, treating the mentally ill.'⁷ To those who work in them they are 'the biggest mental home in the community'.⁸

Budgetary constraints, while not a new dilemma for jails, become particularly salient when we consider the exponential growth in the number of incarcerated people with mental health disorders.⁹ Close to half a million mentally ill persons are detained in U.S. jails;¹⁰ this number is projected to rise. At the same time, 'jails

have become increasingly more populated by women.'¹¹ In 2011, the Bureau of Justice Statistics reported that women comprise 12.6 per cent of the jail population.¹² From midyear 2010 through 2014, the number of females in jail grew 18 per cent while the male population fell by 3 per cent.¹³ Although the U.S. has experienced the largest growth in female incarceration rates, the number of incarcerated women worldwide has steadily increased over the past two decades — 53.3 per cent compared with 19.6 per cent for men — suggesting that this is not just a U.S. problem.¹⁴

While jails are designed for short term confinement and generally not concerned with rehabilitation and treatment programs,¹⁵ jailed women often have a wide range of significant treatment needs — raising the question of how these short-term facilities will respond to this emerging population. In this paper, we propose the use of Animal Visitation Programs (AVPs) either independently or in tandem with other treatment services to address the immediate and short-term needs of incarcerated females with mental health disorders and/or histories of prior victimization. The benefits of AVPs have been empirically established as an efficient, cost effective

1. Lurigio, A. (2016). Jails in the United States: The "Old-new" frontier in American corrections. *The Prison Journal*, 96, 3-9.
2. Vera Institute of Justice. (2015). *Incarceration's front door: The misuse of jails in America*. New York, NY.
3. Minton, T. D., & Golinelli, D. (2014). *Jail Inmates at Midyear 2013-statistical Tables*. Washington, DC: US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
4. Vera Institute of Justice (2015), see n.2.
5. Lurigio (2016), see n.1., p5.
6. *ibid*
7. Slate, R.N., Buffington-Vollum, J.K., & Johnson, W.W. (2013). *The criminalization of mental illness*, 2nd ed. Durham, North Carolina: Carolina Academic Press. p225
8. Cornelius, G.F. (2012). *Jails, pre-trial detention, and short term confinement*. In J. Peterselia & K.R. Reitz (Eds) *The Oxford Handbook of Sentencing and Corrections* (pp. 389-415). Oxford University Press. p406.
9. Kim, K., Becker-Cohen, M., & Serakos, M. (2015). *The processing and treatment of mentally ill persons in the Criminal justice system: A scan of practice and background analysis*. The Urban Institute: Washington, DC.
10. James, D. J., & Glaze, L. E. (2006). *Mental health problems of prison and jail inmates* (Publication No. NCJ 213600). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
11. Lurigio, 2016, n. 1, p 5
12. Minton, T.D. (2012). *Jail inmates at mid-year 2011 – statistical tables* (Report NCJ 237961). Retrieved from <https://www.bjs.gov/content/pub/pdf/jim11st.pdf>
13. Minton, T. D., & Zeng, Z. (2015). *Jail inmates at midyear 2014*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
14. Walmsley, R. (2017). *World female imprisonment list* (4th ed.). London: Institute for Criminal Policy Research.
15. Cornelius (2012), n.8

intervention in reducing stress and anxiety in other populations (e.g. hospital patients, children, college students) in relatively short periods of time.¹⁶ Against this backdrop, AVPs offer carceral facilities with a viable treatment option to address the immediate needs of this vulnerable and burgeoning population.

The vast majority of female detainees have multiple criminogenic risk factors. Compared to jailed men, jailed women suffer from disproportionately high rates of chronic health conditions and substance use and mental health disorders.¹⁷ Perhaps the most significant risk factor for criminality is the high prevalence of physical and sexual abuse reported by jailed women. In the sample of female jail detainees surveyed by Green, Miranda, Daroowalla, and Siddique, 98 per cent reported exposure to a traumatic event, 90 per cent had at least one interpersonal trauma, and 71 per cent had experienced domestic violence.¹⁸ The women also suffer from high rates of post-traumatic stress disorder (PTSD). Despite the relatively short-term nature of most stays, incarceration in jail can be fraught with re-traumatizing experiences ranging from separation from children and family, correctional procedures that can trigger traumatic experiences to interpersonal violence and substance use withdrawal.

... jailed women suffer from disproportionately high rates of chronic health conditions and substance use and mental health disorders.

Unfortunately, jails are often 'ill-equipped to address the wide spectrum of problems faced by

detainees.¹⁹ Even as jails have become one of the country's primary provider of mental health care (alongside prisons), they are expected to do so with insufficient resources.²⁰ Given the growing number of women in jail, the need for mental health care services, and concurrent budget constraints, a unique treatment intervention is needed. Based on the well-documented therapeutic nature of human-animal interactions as calming forces in a multitude of populations and circumstances, Animal Visitation Programs (AVP) provide an opportunity for a brief unstructured interaction with an animal.²¹ Research finds the calming presence of a dog can effectively reduce stress and anxiety.²² Visiting dogs have been used to decrease distress in hospitalized children being treated for pain management,²³ to improve mood and reduce anxiety in older people in assisted-living,²⁴ and to reduce anxiety in patients hospitalized for acute depression.²⁵ The non-judgmental reaction of dogs has been found to encourage reluctant children to read aloud.²⁶ Many colleges are bringing dogs to campus during final exams — holding open hours for student to drop in and spend some time petting a dog.²⁷ In fact, standardized assessment instruments such as the Beck Depression Inventory (BDI) have shown a significant reduction in anxiety among students following brief interactions with the dogs.²⁸ Dogs can be similarly used inside jails where relieving

16. Folse, E., Minder, C., Aycock, M., & Santana, R. (1994). Animal-assisted therapy and depression in adult college students. *Anthrozoos*, 7, 3, 188-194. DOI:10.2752/089279394787001880; Kruger, K.A., & Serpell, J.A. (2010). Animal-assisted interventions in mental health: definitions and theoretical foundations. In A. Fine (Ed.), *Handbook on animal-assisted therapy, theoretical foundations and guidelines for practice* (pp. 33 - 48). San Diego: Elsevier.
17. James & Glaze (2006), n. 10; Mumola, C. J., & Karberg, J. C. (2006). *Drug use and dependence, State and Federal inmates, 2004* (Publication No. NCJ 213530). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
18. Green, B., Miranda, J., Daroowalla, A., and Siddique, J. (2005). Trauma exposure, mental health functioning, and program needs of women in jail. *Crime & Delinquency*, 51, 133-151.
19. Lurigio (2016), n.1, p8
20. Ford, M. (2015, June 8). America's largest mental hospital is a jail. *The Atlantic*. Retrieved from <https://www.theatlantic.com/politics/archive/2015/06/americas-largest-mental-hospital-is-a-jail/395012/>; Harding, C., & Roman, C. (2017). Identifying discrete subgroups of chronically homeless frequent utilizers of jail and public mental health services. *Criminal Justice and Behavior*, 44, 511-530.
21. Kruger & Serpell (2010), n16
22. Cole, K., Gawlinski, A., Steers, N., & Kotlerman, J. (2007). Animal-assisted therapy in patients hospitalized with heart failure. *American Journal of Critical Care*, 16, 575-585. Wu, A., Niedra, R., Pendergast, L., McCrindle, B., (2002). Acceptability and impact of pet visitation on a pediatric cardiology inpatient unit. *Journal of Pediatric Nursing*, 17, 354-362.
23. Sobo, E., Eng, B., & Kassity-Krich, N. (2006). Canine visitation (pet) therapy: Pilot data on decreases in child pain perception. *Journal of Holistic Nursing*, 24, 51-57.
24. Colby, P., & Sherman, A. (2002). Attachment styles impact on pet visitation effectiveness. *Anthrozoos*, 15, 150-165.
25. Hoffman, A., Lee, A., Wertenaue, F., Ricken, R., Jansen, J., Gallinat, J., & Lang, U., (2009). Dog-assisted intervention significantly reduces anxiety in hospitalized patients with major depression. *European Journal of Integrative Medicine*, 1, 145-148.
26. Jalongo, M.R., Astorino, T., and Bomboy, N. (2004). Canine visitors: The influence of therapy dogs on young children's learning and well-being in classrooms and hospitals. *Early Childhood Education Journal*, 32, 9-16.
27. Barker, S., Barker, R., McCain, N., and Schubert, C. (2016). A Randomized cross-over exploratory study of the effect of visiting therapy dogs on college student stress before final exams. *Anthrozoos*, 29, 35-46 Binfet, J. (2017). The effects of group-administered canine therapy on university students' wellbeing: A Randomized controlled trial. *Anthrozoos*, 30, 397-414.
28. Folse et al., n16

the intensity of stress and anxiety can foster institutional adjustment. The programs require few resources and can offer relief to a large number of people in a relatively brief amount of time.

After reviewing the risk factors faced by women detained in jail, we examine the prevalence of mental health issues and the struggles this population faces while jailed. We also consider the challenges this population creates for jail administrators and staff responsible for their custody, care, and control. We review the logic of human-animal interactions and discuss the empirical research findings about the impact of AVPs as a therapeutic intervention. It is important to note that we are not suggesting AVPs replace traditional talk-therapy or psychopharmacological treatments, but given the state of American jails and the worldwide increase of incarcerated women, introducing a treatment approach that is 'innovative and creative' can provide relief for jailed women with a mental health diagnosis.²⁹

Women in Jail

Although designed to house those who violate the law, jails (and prisons) are now serving the dual role of also being the largest provider of mental health treatment in the country.³⁰ 'Los Angeles County Jail, Chicago's Cook County Jail, or New York's Riker's Island Jail each hold more mentally ill inmates than any remaining psychiatric hospital in the United States.'³¹ As a result, mental health treatment is the largest contributor to soaring health care costs in correctional budgets.³² Despite the increasingly large

... risk factors faced by women detained in jail, we examine the prevalence of mental health issues and the struggles this population faces while jailed.

numbers of mentally ill persons in the criminal justice system, Kim et al. argue 'there are few rigorous evaluations of criminal justice programs and policies targeted at mentally ill offenders.'³³ They suggest that this limitation in our understanding calls for research to best identify cost effective evidence-based practices to respond to this burgeoning, and predominantly female, offender population.

As we consider the call to more effectively respond to the incarcerated mentally ill, it is necessary to understand that the pathway to mental illness and criminality are often gender-specific. While there is no one single trajectory to criminal behavior, the inextricable link between victimization, mental health, substance use, and criminal behavior for women is well established.³⁴ The mental health needs of the female offender population have been shown to be more prevalent and more severe than those of male offenders.³⁵ Specifically, incarcerated women report higher rates of violent victimization, major depression, and posttraumatic stress disorder; in addition to higher rates of substance use disorders, women also are more likely to have personality disorders, specifically borderline personality disorder.³⁶

More than men, women report using substances as a way to mask physical and emotional pain (males are more likely to report substance use for pleasure).³⁷ Women are also more likely than males to have co-occurring psychiatric disorders and substance use disorders (COD) and experience greater psychological and physiological disabilities associated with their disorders.³⁸ Many

29. Stewart, L., Dispenza, F., Parker, L., Chang, C., & Cunnien, T. (2014). A pilot study assessing the effectiveness of an animal-assisted outreach program. *Journal of Creativity in Mental Health*, 9, 332-345.
 30. American Psychiatric Association. (2004). *Mental illness and the criminal justice system: Redirecting resources toward treatment, not containment*. Arlington, VA: Author.
 31. Treatment Advocacy Center (2016). *Serious Mental Illness (SMI) Prevalence in Jails and Prisons*. Retrieved from <http://www.treatmentadvocacycenter.org/storage/documents/backgrounders/smi-in-jails-and-prisons.pdf>, p1.
 32. As cited in Kim et al. (2015), n.9.
 33. Ibid, pV.
 34. See Bloom, B., Owen, B., Covington, S., & Raeder, M. (2003). *Gender-responsive strategies: Research practice and guiding principles for women offenders*. Washington, DC: National Institute of Corrections. Pelissier, B. & Jones, N. (2005). A review of gender differences among substance abusers. *Crime & Delinquency*, 51(3), 343-372. Verona, E., Murphy, B., & Javdani, S. (2016). Gendered pathways: Violent childhood maltreatment, sex exchange, and drug use. *Psychology of Violence*, 6(1), 124-134.
 35. Burnette, M.L. & Newman, D.L. (2005). Thae natural history of conduct disorder symptoms in female inmates: On the predictive utility of the syndrome in severely anti-social women. *American Journal of Orthopsychiatry*, 75, 421-430. Doi: 10.1037/002-9432.75.3.421. Jaspersen, R.A. (2013). An animal-assisted therapy intervention with female inmates. *Anthrozoos*, 26 (1), 135-145. Ross, P.H. & Lawrence, J.E. (2009). Women in jail: Mental health care needs and service deficiencies. In R.Gido, & L. Dalley (Eds.), *Women's mental health issues across the criminal justice system*, (pp. 117-128). Upper Saddle River, New Jersey: Pearson Prentice Hall.
 36. Jaspersen (2010), n35
 37. Langin, N. & Pelissier, B.M.M. (2001). Gender differences among prisoners in treatment. *Journal of Substance Abuse*, 13(3), 291-301.
 38. Urban, N.B.L, Kegeles, L.S., Slifstein, M., Xu, X., Martinez D., Sakr, E, Castillo, F, Moadel, T, O'Malley, S., Krystal, J.H., & Abi-Dargham, A. (2010). Sex differenced in striatal dopamine release in young adults after oral alcohol challenge: A positron emission tomography imaging study with [11C] Raclopride. *Biological Psychiatry*, 68(8), 689-696.
- World Health Organization (n.d.). *Gender disparities in mental health*. Geneva, Switzerland: Department of Mental Health and Substance Dependence: Geneva, Switzerland. Retrieved from: http://www.who.int/mental_health/media/en/242.pdf?ua=1

women in jail are struggling with serious mental illness (SMI), substance use disorders (SUDs), and Post Traumatic Stress Disorder (PTSD) at the same time. For example, Lynch et al. found 29 per cent SMI and co-occurring SUD and 26 per cent SMI and SUD and PTSD.³⁹

As women's needs go untreated in the community, they end up incarcerated; between 2000 and 2010 the rate of women behind bars rose by 17.2 per cent while the rate of men increased by 8.1 per cent.⁴⁰ Adjustment to the jail environment for women with SMI, PTSD and victimization histories can be a daunting experience.⁴¹ For many women, jail may be their first experience with incarceration or a return to the system not yet knowing their fate — heightening their levels of fear and anxiety.⁴² Women must cope with procedural protocols including strip searches, loss of privacy and feelings of shame and humiliation.⁴³ Women with PTSD may engage in avoidance techniques that removes themselves from objects or situations that can serve to re-trigger their traumatic experience.⁴⁴ However, in correctional settings, failure to comply with policies and protocols is a violation of the inmate code of conduct that can result in punitive sanctions. Cadreche cautions correctional institutions of the importance in recognizing gender-sensitive risk factors of female offenders to avoid 'becoming part of the problem.'⁴⁵

Traylor and Richie assert 'the linkage between women's victimization and their pathways to

incarceration can best be described as a culmination of a host of traumatic life events.'⁴⁶ In fact, we know 'serious and repeated traumas, polyvictimization, is common' among jailed females.⁴⁷ Using a matched comparison sample of 100 incarcerated and 100 non-incarcerated females, Grella, Lovinger, and Warda found incarcerated women to be at significantly higher risk of trauma exposure and multi-victimization with an apparent lack of appropriate coping mechanisms.⁴⁸ Although estimates vary, McDaniels-Wilson and Belknap's found 70 per cent of the incarcerated women in their study experienced at least one sexual victimization over their lifetime and half were victimized as a child — often at the hands of relative or someone in a position of trust.⁴⁹ Their abuse is often associated with depression, anxiety, psychosis and high rates of PTSD.⁵⁰

In a study of 100 jailed females from Price George County in Maryland, researchers measured the prevalence of trauma exposure, mental illness, and substance use disorder (SUD).⁵¹ They found 'overwhelming exposure to violence among these women' who suffered from multiple and chronic problems.⁵² Among this population, 98 per cent had lifetime trauma exposure, 74 per cent reported a substance use

disorder, one-quarter had a psychiatric diagnosis of major depressive disorder, 22 per cent had symptoms of current Post-Traumatic Stress Disorder (PTSD), and 13 per cent exhibited symptoms of bipolar disorders. The one consequence of this epidemic of women suffering

Adjustment to the jail environment for women with SMI, PTSD and victimization histories can be a daunting experience.

39. Lynch, S. M., DeHart, D.D., Belknap, J.E., Green, B.L., Dass-Brailsford, P., Johnson, K.A., Whalley, E. (2014). A multisite study of the prevalence of serious mental illness, PTSD, and substance use disorders of women in jail. *Psychiatric Services*, 65(5), 670-674.
40. Glaze, L.E. & Kaeble, D. (December 2014). *Correctional Populations in the United States*, 2013. (Publication No. NCJ 248479). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
41. Slate et al. (2013), n7.
42. Cornelius (2012), n8.
43. Human Rights Watch. (2003). *Keep mentally ill out of solitary confinement*. Retrieved from <http://www.hrw.org> Slate et al. (2013), n7.
44. National Institute of Mental Health (n.d.). *Post-traumatic stress disorder*. Bethesda, MD. Retrieved from: <https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml>
45. Cadreche, M. (January/February 2014). The impact of gender specific programming on female offenders. *Corrections Today*, p.8.
46. Traylor, A.L. & Richie, B.E. (2012). Female offenders and women in prison. In J. Peterselia & K.R. Reitz (Eds) *The Oxford Handbook of Sentencing and Corrections* (pp. 561-583). Oxford University Press, p. 572.
47. Scott, C., Lurigio, A., Dennis, M., and Funk, R. (2016). Trauma and morbidities among female detainees in a large urban jail. *The Prison Journal*, 96, 102-125, p. 103.
48. Grella, C., Lovinger, K., & Warda, U.S. (2013). Relationships among trauma exposure, familial characteristics, and PTSD: A case-control study of women in prison and in the general population. *Women & Criminal Justice*, 23, 63-79.
49. McDaniels-Wilson, X. & Belknap, J. (2008). The extensive sexual violation and sexual abuse histories of incarcerated women. *Violence Against Women*, 14(10), 1090-1127.
50. Grella et al. (2013), n.48. Kennedy, S. C., Tripodi, S. J., & Pettus-Davis, C. (2013). The relationship between childhood abuse and psychosis for women prisoners: Assessing the importance of frequency and type of victimization. *Psychiatric Quarterly*, 84(4), 439-453. Mersky, J.P., Janczewski, C.E., & Nitkowski, J.C. (2018). Poor mental health among low-income women in the U.S.: The roles of adverse childhood and adult experiences. *Social Science & Medicine*, 206, 14-21.
51. Green et al. (2005), n.18.
52. Ibid, p. 146

from psychological disorders rooted in trauma is that 'many women in prison or jail for committing crimes are crime victims themselves';⁵³ their victimization contributes either indirectly, through substance use or mental health disorders, to their criminal behavior or as a direct response to their victimization.⁵⁴

The extensive harm that results from trauma and polyvictimization makes standard therapeutic approaches less effective.⁵⁵ Fear, shame, humiliation and guilt are common after effects of victimization with many survivors believing they deserved the abuse.⁵⁶ Although abused women often report feelings of loneliness, fear and distrust of others make it hard to form new or intimate relationships. Communicating thoughts and feelings can be difficult with heightened sensitivity to the criticisms of others.⁵⁷ In their treatment improvement protocol series, Substance Abuse and Mental Health Services Administration calls for treatment specialist to recognize that for clients with abuse histories as part of their substance use or mental health disorders, addressing past abuse is an important step in the treatment process;⁵⁸ however, clients may find it difficult to disclose their abuse or share their feelings with others — preferring instead to confide through other means (e.g. writing it down on paper).⁵⁹ Many people experience a sense of emotional safety when a dog is present in an otherwise stressful

The extensive harm that results from trauma and polyvictimization makes standard therapeutic approaches less effective.

situation.⁶⁰ In jail, the combination of a population with emotionally complex needs and an environment where therapeutic care is limited as a result of time and personnel constraints, the ability of a dog to relieve emotional distress can be particularly useful. Abused women who might otherwise find communicating with others difficult, could find confiding in a dog easier without fear of criticism or judgment.

Treatment

Incarcerated women exist in an institution originally designed for men.⁶¹ As such, women with SMIs and CODs present substantial challenges for institutions for their behavioral adjustment and treatment needs.⁶² The extensive treatment needs and risk factors of this population are incontrovertible, yet their needs are often unaddressed or under-addressed in the correctional setting — women continue to receive the fewest services,⁶³ particularly in jails where programming is not standardized due to typically shorter stays and the transient nature of the population.⁶⁴ Surveyed estimates of mental health treatment in correctional settings showed only 17 per cent of jailed mentally ill receive treatment following admission (as compared with 34 per cent of state prisoners and 24 per cent federal prisoners).⁶⁵ Little

53. Ibid

54. Battle, C.L., Zlotnick, C., Najavits, L.M., Guttierrez, M., & Winsor, C. (2003). *Posttraumatic stress disorder and substance use disorder among incarcerated women*. In P.C. Quimette & P.J. Brown (Eds.), *Trauma and substance abuse: Causes, consequences, and treatment of comorbid disorders* (pp.209-225). Washington, DC: American Psychological Association.

Green et al. (2005), n.18. McConnell, T. (2017). The war on women: The collateral consequences of female incarceration. *Lewis & Clark Law Review*, 21:2, 493-524. Scott et al. (2016), n.47

55. Lynch et al. (2014), n.39.

56. American College of Obstetricians and Gynecologists (2011). *Adult manifestations of childhood sexual abuse*. Committee opinion No. 498.

57. See *ibid*. Fry, P. S., & Barker, L. A. (2002). *Quality of relationships and structural properties of social support networks of female survivors of abuse*. Genetic, Social & General psychology Monographs, 128(2), 139–165. Poole, J. C., Dobson, K. S., & Pusch, D. (2018). Do adverse childhood experiences predict adult interpersonal difficulties? The role of emotion dysregulation. *Child Abuse & Neglect*, 80, 123-133. doi: <https://doi.org/10.1016/j.chiabu.2018.03.006> Substance Abuse and Mental Health Services Administration (2000). *Treatment Improvement Protocol (TIP) Series, No. 36*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

58. Substance Abuse and Mental Health Services Administration (2000), n.57.

59. Also see Ducharme, J., Koverola, C., & Battle, P. (1997). Intimacy development. *Journal of Interpersonal Violence*, 12(4), 590-599.

60. Jaspersen, R.A. (2010) Animal-Assisted therapy with female inmates with mental health: A Case example from a pilot program, *Journal of Offender Rehabilitation*, 49 (6), 417-433, DOI: 10.1080/10509674.2010.499056.

61. Jaspersen (2013), n.35.

62. Chandler, R. K., Peters, R. H., Field, G., & Juliano-Bult, D. (2004). Challenges in implementing evidence-based treatment practices for co-occurring disorders in the criminal justice system. *Behavioral Sciences and the Law*, 22, 431–448. Morgan, R. G., Flora, D. G., Kroner, D. G., Mills, J. F., & Varghese, F. (2012). Treating offenders with mental illness: A research synthesis. *Law and Human Behavior*, 36, 37–50.

63. Harner, H.M. & Riley, S. (2013). The impact of incarceration on women's mental health: Responses from women in a maximum-security prison. *Qualitative Health Research*, 23(1), 26-42. James & Glaze (2006), n.10 Teplin, L.A., Abram, K.M., & McClelland, G.M. (1997). Mentally Disordered Women in Jail: Who receives services? *American Journal of Public Health*, 87(4), 604-609. Zaitzow, B. H. (2010). Psychotropic control of women prisoners: The perpetuation of abuse of imprisoned women. *Justice Policy Journal*, 7(2).

64. Cornelius (2012), n.22.

65. James & Glaze (2006), n.10.

research on treatment administration of jailed women exists — Teplin et al.'s seminal study of mental health service delivery for jailed women found less than one quarter (23.5 per cent) of SMI female detainees in need of treatment received services while in jail.⁶⁶ Moreover, the likelihood of receiving treatment was dependent on receiving a diagnosis; however clinical assessments are limited due to the short term stay of jails and limited resources.

Studies further suggest that institutions disproportionately use psychotropic drugs as a therapeutic approach for symptomatic relief and behavioral control of female inmates.⁶⁷ Culliver estimated incarcerated women in the U.S. were 10 times more likely to be prescribed psychotropic drugs than their male counterparts.⁶⁸ Similar findings were noted by Hassan et al. study in England.⁶⁹ Using the clinical records of male and female prisoners, they found female prisoners were prescribed psychotropic drugs at rates 6 times that of general population estimates -compared with 4 times the rate found for males. Drug therapy is often the only form of treatment available in jail settings.⁷⁰ Whether for the purpose of behavioral control or symptomatic relief, the reliance on psychotropic drugs to the exclusion of other forms of therapy fails to address the underlying treatment needs of women.

'Today, every state has an interest in delivering care that comports with constitutional requirements and leverages opportunities to improve public health and reduce crime and recidivism;⁷¹ however, meeting the treatment needs of inmate populations that have grown exponentially over the past 5 decades has 'come at a steep cost — states spent \$8.1 billion on prison health care in fiscal year 2015 — about one-fifth of overall prison expenditures.⁷² The increasing demand

for healthcare resources are driven largely by the rising number of mentally ill and substance using offenders.⁷³ With fiscal constraints even more limited at the local level, jails are responding to increasing treatment costs by restricting drug formularies and increasing the use of tele-psychiatry in which psychiatric care is delivered electronically at a distance.⁷⁴ Given the inability of jails to meet the substantial mental health needs of jail detainees, particularly females, AVPs can be an adjunctive therapeutic intervention that requires few resources and is empirically supported. Against this backdrop, the AVPs we discuss here can interrupt this cycle of poor institutional adjustment, stigma, and inadequate mental health treatment.

Animal Visitation Programs

In the most common model of AVPs, participants engage in brief unstructured interactions with dogs with the goal of reducing stress, anxiety, and negative affect.⁷⁵ A small body of methodologically sound research regarding the effectiveness of AVPs is largely based on studies conducted in nursing homes,

Drug therapy is often the only form of treatment available in jail settings.

colleges, and hospitals. Animal visitation programs have several strengths compared to traditional talk therapy. The interactions are efficient in that they tend to be brief — for example, 7 to 10 minutes with college students⁷⁶ and 11 to 20 minutes with hospitalized children.⁷⁷ Typically staffed by volunteer certified dog therapy teams, the programs are low-cost interventions that can be administered to large numbers of people in a relatively brief amount of time. The approach also avoids the stigma common with psychotherapy. In addition, the intervention is fairly easy to administer.⁷⁸ The programs do not burden the person in need of stress relief with having to navigate a possibly complex and time-consuming healthcare system.⁷⁹ And finally,

66. Teplin et al. (1997), n.63.

67. See Zaitzow (2010), n.63. Auerhahn, K. & Leonard, E.D. (2000). Docile bodies? Chemical restraints and the female inmate. *Criminology*, 90(2), 599-634.

68. Culliver, C. (1993). Female criminality The state of the art. New York, NY: Garland.

69. Hassan, L., Senior, J., Webb, R.T., Frisher, M., Tully, M.P., While, D., & Shaw, J.J. (2016). Prevalence and appropriateness of psychotropic medication prescribing in a nationally representative cross-sectional survey of male and female prisoners in England. *BMC Psychiatry*, 16:346, p. 1-10.

70. Slate et al. (2013), n.7.

71. Pew Charitable Trust (2017). *Prison healthcare: Costs and quality*. Washington, DC. p.2

72. Ibid

73. Ibid

74. Slate et al. (2013), n.7.

75. Crossman, M., Kazdin, A., and Knudson., K. (2015). Brief unstructured interaction with a dog reduces distress. *Anthrozoos*, 28, 649-659.

76. Ibid

77. Sobo et al. (2006), n.23.

78. Crossman et al. (2015), n.75. Hoffman et al. (2009), n.25.

79. Crossman, M., & Kazdin, A. (2015). Animal visitation programs in colleges and universities: An Efficient model for reducing student stress. In Aubrey H. Fine (Ed.) *Handbook on Animal-Assisted Therapy* (4th ed.) (pp. 333-337). Elsevier.

Hoffman et al. point out that 'alternative treatments provide at least a placebo benefit and produce fewer side effects.'⁸⁰

Both qualitative and quantitative research studies provide support for the effectiveness of AVPs. For example, researchers have found that petting a live animal, whether a rabbit or a turtle, significantly reduces self-report state-anxiety.⁸¹ State-anxiety is a 'transitory emotional response involving unpleasant feelings of tension and apprehensive thoughts.'⁸² In a laboratory setting, the researchers induced anxiety in participants by putting them in a room with a caged Tarantula spider and telling them they may have to hold it. Instead, they were randomly assigned to one of four groups: pet a rabbit, pet a turtle, get a toy rabbit, get a toy turtle, or a control group. Attitudes toward animals, tested prior to the experiment, had no relationship to the anxiety reducing effect; reduced anxiety was not restricted to animal lovers in this sample.⁸³

In a more recent study using self-reported data, Crossman et al. examined 67 students and residents at a medical school.⁸⁴ The researchers used random assignment to place students in one of three conditions: an experimental group that engaged in one-on-one interaction with a trained therapy dog for 7-10 minutes, a control group that viewed pictures of the same dog, and a control group that did not look at a picture or interact with the dog. Participants who interacted with the dogs showed relatively large improvements in anxiety and positive affect compared to participants in the other two conditions. The researchers found a 'single brief interaction with a dog reduced anxiety and negative affect, and increased positive affect.'⁸⁵ The authors note the reduction in the subjective experience of distress was not limited to those with experience with dogs or greater belief in the effectiveness of the therapy dog. Binfet found similar results in a randomized control trial in which groups of three to four college students interacted with a therapy dog for 20 minutes. The treatment group showed a significant decrease in self-reported stress compared to a

group that continued to study uninterrupted by the therapy session.⁸⁶

Researchers have conducted studies using participants who are more similar to incarcerated females in that they are often struggling with fear, adjustment and trauma. For example, in a pre- and post-test controlled crossover study in which participants serve as their own controls, researchers examined state-anxiety using a validated self-report scale.⁸⁷ Their sample was comprised of 12 acutely depressed patients hospitalized for suicidality. A 30-minute visit with a dog had significant anxiolytic effects for the treatment group; the control group members who met with a researcher to talk about the patient's experience with pets did not demonstrate reduced anxiety. In a study of a dog visitation program in a pediatric pain management program at a children's hospital, researchers found the dog could 'foster rapport and communication.'⁸⁸ In interviews with 25 children and parents about their experience with the dog, several themes emerged, including: distraction, pleasure/happiness, fun/entertaining, a reminder of home, snuggling/contact, company, calming, eases pain. After visits of 11-20 minutes in duration, the children reported reduced intensity of emotional distress and physical pain.

In studies that use biological indicators to measure changes in the body that are associated with stress relief and decreased anxiety, participants can serve as their own control (i.e., measurements for each person were taken before and after the treatment, looking for evidence of change). For example, Wu et al. used biological indicators to determine the effectiveness of an AVP on a pediatric cardiology ward.⁸⁹ They found a fall in heart rate and respiratory rates among children who interacted with a dog for 10 to 20 minutes. The children reported 'feelings of fear, anxiety, helplessness, and powerlessness...which boredom and lack of stimulation increase as the period of hospitalization lengthens.'⁹⁰ The researchers suggest the distraction and relief from stress offered by the dog are the mechanisms responsible for the change. Another within

They found a fall in heart rate and respiratory rates among children who interacted with a dog for 10 to 20 minutes.

80. Hoffman et al (2015), n.25, p147

81. Shiloh, S., Sorek, G., & Terkel, J. (2003). Reduction of state-anxiety by petting animals in a controlled laboratory experiment. *Anxiety, Stress, and Coping*, 16, 387-395.

82. Ibid, p387

83. Shiloh et al. (2003), n.81.

84. Crossman et al., (2015), n.75

85. Crossman et al., (2015), n75, p656.

86. Binfet (2017), n.27.

87. Hoffman et al. (2009), n.25.

88. Sobo et al., (2006), n.23, p52.

89. Wu et al. (2002), n.22.

90. Ibid, p354.

subjects study, this one with a control group, was conducted by Barker, Knisely, McCain, and Best who used biological measures to examine the stress of 20 healthcare professionals.⁹¹ The sample was assigned to one of three groups: 20 minutes of quiet rest, a five-minute visit with a therapy dog, or a 20-minute visit with a therapy dog. They found significant decreases in the blood and salivary cortisol levels in both groups that visited the dog. The stress reducing effect of the visit with the dog was present in the five-minute group, suggesting that even very brief interactions with a dog can be therapeutic. A decade later Barker et al., in what they call an exploratory study, found a 15-minute interaction with a therapy dog reduced self-reported stress but not biological indicators, from saliva, in a sample of college students.⁹²

In another within subjects three-group design, this one with random assignment, Cole et al. used biological indicators to examine the effect of a 12-minute visit with a therapy dog on 76 patients hospitalized for advanced heart failure in a cardiac care unit.⁹³ Results of blood tests found reduced stress hormones (epinephrine and norepinephrine) in the sample that had a visit, compared to the group that received a visit from a human volunteer and the group that received treatment as usual. Self-report test results indicated the visits also reduced anxiety. In a unique comparative study using biological measures Odendaal and Meintjes found that when people interacted with a dog the blood pressure of both the person and the dog decreased.⁹⁴ Both also showed an increase in dopamine — the so-called

The stress reducing effect of the visit with the dog was present in the five-minute group, suggesting that even very brief interactions with a dog can be therapeutic.

'pleasure hormone' associated with gratifying sensations and reward (among many other physiological processes). In addition, oxytocin levels (associated with bonding) increased in both species. The changes occurred after visits limited to 30 minutes.

Animals in Carceral Facilities

The therapeutic nature of interacting with a dog has become widely recognized in corrections across the globe.^{95,96} In the most common prison-based animal programs, dog training programs, incarcerated people are taught to train dogs for adoption to the community.⁹⁷ Non-profit animal rescue organizations that partner with a correctional facility provide the dogs, the supplies, and the dog trainer who teaches the program participants. The incarcerated people who are taught to be dog handlers must have a significant amount of time left on their sentence to ensure they complete the training module, usually a minimum of a few months, with their assigned dog.

A relatively small number of studies have focused on incarcerated women in a variety of programs in which they interact with, but do not train, dogs. Jaspersen notes that in populations with high rates of lifetime trauma, such as incarcerated females, there is a high prevalence of insecure attachment style; formed during childhood, this disrupted attachment negatively impacts psychological functioning in adulthood and is associated with personality disorders and mental illness.⁹⁸ She points out

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91. Barker, S., Knisely, McCain, N., Best, A. (2005). Measuring stress and immune response in healthcare professionals following interaction with a therapy dog: A Pilot Study. *Psychological Reports*, 96, 713-729.
92. Barker et al. (2016), n.27.
93. Cole et al. (2007), n.22.
94. Odendaal, J., & Meintjes, R. (2003). Neurophysiological correlates of affiliative behavior between humans and dogs. *The Veterinary Journal*, 165, 296-301.
95. For a review of the literature on U.S. programs see Bachi, K. (2013). Equine-facilitated prison-based programs within the context of prison-based animal programs: State of the science review. *Journal of Offender Rehabilitation*, 52, 46-74. Cooke, B. J., & Farrington, D. P. (2016). The Effectiveness of Dog-Training Programs in Prison: A Systematic Review and Meta-Analysis of the Literature. *The Prison Journal*, 196(6), 854-876. Fournier, A.K. (2016). Pen Pals: An Examination of human-animal interaction as an outlet for healthy masculinity in prison. In C. Blazina and L.R. Kogan (eds.), *Men and Their Dogs*, pp. 175-194. Switzerland: Springer International.
- Mulcahy, C., & McLaughlin, D. (2013). Is the tail wagging the dog? A Review of the evidence for prison animal programs. *Australian Psychologist*, 48, 369-378. Van Wormer, J., Kigerl, A., & Hailton, Z. (2017). Digging Deeper: Exploring the Value of Prison-Based Dog Handler Programs. *The Prison Journal*, 97, 520-538.
96. International programs are discussed in Humby, L., & Barclay, E. (2018). Pawsitive solutions: An Overview of prison dog programs in Australia. *The Prison Journal*, 98 (5), 580-603. Leonardi, R.J., Buchanan-Smith, H., M., Mclvor, G., & Vick, S. (2017). "You think you're helping them, but 'they're helping you too": Experiences of Scottish male young offenders participating in a dog training program. *International Journal of Environmental Research and Public Health*, 14, 945-972. Mercer, J., Gibson, K., & Clayton, D. (2015). The therapeutic potential of a prison-based animal programme in the UK. *Journal of Forensic Practice*, 17(1), 43-54.
97. Furst, G. (2006). Prison-based animal programs: A National Survey. *The Prison Journal*, 86, 407-430.
98. Jaspersen (2010), n.60.

research consistently finds people report experiencing 'emotional security derived from their relationship with an animal.'⁹⁹ In a small (N=5) pilot study of females on an inpatient mental health unit, a dog was present during a program designed to improve the social and coping skills, and self-awareness of the participants. Interacting with the dog provided a 'corrective relational experience' that allowed the participants to 'use the dog as a secure base, helping manage distress.'¹⁰⁰ Participants used the relationship 'to challenge their maladaptive coping strategies.'¹⁰¹ Similar to most jail programs, this prison program was relatively brief, one hour once per week, and the goal was not to change participants' attachment style, but to manage stress and encourage their receptivity to the group. Findings showed women who participated in the program had improved communication skills, increased prosocial behaviors and a decrease in social isolation. Findings further suggested higher levels of therapeutic engagement with the women displaying increased levels of motivation to attend group therapy and greater punctuality for group sessions. Moreover, the participants reported feeling a connection with the dog and 'looked forward to seeing the dog during the Animal-Assisted-Activities group and that the anticipation made them feel excited and happy.'¹⁰² The program effectively modified participants' institutional behavior.

Follow-up research on a psycho-social program allowed for random assignment of 74 women into one of several treatment groups with a dog or control groups without a dog present during the lessons.¹⁰³ In these larger groups, with 9 to 11 women, the treatment significantly improved symptom distress and coping in both groups, but there was no significant difference between groups. Jaspersen hypothesizes that smaller groups, with greater opportunity for more individual interaction with the dog may amplify the effect of the human-animal interaction.¹⁰⁴ Animal Visitation Programs provide this one-on-one interaction.

In research on a unit for females in a Danish prison, the presence of a dog during the business hours of the workshop was found to normalize the prison setting, improved social interactions between the women and

the prison staff, and provided comfort to the women when they were experiencing emotional distress.¹⁰⁵ Of the 12 incarcerated women interviewed, several reported seeking out the dog when they were sad or needed comfort. Petting and hugging the dog lessened feelings of pain and loneliness. Women who were not able to share their feelings with other incarcerated women or staff talked to the dog, who responded to their vulnerability with attention and affection. The dog also showed excitement upon arriving in the unit and seeing the women. The emotional bond the women developed during interactions with the dog positively impacted their overall wellbeing.

AVPs as a Gender-Specific Treatment

Animal Visitation Programs are a therapeutic intervention that can work in tandem with standard treatment options and aid in institutional adjustment. The programs could be particularly beneficial in jails and other short-term correctional facilities where shorter stays make effective talk therapy difficult. Research consistently points to the importance of the therapeutic alliance in successful treatment with victims of trauma¹⁰⁶ Not only do brief jail stays not provide sufficient time for that bond to form, but the harsh, unforgiving jail environment is simply not therapeutic. An AVP provides an opportunity to connect to another living creature and experience the security that can result from unconditional positive regard. As described above, a growing body of empirical research has found self-reported and biological changes that occur when we make that connection.

Animals provide the opportunity for interaction with no judgement or expectation. The lack of language may characterize human-animal relations as uniquely situated to impact incarcerated people, especially jailed women, who often have long histories of people's words being used to punish and reject them.¹⁰⁷ Without language to offend or cause harm, interactions between people and animals can feel less judgmental and therefore more therapeutic for members of this population. Both adult women and young men in prison dog training programs reported receiving emotional support from the dogs they

99. Ibid, p421.

100. Jaspersen (2010), n.60, p426.

101. Ibid

102. Ibid

103. Jaspersen (2013), n.35.

104. Ibid

105. Minke, L.K. (2017) Normalization, Social Bonding, and Emotional Support— A dog's effect within a prison workshop for women, *Anthrozoös*, 30(3), 387-395, DOI: 10.1080/08927936.2017.1311065

106. e.g., Cloitre, M., Chase Stovall-McClough, K., Miranda, R., & Chemtob, C. M. (2004). Therapeutic alliance, negative mood regulation, and treatment outcome in child abuse-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 72(3), 411-416. Keller, S. M., Zoellner, L. A., & Feeny, N. C. (2010). Understanding factors associated with early therapeutic alliance in PTSD treatment: Adherence, childhood sexual abuse history, and social support. *Journal of Consulting and Clinical Psychology*, 78(6), 974-979.

107. Furst, G. (2007). Without words to get in the way: Symbolic interaction in prison-based animal programs. *Qualitative Sociology Review*, 3, 96-109.

were training.¹⁰⁸ Because dogs are viewed as intelligent and having free-will,¹⁰⁹ when they respond positively to humans their behavior is generally interpreted as genuine. For incarcerated people who are used to adversarial and negative responses from many of those around them, a display of friendliness, even from a dog — or perhaps especially from a dog — can communicate empathy and encouragement. The programs also provide incarcerated people with an opportunity to engage in pro-social behavior by appropriately interacting with the visiting dog. They are able to practice, not just talk about, the prosocial, non-criminal transformed behavior incarceration is supposed to instill. Over twenty years ago, in their now classic work, Beck and Katcher pointed out that it is ‘when people face real adversity, affection from a pet takes on new meaning.’¹¹⁰

Throughout this paper, we have argued that corrections-based mental health treatment must not be approached from a ‘one size fits all’ perspective. We have suggested the need to view treatment through a gender-responsive lens with the understanding that the social, psychological and structural determinants of mental health and comorbid disorders are uniquely different for women and are often reflections of their life experiences.¹¹¹ As Bloom et al. assert — ‘an understanding of gender-based life experiences and the consequences of these experiences must inform and shape appropriate policy, operational, and programmatic responses to women offenders.’¹¹² We suggest that the innovative therapeutic approach of AVPs are uniquely suited to respond to the calls for more gender-specific responsive programming, as well as policies targeted at mentally ill offenders. Moreover, Animal Visitation Programs can be administered by volunteers, with no need for a mental health professional,¹¹³ offering institutions a viable therapeutic option that might otherwise not be available.

Conclusion

While AVPs can obviously be effective for a person of any gender, we chose to focus here on women in jail because of the dire conditions they face. With few resources, limited research, and growing numbers,

jailed women with a mental health diagnosis are largely invisible. In addition, this population has low rates of treatment success. Some researchers suggest that part of the reason for poor outcomes is because

traumatic experiences can change brain chemistry and structure, both of

which affect women’s ability to respond to behavioral health care

interventions and to control their behaviors, leading to poor adjustment

in jail and high incidents of misconduct.¹¹⁴

Irrespective of the cause, this population appears well-suited for the relief AVPs can provide.

However, there are limits to both what we know about AVPs and the extent to which they can be used. As others have pointed out,¹¹⁵ the dose-response relationship of animal interaction needs further study. The goal is to be able to know how much therapy, the length of time spent with the animal, is needed to produce an effect, the reduction in distress. In addition, how long the effect last remains unknown. Future research still needs to further examine a variety of populations and the types and intensity of distress that can be impacted by AVPs.

We agree with Crossman et al. who say they are not suggesting AVPs replace psychotherapy and other evidence-based traditional forms of treatment. The programs ‘may have a unique role in reducing the burden of distress in America, which is distinct from that of psychotherapy. AVPs may provide individuals with appealing and low-burden opportunities to reduce psychological distress as part of their daily routines.’¹¹⁶ The programs can be thought of as ‘adding adjunctive and complementary therapies to pharmacological management’ of mental illness.¹¹⁷ Building on the success of prison dog training programs and the therapeutic nature of interacting with animals, the role of canines in corrections can expand to include AVPs. As we have described above, even brief interactions with a dog can have significant calming and soothing effects. Given the effectiveness of this type of efficient intervention, limited jail budgets, and the resource-intensive needs of jailed females with a mental health diagnosis, AVPs can be a valuable tool.

108. Ibid

109. Sanders, C. R. (1993). Understanding dogs: Caretakers’ attributions of mindedness in canine-human relationships. *Journal of Contemporary Ethnography*, 22(2), 205-226.

110. Beck, A., & Katcher, A. (1996). *Between pets and people*. West Lafayette, IN: Purdue University Press. p38

111. WHO, n.d., n.38.

112. Bloom et al. (2003), n.34, p.8.

113. Crossman et al. (2015), n.75.

114. Scott et al. (2015), n.47, p104.

115. Binfet (2017), n.27. Crossman et al. (2015), n.75.

116. Crossman et al. (2015), n.75, p657.

117. Cole et al. (2007), n.22, p576.