

**ANIMAL ASSISTED THERAPY AS A REHABILITATION TOOL IN CORRECTIONAL
FACILITIES**

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Abstract

It is essential to not solely focus on the punishment of incarcerated individuals, but to also focus on the rehabilitation of inmates in order to successfully integrate them back into the community. Recently, correctional institutions have begun integrating canine and animal training programs as a non-traditional method of rehabilitation and therapy. Preliminary evidence demonstrates that inmates benefit from these programs, learning life-enhancing skills and lowering the rate of recidivism. This thesis will examine the effect of animal assisted therapy (AAT) on inmate rehabilitation in correctional facilities. Evidence from a number of studies indicate that inmates gain life enhancing skills and are able to improve their coping abilities to cater to their emotional and social needs. In addition, exploring the effects and benefits to not only inmates but also to society and the community, will significantly impact how AAT programs can be used as intervention techniques within the correctional system. Focusing exclusively on punishment will not work, incarcerated individuals need a program that instills a life changing attitude and this program can be AAT.

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Animal Assisted Therapy as a Rehabilitative Tool

Animal-assisted therapy programs are becoming an increasingly common alternative to more traditional forms of therapy in a number of different settings, such as hospitals, psychiatric centres and correctional facilities. Research and case studies of animal-assisted therapy interventions, which is a type of human-animal interaction therapy most often used with populations affected by depression/anxiety, mental illness, and trauma, could provide a model of how prison-based animal therapy programs can be extensively implemented in correctional institutions, where the population suffers from high rates of mental health problems.

Methodology

The aim for this thesis is to determine the effect of animal assisted therapy programs on inmate rehabilitation in correctional facilities. By conducting a comprehensive literature review, this thesis will examine multiple scholarly articles, books and case studies that look at the benefits of AAT programs within the prison systems around the world. This paper will also examine a Canadian AAT program in order to determine the effects that an AAT program in Canada has had on inmates. By way of inductive and unobtrusive secondary data collection, a combination of pre-existing research, case studies, and news articles will provide a clear illustration on how these programs can lower recidivism rates and improve cognitive and behavioural wellbeing. The variables that will be addressed and measured in this thesis are recidivism rates, mental and emotional wellbeing such as depression levels, and psychosocial behaviours such as anti-sociality and aggression. It is important to define these variables.

Definitions

Recidivism is the most common measure of correctional program effectiveness and it is defined as the “tendency of a convicted criminal to reoffend” (Duwe, 2017, p. 2). Measures of recidivism generally include rearrest, re-conviction, re-sentencing to prison for a new offence, and a return to prison for a technical violation revocation (Duwe, 2017, p. 2).

In addition, this thesis will be looking at AAT as a form of cognitive-behavioural therapy (CBT), which is defined as, “A psycho-social intervention that focuses on challenging and changing unhelpful cognitive distortions and behaviours, improving emotional regulation, and the development of personal coping strategies that target solving current problems” (Martin, 2019). In other words, cognitive behavioural therapy helps individuals learn how to identify and change destructive or disturbing thought patterns that have a negative influence on behaviour and emotions. This is the definition that will be used, and the measures examined will be emotions and behaviours such as depression, anxiety, aggressiveness, and anti-sociality.

Limitations

Although there is quite a bit of information on AAT, there is a lack of research on animal assisted therapy in prisons and the effect that these programs have on inmates. The lack of information on AAT programs in correctional facilities means that the case studies examined may not be representative or typical of the larger issue being investigated because most of the case studies that examine AAT programs are very specific to the population being analyzed. For example, one case study looks at an active AAT program in a Canadian psychiatric prison, while another study looks at the effects of AAT programs on incarcerated women. In order to minimize the limitations, this thesis will focus solely on the impact of AAT programs on incarcerated

males. This thesis will establish an understanding of how best to proceed in studying and utilizing AAT programs as a rehabilitation tool in correctional facilities and will be utilized to gain insights for later investigation into this topic.

Rehabilitation in Correctional Facilities

Canada's incarceration rate, at 114 per 100,000 population, is one of the highest in the 'developed' world, lower than the United States (US), Britain or Australia but higher than all of western Europe (The John Howard Society of Canada, 2020, para. 3). In the US, incarceration rates are at a record high with 6.4 million people entangled in the criminal justice system, either incarcerated in jails or in the community on probation or parole (Maruschak & Minton, 2020, p. 1). It is estimated that 95% of those incarcerated in state correctional facilities are eventually released back into the community (Maruschak & Minton, 2020, p. 1). In the present time, there is a major focus on punishment — the majority of criminal justice or correctional institutions are punitive by nature — which makes it difficult to create effective rehabilitation programs. Critics of a more rehabilitative approach to crime believe that justice should be harsh in order to deter the public from committing crimes and they believe that rehabilitative programs would be less likely to have that effect. However, there is very little evidence to suggest that long prison sentences deter criminals.

It is essential to clearly define what is meant by the concept of rehabilitation. Cullen and Jonson (2011) have offered the following definition of rehabilitation: "a planned correctional intervention that targets for internal change and/or social criminogenic factors with the goal of reducing recidivism and, where possible, of improving other aspects of an offender's life." There are three main components of this definition, each of which carries with it a normative

requirement: (1) Treatments with criminal offenders should be planned, containing features created to reduce recidivism. (2) Treatments should identify the causes of crime (i.e., those things that are “criminogenic”) and be capable of changing or curing them. And (3) treatments should be directed toward human service and, whenever possible, seek to improve offenders’ well-being (Cullen & Gendreau, 2000, p. 239).

Rehabilitation programs are intended to reduce recidivism among criminal offenders by improving their behaviours, skills, mental health, social functioning, and provide access to education and employment (National Institute of Justice, 2020). Offenders could become participants in rehabilitation programs during a number of times in their involvement with the criminal justice system, and programs are generally provided in conjunction with some form of sanction such as incarceration or probation (National Institute of Justice, 2020). Thus, most programs are delivered within correctional settings while the offender completes his or her sentence, or in a community setting following the offender’s release (i.e., probation or parole-based programs).

In general, rehabilitation programs do not follow a common, well-defined treatment protocol (Lipsey & Cullen, 2007). Instead, interventions and services may vary significantly by program. However, all programs address at least one of the risk factors frequently associated with offending such as mental health problems, substance use, education level, or employment status (Lipsey & Cullen, 2007). The common types of treatment services provided by rehabilitation programs include group work (structured via protocol or psycho-educational content); cognitive behavioural therapy (CBT) or CBT-like components such as thinking skills, relapse prevention, or anger management; counselling; academic work such as GED or college

classes; employment-related (work-release, job placement, vocational training); supportive residential (therapeutic community, halfway house); drug court or other specialized court; multimodal, mixed treatments (individual case management); intensive supervision (reduced probation or parole); or restorative interventions such as mediation, reparations, community service, and victim-offender conferencing (National Institute of Justice, 2020).

Mental Health Among Inmates

Concern over the mental health of incarcerated individuals has a longstanding history in North America, including the effects of incarceration itself (e.g. post-traumatic stress disorder), as well as the social determinants contributing to incarceration such as injection drug use as a risk factor for criminalization and HIV (Dell et al., 2019). As previously mentioned, the US currently has the highest rate of incarceration in the world, including an overrepresentation of offenders with mental health problems and a corresponding need for improved care (Al-Rousan et al., 2017). Drawing on 2004 survey data, a study of the federal and state prison systems in the US concluded that at the time “[a] significant portion of the prison population [was] not receiving treatment for mental health conditions” (Gonzalez & Connell, 2014). In Canada, the Office of the Correctional Investigator has also raised continual concern about prisoners’ inadequate access to physical and mental health care (Dell et al., 2019).

The prevalence of mental illness among incarcerated individuals is estimated to be as high as 15%, compared to the prevalence rate of 2-3% in the normal population (Lamb & Weinberger, 1998, p. 485). In addition to clinical disorders, offenders regularly display psychosocial deficits, including poor social skills and emotion control. These deficits could be a result of both poor functioning prior to incarceration and a loss of skills while incarcerated

(Fournier, Geller & Fortney, 2007, p. 91). This is consistent with previous literature on prisonization, a process in which incarcerated individuals adopt the customs and culture of a correctional institution (Peat & Winfree, 1992, p. 210). One of the most distinguished studies of the psychosocial effects of incarceration is the Stanford Prison Experiment, in which psychologically healthy individuals in a prison-simulation study adopted the role of an inmate, becoming blindly subservient and suffering intense psychological trauma (Haney, Banks, & Zimbardo, 1973). Due to these deficits, rehabilitative programs are often incorporated to increase desired behaviours and attitudes among offenders and to provide inmates with education and training in psychosocial skills (Pearson et al., 2002, p. 478).

Does Rehabilitation Reduce Recidivism?

Recidivism is the most common measure of correctional program effectiveness. Research has demonstrated that a majority of released prisoners reoffend, especially when measured as a rearrest within at least three years of release from prison (Langan & Levin, 2002, p. 62). In a study of more than 400,000 offenders released from prisons in 30 different states in 2005, Durose, Cooper, and Snyder (2014) reveal that 68 percent were rearrested within three years and 77 percent were rearrested over a five-year follow-up period (para. 2). Durose, Cooper, and Snyder (2014) also discovered that recidivism rates were higher among males, non-whites, younger offenders, and those with longer criminal histories (para. 4), which is consistent with previous research exhibiting that gender, race, age, and criminal history are among the strongest predictors of recidivism (Gendreau, Little, & Goggin, 1996, p. 578).

Notably, recidivism data can help to revise rehabilitation programming for offenders. It is worth mentioning that a small group of chronic or repeat offenders commit a large proportion of

crime (Ahsan, 2019). Knowing this, data that identifies the types of offenders that are re-convicted most often can help to target specific groups of offenders when developing rehabilitation programs. Numerous studies show that a wide range of rehabilitation programs can reduce recidivism rates when they target the causes of recidivism (Ahsan, 2019). Further, research shows that offenders recommit crimes due to their socioeconomic status, effectiveness of their parole officers, length of time incarcerated, seriousness of crime, their education level, and general willingness to commit crime (Ahsan, 2019). However, an offender's willingness to recommit crime can be changed through programs that address cognitive and behavioural issues that help offenders create positive peer relationships, which enlarge their circle of support and make them feel more accountable for their actions (Ahsan, 2019). Their attitudes change from viewing crime as a necessity or normalcy to knowing that they have support outside of their criminal network. In other words, offenders are less likely to resort to crime because their social circle deters them from it. Furthermore, education and vocation programs at correctional institutions help inmates develop skills that increase their employability when released from prison, which makes it easier for them to have an income and pay for living expenses without returning to crime (Ahsan, 2019).

An analysis released by the National Institute of Justice (2020) examined a series of studies of inmates in rehabilitation programs aimed at improving their behaviours, skills, mental health, social functioning, and provided access to education and employment. It found that, "Overall participation in adult rehabilitation programs is associated with a statistically significant reduction in recidivism" (National Institute of Justice, 2020). However, certain types of treatment services were more successful at reducing recidivism than were others. Successful programs that

included group work (structured via protocol or psycho-educational content), CBT or CBT-like components, counselling, or that used drug court or other specialized court models were associated with a statistically significant reduction in recidivism (National Institute of Justice, 2020). However, it added that, “There were no statistically significant reductions in recidivism found for other types of rehabilitation programs,” such as work-related programs, academic programs, supportive residential programs, intensive supervision (such as reduced probation or parole caseloads), and multimodal/mixed treatments such as individual case management (National Institute of Justice, 2020).

Effective rehabilitation programs commonly use treatment methods that are based on behavioural and social learning theories of change. Behavioural theory suggests that individuals are conditioned to behave in a certain way based on experiences with reinforcement and punishment (Skinner, 1965). In contrast, social learning theory posits that people learn behaviours from one another, through observation, imitation, and modelling (Bandura, 1997). Thus, rehabilitation programs are designed to reduce criminal behaviours through the positive reinforcement of conventional behaviours learned through observation or modelling (Lipsey & Cullen, 2007). For example, a program may help a participant learn how to manage his or her anger by modelling appropriate responses instead.

Overall, looking at 634 independent effect sizes, Lipsey (2019) found a statistically significant mean effect size of 0.203 for recidivism. This finding illustrates that adult offenders who participated in rehabilitation programs showed reductions in criminal offending, compared with control group adult offenders who did not participate.

History of the Use of Animals in Institutions

The concept of utilizing animals in institutions is not new. Its origin can be traced to the notion of the human-animal bond (HAB), a term first used by pioneers such as Konrad Lorenz and Boris Levinson whose work significantly impacted the scientific community in the 1970s and 1980s, primarily in the field of veterinary medicine (Hines, 2016, p. 7). After being originally referred to as pet therapy or pet-facilitated therapy, they were characterized by the Delta Society as "animal-assisted activities" (AAA) and "animal-assisted therapy" (AAT) (Hines, 2016, p. 7). Pet Partners (formerly Delta Society), a leading international, non-profit organization that provides training for AAA and AAT practice, defines AAA and AAT in the following way: AAA provides opportunities for, "Motivational, educational, recreational, and/or therapeutic benefits to enhance quality of life." AAA is delivered in a variety of environments by specially trained professionals, paraprofessionals, and/or volunteers, in association with animals that meet specific criteria (Marino, 2012). AAT is a goal-oriented intervention in which an animal that meets specific criteria is an integral part of the treatment process. AAT is directed and/or delivered by a health/human service provider working within the scope of practice of his/her profession (Marino, 2012).

AAT is distinguishable from AAA in that it has a specific therapeutic objective and is delivered as part of a highly specific treatment plan. On the other hand, AAA involves a more casual interaction between animals and humans and can be provided by a broader range of individuals than AAT (Marino, 2012). Although Pet Partners distinguishes AAA and AAT, in actual practice the two are often conflated and may overlap substantially. In AAT and AAA, the animal serves a number of roles from companionship to caregiver to social facilitator and

reinforcement. Despite this ambiguity, Pet Partners is clear about the key point, which is that although it is often used as an adjunct to other forms of therapy that includes the presence of a human, AAT and AAA are based on the premise that the animal makes a therapeutic difference to the subject (Marino, 2012).

The implied mechanisms of action include mental stimulation, physical stimulation, physiological effects, and general motivating effects (Marino, 2012). Therefore, according to Pet Partner's arguments, the effects of an animal in the presence of a human should be differentiable from the effects of just a human on the subject and differentiable from the effects of another novel stimulus and a human (Marino, 2012). As is the case with many other disciplines that are still in the beginning stages of professional development, there is no general agreement on how AAT is to be conducted. There is an abundance of variations, depending on setting and target population (Deaton, 2005, p. 48). In addition, a wide variety of animals are used, ranging from small animals such as birds, fish, rabbits, dogs and cats to larger animals such as horses and farm animals, even dolphins (Deaton, 2005, p. 49). AAT can take place in numerous settings, including long-term care facilities, nursing homes, hospitals, schools, as well as correctional institutions.

Cusack (1988) proposed in the beginning stages of the development of AAT that, "Animals can be vitally important for the fringe groups of society; prisoners, the physically challenged, and the mentally ill" (p. 33). He further stated that perhaps most important, "Pets seem to bring out the best in us. If there is a capacity for affection, compassion, for empathy or tenderness overlooked by our human fellows, a pet has an uncanny ability to ferret it out" (p.33). Similarly, Beck and Katcher (1983) found that, "When people face real adversity...affection from

a pet takes on new meaning. Then the pet's continuing affection is a sign that the essence of the person has not been damaged" (p. 31). These conclusions support the idea that animal-assisted therapy in prison can encourage inmates to feel human again — a first step towards healing and change.

The Presence of Animals

The significance of animal-assisted interventions of all kinds is that the live animal is a highly specific component of the therapy. That is, without the animal there is no animal-assisted activity of any sort. The entire industry is founded on the assertion that involvement of a live animal in any kind of activity or therapeutic intervention (no matter how complex or multidimensional) is critical to its identity (Marino, 2012). There is a longstanding general sense among practitioners and researchers that activities and interventions involving animals may have nonspecific positive effects on both patients and normative populations of subjects. Yet, there have also been continuing doubts and controversies about the strength and specificity of the effect of animals on human health and welfare (Marino, 2012). In other words, there remains questions about the validity of AAT.

In a review, Johnson, Odendaal and Meadows (2002) recognized the importance of obtaining empirical evidence for AAT and stated that, “Advocates of programs using animals have begun to see empirical documentation as a critical factor in widespread acceptance of animal-assisted therapy as beneficial interventions for patients” (pp. 422–423). They cautioned that, “ ... Better designed experiments are needed to enhance the credibility of animal-assisted interventions ...” (p. 438). Since then, there has been an increase in published peer-reviewed studies of AAT reinforcing and strengthening claims of therapeutic efficacy.

The interaction between the animal and the human could provide a wide range of psychological and physical benefits for humans. These benefits could be explained by different reasons such as the biophilia hypothesis, which is described as the genetically based propensity of humans to seek connections with other living organisms or an increase in oxytocin levels, which induces antidepressant and calming effects (Villafaina-Domínguez et al., 2020). In addition, previous studies have shown a positive physiological response after being in contact with animals. For instance, an increase in beta endorphins or dopamine production were found in humans (Odendaal & Meintjes, 2003). Moreover, oxytocin levels seemed to increase. This is relevant since oxytocin is a peptide hormone and neuropeptide, released by the posterior pituitary, with antidepressant and calming effects (De Cagna et al., 2019). This could be the reason why AAT can help reduce anxiety, depression, blood pressure, or cortisol, as well as increase mental and physical wellbeing.

Animal Assisted Therapy in Correctional Institutions

Individuals involved in the criminal justice system are often exposed to violence, traumatic experiences, or have been through critical life events. Thus, as previously mentioned, the prevalence of mental health issues among sentenced prisoners is higher than that in the general population (Villafaina-Domínguez et al., 2020). Specifically, the prevalence of psychiatric disorders such as stress, anxiety or depression is relatively high in correctional facilities. Due to the large number of individuals in prison, which account for more than 10 million individuals worldwide and the large proportion of physical and mental health issues compared to the general population, there is a strong need to create programs that help to reduce offender infraction rates and violence and increase physical and mental health (Villafaina-

Domínguez et al., 2020). These intervention programs, which should be focused on psychosocial well-being, can be an effective way to maintain both staff and inmates' safety within correctional facilities, while also reducing the likelihood of recidivism. In this regard, AAT programs are a promising solution for these purposes.

Specifically, canine-based AAT programs consist of providing care and training for dogs, and sometimes, it includes vocational or educational components to enhance employability for offenders (Villafaina-Domínguez et al., 2020). These types of interventions have been proven to have positive effects on inmates. For instance, offenders who participated in a dog-based AAT program required less medication, were less violent to others, were less depressed, improved their social behaviours, and had fewer infractions, while at the same time their self-esteem was increased and their stress levels were decreased (Koda et al., 2015). In addition, since high dropout rates of behavioural intervention could be expected in this population, the inclusion of animals can increase adherence and motivation (Villafaina-Domínguez et al., 2020), which could be a key factor to consider.

Animal-based programs are common in prisons in the US. More recent, Cooke & Farrington (2016) identified 290 correctional institutions offering canine-based programs. The programs commonly involved inmates caring for and training dogs affiliated with rescue organizations, and frequently with dogs that may otherwise be euthanized. Other programs have inmates training puppies and adult dogs for service and therapy work (Dell et al., 2019). The perception of inmates contributing to the good of others, either for the animal or broader human community, has made this form of prison-based programming popular (Dell et al., 2019). The

rehabilitative focus on the animals (i.e. giving them a second chance at life) has also been cited by participants as an important feature of the programs (Dell et al., 2019).

In contrast, there are few animal-based programs in Canada's federal correctional system. Among the six that exist, four are clinical-based approaches and two are dog-training programs, which acknowledge their potential therapeutic benefits (Dell et al., 2019). A modified visiting therapy dog program operates at Stony Mountain Institution, the PAWSitive Support Canine Assisted Learning Program is offered at Drumheller Institution and an AAT program is at the Regional Psychiatric Centre (RPC), which will be examined in depth below (Dell et al., 2019). In addition, the Nekaneet Horse Program is offered at the Okimaw Ohci Healing Lodge for women. It is a blend of Cree protocol and equine therapy, including traditional indigenous spiritual teachings. As shared above, evaluated animal-based programs in Canada and in the US, where the majority of research has taken place, near exclusively focuses on canine training by offenders (Dell et al., 2019).

Evaluation of Prison-Based AAT

There is limited research on the effectiveness of prison-based AAT, and no peer-reviewed studies have been undertaken in Canada. The majority of research that does exist is specific to canine training programs in correctional facilities. Although training programs and visiting programs have distinct goals and objectives, the impact of the human–animal interaction and bond is common to both (Cooke & Farrington, 2016). Keeping this in mind, a 2016 review of AAT programs specifically in non-prison contexts for adaptability to the prison environment, suggested that when taking into consideration the animal roles in each evaluated study, offenders may benefit most from AAT that creates a stronger bond between inmate and therapist, as well as

a safe, non-judgmental environment “to express past experiences, reveal feelings and fears, and initiate conversations about how to mindfully react to and cope with life situations. These patient-animal interactions resulted in self-awareness, comforting support, and retention of learned therapy skills, important foundational components to positive mental health” (Allison & Ramaswamy, 2016, p. 477).

A 2016 systematic review and meta-analysis of the existing AAT prison literature, specific to dog-training programs, and based on ten studies meeting inclusion criteria, concluded that the programs had a beneficial effect on inmates (Cooke & Farrington, 2016). Other research conducted on prison dog-training and pet visitation, however, has produced less supportive findings, and is often critical of AAT study methods (Gilger, 2007). Despite limited, conflicting and often incomparable research results, inmates participating in a variety of forms of AAT typically report psychosocial benefits, including reduced depression and increased confidence, self-esteem, trust, self-control and pride (Hill, 2020; Currie, 2008; Turner, 2007; Deaton, 2005). Prison administrators have also reported that animal programs result in a lower rate of disciplinary infractions for participants and an improvement in institutional tension levels (Hill, 2020; Turner, 2007). In fact, 60 of the 61 administrators responding to Furst’s (2006) survey indicated that they would recommend animal programs to their colleagues. The scarce research on the impact on prisoner recidivism rates has been found to be supportive (Weaver, 2015), but oftentimes inconclusive and, if apparent, declining with time after release (Hill, 2020).

Even though there is a shortage of research specific to prison-based AAT, a meta-analysis conducted by Nimer and Lundahl (2007) examining 49 studies of mainly US AAT programs, found support for their effectiveness. In addition, Mercer, Gibson & Clayton (2015) reported on

the operation of a special therapeutic unit within a British prison, where prisoners visited with chickens, ducks, goats, miniature ponies and dogs. Semi-structured interviews with prisoners and staff revealed that the presence of the animals fostered a sense of responsibility, built trust, enhanced communication and decreased self-harm and aggressive behaviour (Mercer, Gibson & Clayton, 2015).

Case Study

RPC and the St. John Ambulance Therapy Dog Program

This study is the first of its kind to explore the goal of a canine AAT program in a Canadian correctional institution. It is also unique in that it is analyzing and examining an AAT program that was explicitly offered to benefit inmate mental and emotional well-being. The purpose of the study is to determine whether the goal of the St. John Ambulance Therapy Dog program, which is to provide love and support, is achieved within a psychiatric prison setting and if so, how are inmates' correctional plans supported through the resulting human–animal bond (Dell et al., 2019, para. 5). Both love and support are important aspects of mental well-being, and both are lacking for prisoners given the negative experience of incarceration.

Regional Psychiatric Centre (RPC) is a mixed-gender, multi-level secure forensic psychiatric facility. It has a capacity for 204 prisoners, with the majority being male (Dell et al., 2019, para 14). It is a hybrid facility, serving as both a correctional facility operated under the federal Correctional and Community Release Act and as a hospital subject to legislation and regulation by the Province of Saskatchewan (Dell et al., 2019, para. 15). Individuals at RPC are both inmates convicted of a criminal offence and sentenced to a period of incarceration over two

years and patients of a psychiatric hospital where they receive intense and chronic mental health care (Dell et al., 2019, para 15).

The goal of the St. John Ambulance Therapy Dog program is to provide love and support to individuals with whom the dogs visit under the guidance of their handlers (St. John Ambulance, 2015, para. 3). The volunteer program has been active in Canada since 1992 and in Saskatchewan since 2007. The RPC AAT program consists of 24 sessions over approximately eight months (Dell et al., 2019, para 16). Each session is directed by an RPC mental health clinician alongside a therapy dog and handler team. Underlying mental health oriented skills in line with inmates' correctional plans are identified at the start of the program and revisited midway, with an inmate choosing a skill to focus on at the start of each individual session (Dell et al., 2019, para 16).

In general, the first five minutes of a session are assigned to the inmate to re-acquaint with the therapy dog, followed by skill development through experiential learning opportunities with the dog, then five minutes of visiting with the dog to conclude the session (Dell et al., 2019, para 16). In practice, more than one mental health oriented skill may be the focus of a session. For example, an inmate worked with a handler and therapy dog on basic obedience such as commands like sit and heel, to increase their focus. The clinician also linked this during the session to the inmate practicing calmness (Dell et al., 2019, para. 16). At the completion of the AAT program, the inmates received a certificate of completion signed with a dog's paw and a plush dog. They also have an opportunity to take part in a booster session to visit with the therapy dogs every three months while incarcerated at RPC (Dell et al., 2019, para. 16).

Participants

A small group of carefully selected inmates ($n = 3$) received weekly 30-minute one-on-one AAT sessions with their RPC mental health clinician (Dell et al., 2019, para. 18). The participants were chosen based on an internal referral process (from a staff member on an inmate's unit) and personal review of inmate such as mental health and/or problematic substance use background; likes dogs; non-violent history toward animals; and no current physical threat to animal or handler (Dell et al., 2019, para. 18). The cohort consisted of one female and two males, with an average age of 48, the average length of their current federal incarceration was 12 years and their average length of time at RPC was 6 years (Dell et al., 2019, para. 18). All of the participants were convicted of violence-related crimes and were identified as high risk and high needs and identified by their clinician to not be making progress on their correctional plans (Dell et al., 2019, para. 18).

Participant 1 (female) presented with a pattern of overly compliant behaviour interspersed with outbursts directed at others and self-harming incidents. The mental health oriented skills identified for her AAT program were learning to calm herself, increasing her focus, abstaining from being disrespectful when angry and respectfully sharing with others how she feels (Dell et al., 2019, para. 20). Inmate 2 (male) was withdrawn and had socially isolated himself. His AAT program skills were to decrease loneliness, increase his self-esteem and have positive interactions with others (Dell et al., 2019, para. 20). Inmate 3 (male) presented with aggressive patterns of behaviour. In his words, "I am provoked to [an] angry [state], and my anger got progressively worse, and then I act out my aggression" (Dell et al., 2019, para. 20). His program skills were to be more relaxed, increase his confidence, be less stressed, establish trust

and have more positive feelings and thoughts (Dell et al., 2019, para. 20). Overall, the mental health oriented skills identified for the inmates' AAT programming mainly concentrated on the acknowledgement of emotions and feelings.

Data Collection and Analysis

Data was collected and analyzed from multiple sources to understand inmates' lived experiences and their meanings within the framework of the AAT program goals – connection with therapy dogs and support for the correctional plans – as well as in relation to the empirical evidence located within the AAT, human–animal bond, prisoner and human health literature (Dell et al., 2019, para. 23). The post-AAT program session data collection instrument was designed based on the goals of the AAT program plus a review of the existing AAT literature. The qualitative interview guide was designed to add insight and context to the individual session data at the midway and end points in the AAT program (Dell et al., 2019, para. 23).

Following each of the 24 AAT sessions, questionnaires with four to five qualitative questions and four to five quantitative questions were completed by the inmates (n=48), handlers (n=54) and RPC clinicians (n=48) (Dell et al., 2019, para. 24). Semi-structured inmate, handler and clinician interviews (average 45 minute each) were conducted midway through the program (after session 12) and at its completion (Dell et al., 2019, para. 24).

Results

This present case study met the St. John Ambulance Therapy Dog program goal: the inmates connected with the therapy dogs through their perceived offering of love, comfort and support (Dell et al., 2019, para. 27). This connection was understood to be mutual, to develop over time and to be lasting. Love was experienced primarily by the inmates as affection from the

dogs and support was experienced as unconditional acceptance from them (Dell et al., 2019, para. 27). When asked in the questionnaire to provide an example of feeling comforted/loved by the therapy dogs, all participants indicated that it was the connection they established with the dogs, followed by affection received from the dogs, and happiness from being with the dogs (Dell et al., 2019, para. 27). When the clinicians were asked to provide examples from their observations of the inmates and therapy dogs interacting, they similarly identified affection, followed by connection, happiness and unconditional acceptance.

When asked in the questionnaire to provide an example of feeling supported by the therapy dogs, the inmates described the affection they received, followed by the dogs' unconditional acceptance, their mutual interactions and being in a safe, trusting and comfortable emotional "space" when interacting with the dogs (Dell et al., 2019, para. 25). For the inmates, there was overlap in their experience of love/comfort and support. For example, Inmate 2 shared: "I felt comforted and loved by them [...] I feel a lot of feelings of being wanted" (Dell et al., 2019, para. 25). Receiving love, comfort and support from the therapy dogs appears to have positively impacted the inmates' emotional states. Inmate 1 described the impact her interactions with the dogs had between AAT sessions. "When I am upset, they [pictures of the dogs] ease me and calm me," she reported, "it distracts me from self-harm, distracts me from triggers, helps me move on" (Dell et al., 2019, para. 25).

There was also positive behaviour change disclosed by the inmates, including self-reflection about their conduct. Inmate 2 shared: "I can be an A-hole when I want to be. I did not want to act that way around the pooches [...] No, because they just will not put up with a whole lot of that" (Dell et al., 2019, para. 25). He went on to share, comparing the start to the end of the

AAT program: “I feel like I am two different people. I certainly do.” Asked who the new, different person is, he replied “Very confident in the dog’s eyes” (Dell et al., 2019, para. 25).

There was evidence that the development of a human–animal bond in the sessions, and its consequent facilitation of inmates’ recognizing their feelings and emotions, contributed to improved inmate behaviour (Dell et al., 2019, para. 26). This was acknowledged by both the AAT program participants and mental health clinicians, and distinctly supports the inmates’ correctional plans. Inmate 1 stopped self-harming, Inmate 3 stopped exploding with aggression toward others and Inmate 2 was able to form a social relationship with another inmate (Dell et al., 2019, para. 26). Similarly, a case study of a canine training program with male inmates in the US identified a positive effect on behaviour (Currie, 2008). Of interest to this study is Mercer, Gibson & Clayton’s (2015) finding from an animal-based program that concluded a decrease in participants’ self-harming behaviour.

Overall, the development of a human–animal bond seems to have supported and encouraged inmates’ cognitive-behavioural correctional plans through increased recognition of their feelings and emotions (Dell et al., 2019, para. 27). This bond affected inmates’ improved emotional states and behaviour. Building a connection and supporting the inmates correctional plans were the goals of the RPC AAT program. However, a larger sample size and a bigger time frame is required to determine whether these promising results can be replicated and to comprehend the potential lasting effects of AAT (Dell et al., 2019, para. 27).

Discussion

The key themes identified in the case study above, as well as insight gained from existing literature, suggests that a prison-based AAT program that emphasizes inmate mental well-being,

alongside that of animal and community well-being, merits further exploration. It would be worthwhile to evaluate other AAT programs with a larger sample size and a diversity of inmates. It would also be valuable to do a follow-up study of this cohort of inmates. Findings from the RPC case study should accumulate institutional interest in AAT given its ability to address criminogenic risks and needs as well as improve inmate safety through reduction of aggression toward others and harm to self (Usher, Power & Wilton, 2010). A recent systematic review of randomized control trials of AAT on psychosocial outcomes found that AAT may be beneficial for many different people, especially inmates (Maujean, Pepping & Kendall, 2015).

Inmates are to a great extent, disconnected from love and affection while incarcerated. Most obvious, this includes physical affection from other humans (an exception would be a conjugal visit or a hug during a scheduled visit). Familial relationships where love, comfort and affection are most likely to exist for inmates are usually strained and incarceration facilitates both a physical and an emotional disconnect for inmates with the “outside world.” For example, there is limited access to telephone calls and visits. It is also possible that familial love and affection do not exist on the outside for the inmate, considering high rates of childhood physical and emotional neglect and other adverse childhood experiences among inmates (Dutton & Hart, 1992). The importance of emotional development in childhood on future emotional health is well established.

AAT literature acknowledges the domesticated dog’s innate ability to offer and receive nurturance (Levinson, 1984). Dogs are commonly viewed to present with non-judgmental warmth, and companionship and bonding, which in turn nurtures the ability of humans to receive and offer love and trust (Arkow, 2011). Cooke and Farrington (2016) note that within a prison

setting, the human need to love and be loved is difficult to achieve and that, “[f]or many offenders, participation [...] may be their first exposure to unconditional love and acceptance, which allows them to express their emotions in a healthy manner” (p. 858). Additionally, referring to Beck and Katcher’s work, Furst (2006) shares that, “[f]or inmates who live lives absent of touch and acceptance, animals are able to stimulate a kind of love and caring that is not poisoned or inhibited by the prisoners’ experiences with people” (p. 412). In the study of therapy dogs visiting at RPC, Dell and Poole (2015) concluded that the dogs can assist in supporting individuals with trauma histories during informal visits.

The literature also supports that animals can trigger happy memories, improve mood and elicit a sense of happiness, joy and general well-being (Arkow, 2011). This is especially important in the prison context where inmates frequently shut down their feelings, and more so the longer they are incarcerated (Leigey & Ryder, 2015). Rekindling positive feelings in inmates can help them with feeling human again. The AAT literature in prisons, even though limited, identifies a positive impact on mood and behaviour change.

As previously established, inmates commonly experience limited support while incarcerated, both emotional and practical. As mentioned, inmates are physically separated from their familial and other outside supports. Oftentimes, these supports disregard the inmates because of the pain, damage and stigma associated with their crime and incarceration (Dell et al., 2019, para. 30). Inmates themselves frequently dissociate from outside networks and available supports and isolate themselves as a form of emotional defence. AAT literature identifies social support as a key contribution from therapy animals to individuals who are psychosocially at risk

(Fine, 2010). The work of Arkow (2011), for example, refers to therapy dogs as “a form of stress reducing or stress-buffering social support” (p. 2).

In Canada, a correctional plan is created for inmates upon admission to a federal institution by Correctional Service Canada (CSC). The plan outlines a risk management strategy, drawing upon dynamic and static risk factor information about inmates’ lives and crimes (CSC, 2019). CSC (2019) assesses and rates offenders’ needs in relation to mental health, learning, substance abuse, and other topics. CSC (2019) also rates how willing offenders are to act responsibly, to work on their correctional plan, and to address the issues that led them to commit crimes. Finally, CSC (2019) rates how able offenders are to live in society without committing crimes in the future. Cooke and Farrington (2016) assert that despite a scarcity of research on AAT programs in prison environments, many of the benefits identified in the literature are specific to risk and protective factors related to not re-engaging in criminal behaviour.

As shared, CSC’s (2019) correctional plan suggests programming for inmates (e.g. family violence, substance abuse), with much of it situated within a cognitive-behavioural skill development framework. CBT is a form of psychotherapy, focused on altering individuals’ negative thought patterns and corresponding behaviours (Beck & Beck, 2011). CBT concentrates on individuals’ experiences and how these experiences link to how they think; it acknowledges that human feelings and emotions influence behaviour (Beck & Beck, 2011). AAT’s focus on mental health oriented skills development is rooted in inmates’ emotions and feelings, and its corresponding experiential learning component is a unique complement to CBT programming. A recent study examined CBT with and without a dog present for anxiety and trauma disorders in the general population, and “[t]he results suggest that dogs can lower acute distress without

compromising emotional processing or therapeutic mechanisms, and may actually improve long-term outcome for some individuals” (Hunt and Chizkov, 2014, p. 457).

Conclusion

At a time when correctional institutions are becoming more expensive to operate and there is little change in the rate of recidivism, new methods should be explored to alternative rehabilitation and therapy programs. As reviewed in this thesis, there is empirical and anecdotal evidence that animals and essentially, AAT programs, can influence and affect the atmosphere of prisons and provide meaningful experiences for inmates. These programs are imperative to inmate rehabilitation because they promote life enhancing skills such as coping skills, increase community involvement and responsibility and enhance the overall quality of life. In spite of the lack of research on the overall effectiveness of AAT programs, there is reasonable evidence that they can be profoundly successful and valuable to incarcerated individuals. In AAT programs, inmates learn new skills while being involved physically, mentally and most often emotionally. It has been established that animals can promote a change within an individual which cannot be easily matched by traditional methods.

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