FROM TRAINING TO REHABILITATION:

ANIMAL-ASSISTED INTERVENTION FOR INMATES

by

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THESIS

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Abstract

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The Bureau of Justice Statistics reports that 14.5% of federal prisoners and 26.4% of jail inmates report serious psychological distress (SPD), which are rates that are significantly higher than the 5% rate found in the general adult population. The high prevalence of mental illness demonstrates the need to develop interventions that can help address an inmate's mental health needs. The current study reports on an evaluation of the psychosocial impact of a dog training program for men incarcerated at the Dallas County Jail. Participants (*N*=17) completed surveys monitoring their symptoms of depression, anxiety, PTSD, self-esteem, loneliness, and resilience at Time 1 and Time 2, five weeks later. Dependent sample t-tests were run to test the hypothesis that there are significant differences in participant responses between their first and last week in the program. Analyses revealed significant reductions in PCL-C (*t* (df=16), 3.030, *p*=.008) and CESD (*t* (df=16), 1.738, p=.101) scores when comparing the first and last week in the HfH program. An additional dependent samples t-test was run over individuals who had clinically

significant scores (moderate to severe) for each measure. These analyses revealed even stronger effects on PCL-C scores (*t* (df=8), 4.498, *p*=.002) and GAD-7 scores (*t* (df=8), 2.622, *p*=.031). Successful completion of the HfH program led to significantly lower symptoms of PTSD, depression, and anxiety, which indicates the potential strengths of this program and the need for more rigorous evaluations.

Keywords: Mental Health, Rehabilitation, Criminology, Criminal Justice, Animal Assisted Intervention, PTSD, Depression, Anxiety

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Chapter 1: Introduction

The literature shows that incarcerated individuals in the United States experience high recidivism rates and a large prevalence of mental illness (Alper, Duros, & Markman, 2018; Bronson & Berzofsky, 2017; Kaeble & Cowhig, 2018; Prins, 2014). As social workers it is our ethical duty to provide needed services to vulnerable individuals that sometimes cannot seek out these services on their own (National Association of Social Workers [NASW], 2017). Therefore, we must research, develop, and implement novel interventions that can help address an inmates' mental health needs while reducing their likelihood of recidivism.

One approach that has been proposed as a solution for increased recidivism and prevalence of mental illness in correctional institutions are animal-assisted interventions (AAI). Unfortunately, the literature on AAIs has major gaps that have prevented this type of approach from being implemented and replicated on a larger scale. Some of these limitations include inconsistency in program models, settings, and populations. In addition, some programs do not track qualitative or quantitative data that can provide empirical support for the effectiveness of these programs. These gaps have limited the ability to replicate AAIs across jails and to provide evidence that can motivate policy makers to utilize this type of intervention as a rehabilitative model.

The following study will attempt to address some of these limitations by tracking changes in psychosocial constructs while inmates participate in an AAI program at the Dallas County Jail. Changes in anxiety, depression, PTSD, self-esteem, loneliness, and resilience were monitored while participants were enrolled in this program. I hypothesized that participation in the program would result in significant decreases in anxiety, depression, PTSD, and loneliness

symptoms, as well as significant increases in self-esteem and resilience. These positive outcomes could help demonstrate the rehabilitative value of AAI programs and could help justify their replication and further study.

Chapter 2: Literature Review

The higher rates of mental illness in correctional populations have created the need for the criminal justice system to not just detain criminals but also provide interventions to address their mental health needs. Correctional institutions in the United States are beginning to develop new strategies in an attempt to address these needs, some of these include programs that incorporate animals as a component of therapy or as an intervention in itself (Furst, 2006). These programs are fairly new and little research has been done on how inmates might benefit from participating and successfully completing these programs. Therefore, the current study aimed to identify the psychosocial changes that inmates undergo while participating in a five-week dog training program called Home for Hounds (HfH). HfH is a recurring program being carried out at the Lew Sterrett Justice Center in Dallas, TX. The aim of the current study was to assess the program's ability to address inmates' mental health needs through weekly administered psychosocial measures and to assess the feasibility and effectiveness of animal-assisted interventions (AAI) in correctional settings.

Prevalence of Mental Illness in Correctional Populations

An inmate's mental health is an area of concern in the criminal justice system and it may be a contributing factor to the high recidivism rates found in the United States. In 2016, the incarcerated population in the United States was 2,162,400 (with 740,700 in local jails) and approximately 6,613,500 (about 1 in 38 adults) under some kind of correctional supervision (Kaeble & Cowhig, 2018). Evidence also shows that recidivism rates in the United States are high, five out of every six (83%) inmates released across 30 states in 2005 recidivated within a nine-year period, and four out of nine (44%) were arrested within their first year of release

(Alper et al., 2018). Future correctional interventions must look for novel ways to address these issues and avoid recidivism.

Evidence shows that the current and lifetime prevalence of mental illness in correctional populations are significantly higher than the rates found among non-incarcerated individuals, which might help explain inmates' high recidivism rates (Bronson & Berzofsky, 2017; Prins, 2014). The Bureau of Justice Statistics reported that 14.5% of federal prisoners and 26.4% of jail inmates reported serious psychological distress (SPD), rates that are significantly higher than the 5% rate found in the general adult population (Bronson & Berzofsky, 2017). In addition, 36.9% of federal prisoners and 44.3% of jail inmates reported a history of mental health problems (Bronson & Berzofsky, 2017). The National Institute of Mental Health (2016) also found that for federal and jail inmates', the prevalence of each mental health problem was significantly higher than those reported in the general adult population (GAP); depression (federal 24.2%; jail 30.6%; GAP 6.7%), bipolar disorder (17.5%; 24.9%; 3.8%), personality disorder (13.0%; 13.5%; 9.1%), post-traumatic stress disorder (12.5%, 15.9%; 3.6%), and anxiety disorder (11.7%; 18.4%; 19.1%) (National Institute of Mental Health, 2018). These rates demonstrate the need to further evaluate effective ways to help correctional populations cope with and/or reduce negative symptoms associated with mental illness.

Human Animal Interactions and Mental Health.

There is a vast amount of literature that demonstrates a variety of biopsychosocial benefits that individuals can gain through interactions with animals (Ambrosi, Zaiontz, Peragine, Sarchi, & Bona, 2018; Aoki et al., 2012; Beetz, 2017; Berry et al., 2012; Walsh, 2009). Human animal interactions (HAI) can do things like alter an individual's biology, enhance their social

skills, or improve their overall psychological well-being (Beetz, 2017; Walsh, 2009). The effects may at times vary based on the type of intervention used or the population, but overall it appears like HAIs have significant biopsychosocial effects that can benefit individuals in a variety of settings.

Psychological Distress and Mood. Research consistently finds that HAIs have positive effects for people experiencing depression, anxiety, or post-traumatic stress disorder. Most of the literature shows that HAIs can lead to significant decreases in depression and increases in cortisol levels (often associated with improved mood) (Ambrosi et al., 2018; Berry et al., 2012; Muela, Balluerka, Amiano, Caldentey, & Aliri, 2017; Nepps, Stewart, & Bruckno, 2014; Olsen et al., 2016; Schramm, Hediger, & Lang, 2015). Similarly, AAIs have been found to have positive effects on anxiety, with one study reporting a significant 2.74-point decrease in anxiety and a 2.29-point decrease in depression symptoms, when using the Burns Anxiety Inventory and the Burns Depression Checklist (Nepps et al., 2014). Although, it is worth noting that some studies did not find the presence of a dog to lead to significantly different changes in depressive symptoms during mindfulness training and there were also studies that did not find significant differences in anxiety and agitation during an AAI (Ambrosi et al., 2018; Henry & Crowley, 2015; Olsen et al., 2016). However, these differences could be due other factors like the level of interaction, number of people sharing the dog, or the role that the dog had in the intervention. Further study is needed to better determine why AAIs are effective at some times but not others. AAI also helped reduce post-traumatic stress disorder symptoms, often accompanied by reductions in stress, isolation, self-judgement, and heart rate (Bergen-Cico et al., 2018; Hunt & Chizkov, 2014; Krause-Parello & Friedmann, 2014; Mims & Waddell, 2016). These findings

suggest the effectiveness of AAIs in helping reduce or eliminate negative symptoms often associated with mental illness.

Other Effects. In addition to reduced psychological distress and an improved mood, AAIs have also been found to be beneficial in other psychologically significant areas. AAIs have been found to help address attachment issues which were at times the result of childhood trauma (Balluerka, Muela, Amiano, & Caldentey, 2014; Zilcha-Mano, Mikulincer, & Shaver, 2011). In addition, AAIs have been found to help improve social skills, the quality of social interactions, empathy, and communication (Berry et al., 2012; Muela et al., 2017; Peluso et al., 2018; Spattini et al., 2018; Wesenberg, Mueller, Nestmann, & Holthoff-Detto, 2018). Other effects include increased motivation and self-esteem, which may enhance the effects of an intervention or improve the relationship between the participant and the staff conducting the intervention (Peluso et al., 2018). These results further highlight the importance of AAIs and the role that they can have on improving an individual's mental, social, and/or biological well-being.

Neurobiological Implications. In addition to psychological effects, AAIs have been found to have significant biological effects that can contribute to or help explain some or all of the psychological changes associated with AAIs. For instance, near-infrared spectroscopy showed increased activation of the prefrontal cortex in patients with depression during animal-assisted therapy (AAT) (Aoki et al., 2012). AAIs have also been found to lead to increased cortisol levels (leading to improved mood) as well as an increased activation of the oxytocin system, which is explained further in the theoretical models described in a later section (Berry et al., 2012; Handlin et al., 2011; Odendaal & Meintjes, 2003). Significant changes in heart rate and pulse have also been found, except for one study in which Henry and Crowley (2015) did not

find an effect during sessions with a therapy dog (Krause-Parello & Friedmann, 2014; Nepps et al., 2014). However, overall AAIs do appear to have significant biological effects in an individual, which might help explain some of the psychological changes.

Theoretical Considerations

The effects that AAIs have on individuals can be better understood by further analyzing them under the lens of theoretical models that attempt to explain the effects of HAIs. For the purpose of this study, a detailed description of the activation of the oxytocin system theory will be provided, followed by a brief description of other theoretical models that may help explain the effects of HAIs.

Activation of the Oxytocin System Theory. This is a neurobiological theory that focuses on the role that HAIs may have in an individual's oxytocin system. Neurobiology shows that oxytocin is released into the brain through pleasant physical stimulation, which may include but is not limited to breast feeding, sexual activity, or stroking (Beetz et al., 2012; Carter & Porges, 2016; Insel, 2010). Benefits of oxytocin activation include reductions in stress, anxiety, and depression as well as an increase in pain tolerance (Beetz & Bales, 2016; Heinrichs et al., 2003; Uvnas-Moberg, 2003). Oxytocin can also help improve trust, communication, social relationships, and bonding (Beetz & Bales, 2016; Heinrichs et al., 2003; Uvnas-Moberg, 2003). Interactions with dogs have been found to significantly increase oxytocin levels sometimes in as little as three minutes, or even through simple eye contact if the human already has a high level of attachment to the dog (Handlin et al., 2011; Nagasawa, Kikusui, Onaka, & Ohta, 2009; Odendaal & Meintjes, 2003). The oxytocin effects resulting from physical interactions with animals may provide therapeutic, emotional, and social benefits that could not otherwise be

gained due to the social or institutional norms restricting human to human physical interactions (Beetz, 2017). For instance, an inmate's need for intimacy and human touch while incarcerated may be reduced by providing opportunities to interact with a dog, which may in turn help reduce incidents of misbehavior and sexual victimization (Rantala, 2018). These and other theories provide justification for why AAIs might produce therapeutic benefits that may improve an inmate's mental and physical well-being while incarcerated.

***Other Theories*.** Other theories offer viable explanations that can help us understand the effects that HAIs can have in an individual. Some of these include the theories of biophilia, anthropomorphism, experiential/symbolic system, motivation, attachment, and distraction. The biophilia theory is an evolutionary theory that makes the claim that human's heightened affinity and interest in nature, animals, and life is due to its adaptive purpose to identify food and/or danger (Beck & Katcher, 2003; Julius, Beetz, Kotrschal, Turner, & Uvnas-Moberg, 2013; Wilson, 1984). Anthropomorphism theory refers to the human desire to understand and relate with animals and the world around them, and it can include interpretations of animals emotions and cognitive processes or the belief that animals exhibit human-like behavior (Epley, Waytz, & Cacioppo, 2007; Urquiza-Haas & Kotrschal, 2015). The experiential and symbolic systems have also been suggested as possible explanations for HAI effects, it is believed that HAI provides a balance between the implicit-experiential functioning (experiential) and the explicit-cognitive functioning (symbolic) systems, which are connected to our ways of processing and triggering arousal (Beetz, 2017; Epstein, 1994; Schultheis, 2001). Furthermore, others utilize attachment, motivation, and distraction theories to help explain HAIs (Beetz et al., 2011; Beetz, 2017; Julius et al., 2013; Kurdek, 2008, 2009; Wohlfarth et al., 2003). Similar to other psychological

constructs, HAIs have multiple possible explanations, but the neurobiological basis of the oxytocin activation system theory may provide the most relevant conceptual base to help explain HAI effects.

AAIs in Correctional Populations

Even though AAIs with correctional populations have been utilized since the year 2000, there has been limited work in systematically analyzing these programs and measuring their impact. However, Furst (2006) provided a detailed analysis of some of the AAI interventions implemented within the United States. Through a national survey of state correctional systems. Since AAIs are a novel approach to criminal rehabilitation, his current review of AAI programs might be limited in its ability to reflect the effectiveness and use of AAI programs over the past 10 years. Furst's analysis might still prove useful in providing the most complete picture of the prevalence, characteristics, and effectiveness of correctional AAI programs within the US, because of the limited literature available on the topic.

Most of the programs Furst (2006) looked at were established after the year 2000, utilized a service model (33.8%; animals rehabilitated and sent out for adoption), and used dogs as the primary animal (66.2%). However, other program models included animal socialization (socialization and training of puppies who were later sent to more advanced service training programs), multimodal programs (vocational and service animal socialization components), livestock care/agricultural programs, visitation programs, wildlife rehabilitation programs, and wildlife release programs, which utilize a variety of animals (ex. dogs, cats, horses, deer, pheasants, etc.). The wide variations in AAI models can make it difficult to compare them to one another and assess their impact on inmates' well-being.

Furst (2006) also described the types of inmates that participate in these programs and the professional tools they gained. He found that 22.5% of programs did not have crimes that made inmates ineligible to participate, while 59.2% did have some restrictions that made inmates ineligible based on their conviction. Furst (2006) also pointed out that most programs (70%) did not offer certificates for participation. However, those programs that did (14.3%) provided certificates in vocational training, pet care technician, veterinarian assistant, college credit, dog behavior modification, dog handling, grooming, or barn boss. Upon release 33.8% of the inmates reported working in animal related jobs, while 23.9% reported receiving a job referral upon completion of the program (Furst, 2006). In addition, inmates and prison staff seem to be receptive to this type of intervention. An increased sense of responsibility was reported as the greatest benefit of the program, and 60% of those interviewed (prison administrators) reported no negative aspects to the programs. However, 10% reported staff resistance as the main negative aspect, which might be one of the reasons why it's taken so long for this type of programs to be taken up by correctional institutions and further studied in research. AAI programs seem to be increasing in popularity in the United States, so it will be important for the literature to provide an evidence base that demonstrates the potential benefits that inmates might get from participating in this type of intervention.

Effects of Correctional AAIs. One of the most notable benefits that inmates can get from an AAI is a general improvement in their emotional and psychological well-being (Fournier, Geller, & Fortney, 2007; Jasperson, 2010; Koda, Watanabe, Miyaji, Ishida, & Miyaji, 2015; Mercer, Gibson, & Clayton, 2015; Richardson-Taylor & Blanchette, 2001; Wesley, Minatrea, & Watson, 2009). Research shows that individuals participating in these programs

may experience improved mood states, better emotion regulation, and improved motivation (Koda et al., 2015; Richardson-Taylor & Blanchette, 2001). One study found that the number of inmates with psychiatric disorders who reported a good overall mood increased from 11% to 43% after participating in the program. Similarly, those who had developmental disorders went from 77% to 45% after participating in the program (Koda et al., 2015). In addition, qualitative interviews reveal improvements in physical energy, ability to deal with emotions, and improved trust (Richardson-Taylor & Blanchette, 2001). Other positive outcomes have included a reduction in self-harm behavior, an improved therapeutic alliance, better treatment progress, decreased tension, and decreased distraction (Fournier et al., 2007; Koda et al., 2015; Mercer et al., 2015; Wesley et al., 2009). Thus, it appears that not only do AAIs have psychological benefits on their own, but they may also complement and at times enhance the effectiveness of other therapeutic interventions (Fournier et al., 2007; Wesley et al., 2009).

Even though some studies have supported the proposition that AAI programs may provide positive outcomes and psychosocial benefits for inmates, other studies have found that at times AAI programs may be ineffective. For instance, significant differences were not found in self-esteem, locus of control, irritation, and the "vigor" characteristic of an individual's mood after participating in AAI programs (Koda et al., 2015; Richardon-Taylor & Blanchette, 2001). Similarly, Jasperson (2013) found that the presence of a dog during a therapeutic intervention did not alter the inmates' overall improvement as a result of the intervention. This lack of significant positive findings demonstrates the need for further research of AAI programs. Most studies of AAI programs utilize small sample sizes, qualitative data, and vary in the type of programs and populations that they study. These challenges limit our ability to accurately identify the type of

format, setting, or population where these programs can be most effective. This gap in the literature might account for the lack of significant findings that we may find with some AAI programs. However, the overwhelmingly positive outcomes strengthen the argument that this correctional-based intervention should be further studied, improved upon, and implemented on correctional institutions.

AAIs and the Correctional Environment. AAI programs have also been found to have social effects that could benefit the overall health of an individual as well as their relationships and interactions with others (Jasperson, 2010; Mercer et al., 2015; Turner, 2007). Individuals enrolled in AAI programs have reported enhanced social skills such as an increased sense of responsibility, better trust building, better communication, patience, and a desire to help others (Mercer et al., 2015; Turner, 2007). AAI programs have also been associated with decreased social isolation and an increase in prosocial behaviors such as smiling, showing pleasure, socialization, helpfulness, and cooperativeness (Jasperson, 2010; Marr et al., 2000). Learning these prosocial behaviors could not only benefit the inmates after release but it may also improve the correctional environment and their interactions with the correctional staff.

AAI programs have received positive evaluations from both inmates and correctional staff, which could be related to improved relationships, better communication, and an overall better correctional environment (Koda et al., 2015). Studies show that AAI programs can lead to decreased institutional infractions and improved work performance (Beck et al., 2012; Fournier at al., 2007). Additionally, and perhaps more significant, is the finding that individuals who participate in these programs report an increase in the quantity and quality of their interactions with other inmates and correctional staff (Bachi, 2013; Beck et al., 2012; Richardson-Taylor &

Blanchette, 2001; Mercer et al., 2015). Enhanced correctional environments may be more conducive to therapeutic and rehabilitative interventions, but they may also help ensure the health and safety of inmates as well as correctional staff.

Life after Jail. AAI programs can not only be beneficial for inmates and prison staff, they may also provide valuable services for the community (Furst, 2015; Strimple, 2003). Inmates in AAI programs can help vulnerable populations such as older adults, people with disabilities, or people with mental health issues by providing them with trained dogs that can give them assistance, enhance treatment, or speed up recovery (Furst, 2006; 2015). For example, there is an AAI program that trains dogs for veterans suffering from PTSD. They think that giving these dogs to veterans gives them the opportunity to engage in treatment while avoiding the stigma often associated with traditional mental health treatment (Furst, 2015). In addition, not only can AAI programs help vulnerable members of the community, they may also provide inmates with valuable work skills and practical experience (sometimes accompanied by certifications), which might help them find a job, retain it, and/or avoid recidivism (Furst, 2006).

AAIs might also help address high recidivism rates by providing inmates with useful work skills and biopsychosocial benefits that can improve their well-being and increase their employment opportunities after release. This is consistent with literature that shows significant correlations between post-release employment and recidivism rates, regardless of an inmate's offense (Nally, Lockwood, Ho, & Knutson, 2014). Being unemployed significantly increased an inmate's likelihood of recidivating, which highlights the importance of providing inmates with the necessary job skills to secure and retain a job after release. AAIs might provide inmates with the necessary skills to be more marketable to employers upon release, thus increasing their

employment prospects and reducing their likelihood of recidivating. It was disclosed in private communication to Strimple (2003) that of 68 inmates that participated in the AAI program at the Sanger B. Powers Correctional Center in Oneida, Wisconsin, none had recidivated. Although these findings are encouraging further research and details about the employment status and longitudinal data of these individuals is needed to make any causal claims. However, it is encouraging to see that AAI programs might be a way to provide inmates with the psychosocial and/or professional tools necessary to secure a job and avoid recidivism.

The high prevalence of mental illness in correctional populations combined with our awareness of high recidivism rates should be enough to motivate academics and other professionals to invest more time and research with AAIs (Alper et al., 2018; Bronson & Berzofsky, 2017). Research has the potential to help define the best and most effective ways to administer and measure novel interventions. Although tracking recidivism rates is beyond the scope of this study, we hypothesize that an AAI program will improve an inmates' overall mental health and provide them with essential work skills, which longitudinally might help reduce their risk for recidivism.

Limitations and Gaps in AAI Research

The use of AAIs is a novel approach that has just recently begun to be studied and analyzed. Due to a limited number of studies we are limited to comparing AAI programs with different models, settings, and populations to one another. This inconsistency in the measurement of outcomes and the format of each program has made it difficult to draw conclusions or provide a strong evidence that demonstrates the benefits of AAIs in a variety of settings. The effects of AAIs in geriatric populations at a nursing home or youth at a rehab center

may not be comparable to the effects of AAIs with jail inmates. In addition, little or no data exists that might account for the ways in which demographic data such as race/ethnicity may impact the effects that AAIs have on an individual. These gaps and limitations in the literature are expected since the onset of AAI research is recent compared to other areas of mental health research.

Current Study. The aim of the current study was to expand the existing evidence base and address some of the limitations found in the literature. Research on AAIs is limited, but research on AAIs in jails and prisons is even more scarce, therefore, the current study will aim to expand this literature by exploring the psychosocial effects that an AAI program can have on an inmates' social and emotional well-being over a five-week period. In addition, demographic data will be collected to explore between group differences that may be found. Expanding the research on AAIs with correctional populations is an important endeavor, especially when we consider the significantly higher rates of mental illness found in correctional populations when compared to the general population (Bronson & Berzofsky, 2017; Prins, 2014). I hypothesized that an inmate's scores in a variety of psychosocial constructs will significantly improve after participating at the jail's AAI program. Specifically, I expect depression, anxiety, PTSD, and loneliness symptoms to decrease while resiliency and self-esteem increase.

Chapter 3: Methods

This study was carried out as part of the HfH program that took place at the Lew Sterrett Justice Center in Dallas, TX. HfH is a collaborative project between the Dallas County Sheriff Department and Prairie Paws Adoption Center. I contacted these two agencies around November 2017, received UTA IRB approval in December 2017, and began data collection in January 2018. I attended the Dallas County Jail (DCJ) once a week and finished data collection in October 2018.

Program Description

The HFH program selected 10 inmates that trained five dogs for the duration of five weeks. The shelter, Prairie Paws Adoption Center, chose five dogs to go to the jail to receive Canine Good Citizenship (CGC) training. This type of training is considered the "golden standard" of dog behavior by the American Kennel Club (American Kennel Club, n.d.). The CGC training is often selected as the first type of training and basic obedience a dog should learn, and it is often a prerequisite for therapy groups, condo applications, and apartment applications. Successful completion of 10 evaluations is required in order to complete CGC training. These tests include accepting a friendly stranger (1), sitting politely for petting (2), appearance and grooming (3), out for a walk (4), walking through a crowd (5), sit and down on command and stay in place (6), coming when called (7), reaction to another dog (8), reaction to distractions (9), and supervised separation (10). Successfully completing each of these evaluations will result CGC certification (American Kennel Club, n.d.).

The dogs in the HfH program lived inside the assigned HfH jail pod with the ten inmates enrolled in the program. The HfH pod was located on the first floor "G" pod of the Kays Tower

at Lew Sterret Justice Center. It is important to note that this jail pod was different from other pods because it was decorated in a way that simulated a dog park. Each dog had its own kennel and transportation was provided by Prairie Paws Adoption Center. The dogs arrived on the first day of class and were returned to the shelter on graduation day after the five weeks of training were completed. HfH program officers choose up to 10 inmates to participate in each class (two inmates per dog). After the course was over, inmates who completed the five-week training received a certificate of completion from the Dallas County Sheriff's Department. The program has been in operation since March 2017 and, to date, fifteen groups have participated in the program and seventy-five dogs have been adopted upon completion of the program or shortly after (100% adoption rate).

HfH Participant Screening Process. The screening process was carried out by two officers assigned to the HfH pod at the Dallas County Jail (DCJ). All inmates had an equal opportunity to apply for the HfH program, but only those who met the eligibility criteria would be selected for enrollment. First, they filled out a Securus Kite (an application that is part of a computerized Securus Kiosk System located in the inmates respective housing locations), which was their way to indicate interest in the program. This was followed by a review of their charges, custody level, and broken jail rules. An inmate was eligible to participate in the program if they were pre-adjudication, had a six-month clear disciplinary record, and no pending/current aggravated charges. The following charges could disqualify an inmate from participating in the HfH program: aggravated charges, escape, capital murder, child abuse, assault on a public servant, sexual related crimes, kidnapping, arson, and disciplinary actions within the last six months while housed in the DCJ. The screening process was completed using the Adult

Information System (AIS), which is a primary records and information processing system that facilitated the sharing, collaboration, filing, and reporting of different agencies in the Dallas County criminal justice system.

If an inmate qualified for the program he was placed on a waitlist, would then be interviewed by one of the program officers, and a determination was made of their eligibility for the program. Once the program began, classes were scheduled each week. During each class, inmates learned a new set of training skills and techniques to teach the dogs basic obedience. The program application and a detailed curriculum of the program can be found in the Appendix.

Sample

I utilized a convenience sampling technique to collect the data. The limitations and unpredictability associated with working with correctional populations, as well as the time constraints and limited resources of a Master's thesis made randomization or establishing a control group unfeasible. I collected data from five Home for Hounds cohorts and every inmate that enrolled in the program between February, 2018 and September, 2018 was given an equal opportunity to participate. Of 55 adult male inmates enrolled in the program during this time period, 50 (93%) agreed to participate, four refused, and one requested to drop out of the study.

Data Collection

I carried out data collection on a weekly basis, but the unpredictability of a prison environment made it challenging to collect consistent data. Out of the 50 participants who enrolled in the study, 35 (68.6%) completed two weeks in the program, 30 (58.8%) completed three, 25 (49.0%) completed four, and only 17 (33.3%) participants completed five weeks in the program. Inmates could be absent on the week of data collection for a variety of reasons

including medical appointments, court appointments, transfers, release, or removal from the program by jail staff. These challenges made data collection at week one and week five impossible, since the inmates enrolled at week one might be different from those present at week five.

Another limitation was the fact that inmates who joined the program late could roll over into the next group. For instance, if an inmate joined the program on week three, they could stay until the next group and finish on week two of the second group. In addition, inmates were not always removed upon completion of the program, if circumstances allowed, they could choose to remain longer than five weeks. As a result, surveys were administered weekly in order to track the number of weeks that each inmate had been in the program, and they were administered for as long as the inmates remained in the program but no longer than five-weeks (this decision was made before the first day of data collection).

Procedures. After going through the jail's vetting process, including a background check and jail orientation, I received clearance and began data collection. Upon arrival at the jail I was escorted by an officer to the HfH pod. Once at the pod, the officer gathered all inmates in a closed-door classroom where I had the opportunity to speak with them privately without officers present (it is important to note that the door and windows were clear so officers could still look in if they wanted to). Inmates took a seat, I went through the consent process with them, those who chose not to participate were dismissed, and those who consented completed their first round of data collection. The following weeks only those who had consented to participate and inmates newly enrolled in HfH were called into the classroom for data collection and/or consenting. The surveys were administered, collected, and labelled with an encryption code

developed by the principal investigator and approved by the IRB. All survey data was input in an SPSS software file and paper copies were transported and stored in a locked filing cabinet in Dr. Nordberg's office at The University of Texas at Arlington.

Measures

The study was intended to be a pre- and post-test design with measures administered at the beginning and end of the HfH five-week program. The measures were administered by the principal investigator in 15-30-minute sessions in a room without jail staff present. Measures included a demographics survey, CES-D Scale for depression, GAD-7 for anxiety, Rosenberg's Self-Esteem Scale, the PCL-C for PTSD symptoms, UCLA Loneliness Scale, and a Resiliency Scale. All measures can be found in the Appendix. and brief explanations of each measure can be found below.

CES-D Scale. This scale is a screening test that measures self-reported symptoms of depression (Radloff, 1977). This scale is composed of 20 items that measure the six major dimensions of depression ($\alpha = .90$), which are depressed mood, guilt and worthlessness, helplessness/hopelessness, psychomotor retardation, loss of appetite, and sleep disturbance (Hunter et al., 2003). Scores range between 0 and 60, with higher scores being indicative of more depressive symptoms and a score of 16 or higher used as the cut-off point for identifying high risk for clinical depression (Lewinsohn, Seeley, Roberts, & Allen, 1997).

GAD-7. This measure is a brief screening tool for symptoms of anxiety (Spitzer, Kroenke, Williams, & Löwe, 2006). It is composed of seven items with higher scores representing more severe anxiety ($\alpha = .93$). Scores range between 0 and 21. Individuals with

scores of 5-9 have mild anxiety, 10-14 moderate, and >15 severe. Those who score a 10 or higher might have a diagnosis of generalized anxiety disorder.

Rosenberg's Self-Esteem Scale. This is a measurement of self-worth that utilizes self-reporting data to identify an individuals' positive and negative beliefs about oneself (Rosenberg, 1965). This measure is a 10-item scale where higher scores reflect higher self-esteem ($\alpha = .94$). Scores range between 0-40, with scores under 15 suggesting low/problematic self-esteem.

PCL-C. This is a self-report screening tool utilized to screen for PTSD, aid in diagnostic assessments of PTSD, and monitor changes in PTSD symptoms. This is a 17-item scale with scores that range between 17 and 85 ($\alpha = .96$). The higher the score the more severe the PTSD symptoms with a cut-off point of 33 traditionally used for diagnosing problematic PTSD symptoms (Weathers, Litz, Keane, Palmieri, Marx, & Schnurr, 2013). A 5-10 point change in scores is seen as reliable change and a 10-20 point change is seen as clinically significant.

UCLA Loneliness Scale. This scale measures loneliness defined as the difference between an individual's ideal social contact and their actual social contact (Robinson, Shaver, & Wrightsman, 1991; Russell & Cutrona, 1988). It is a 20-item scale with scores ranging from 20 to 80 ($\alpha = .92$). Higher scores reflect higher levels of loneliness.

Resiliency Scale. This scale was developed to measure an individual's ability to bounce back and recover from stress in the face of adversity (Smith et al., 2008). This is a six-item scale with scores ranging from 6 to 30 ($\alpha = .86$). Higher scores reflect more resilience.

Data Analysis

Statistical analysis was run in SPSS v. 25 to test the hypothesis that there are significant differences in participant responses between their first and last week in the program. Even though the full sample consisted of 50 participants, the data analyses were run on 17 (33.3%) of them, because this was the number of participants who successfully completed five weeks in the program. First, univariate statistics were run for all measured variables for the full sample that successfully completed five weeks (N=17) to look at distributions, presence of outliers, etc. Next, a set of dependent sample t-tests were run with an *a priori* alpha of .10 for each outcome (depression, anxiety, PTSD, self-esteem, loneliness, and resilience). An alpha of .10 was selected due to the small sample and the exploratory nature of this study (Field, 2017). Finally, the bivariate analysis was repeated with each outcome using only those participants whose scores fell within clinical and/or severe ranges for each measure. Clinical range cut-off scores were >33 for PTSD, 6-20 for anxiety, >14 for depression, >14 for self-esteem, and <3 for resilience. These cut-off scores resulted in nine participants with clinically problematic PTSD, nine with anxiety, nine with low self-esteem, zero with depression, and zero with low resilience. Cut-off score analyses could not be run on loneliness scores because the literature does not have clear cut-off points to define severity.

Chapter 4: Results

Positive findings were found for the sample of participants who successfully completed the five-week program (*N=17*). The original sample of 50 participants had average scores of 33.96 (CESD), 5.80 (GAD-7), 17.53 (self-esteem), 32.76 (PCL-C), 44.15 (Loneliness), and 3.80 (Resilience). I visually examined the distributions of each outcome scale using histograms and none showed problematic outliers. In addition, the means and medians are similar indicating adequately normal distributions (Table 1).

Table 1.

Univariate statistics for full sample (N=50)

	M (*SD*)	Median	Mode	Min.	Max
CESD (depression)	33.96 (10.82)	31	23	20	56
GAD-7 (anxiety)	5.80 (5.53)	4	0	0	20
Rosenberg's Self Esteem	17.53 (6.24)	16	21	10	36
PCL-C (PTSD)	32.76 (15.24)	28	17	17	67
UCLA Loneliness Scale	44.15 (11.29)	45	34	20	71
Brief Resiliency Scale	3.80 (.83)	3.83	5	1.83	5

All study participants were adult males and their ages ranged from 19 to 58 years. (Table 2 and Table 3). Most of them were white men (56.9%) with children (82.4%). The analyses focused only on the comparison of scores between week one and week five for the 17 participants who completed five weeks in the program.

Table 2

General Demographics (N=50)

Variable	n (%)
Race/Ethnicity	
Caucasian	29 (56.9)
African American	5 (9.8)
Hispanic	13 (25.5)
Asian	2 (3.9)
Other	2 (3.9)
Education Level	
8th grade or less	2 (3.9)
Some high school	11 (21.6)
High school or GED	19 (37.3)
Some college	8 (15.7)
College degree	4 (7.8)
Tech school	1 (2.0)
Unknown	6 (11.8)
Marital Status	
Single	22 (43.1)
Married	13 (25.5)
Divorced	8 (15.7)
Separated	1 (2.0)
Widowed	1 (2.0)
Unknown	6 (11.8)
Number of Children	
None	9 (17.6)
One	6 (11.8)
Two	11 (21.6)
Three	7 (13.7)
Four	4 (7.8)
Five or more	8 (15.6)
Unknown	6 (11.8)

Table 3

Incarceration Demographics (N=50)

Variable	n (%)
Time Spent in Past Incarceration	
Less than 1 month	3 (5.9)
2 months	2 (3.9)
3 months	2 (3.9)
4 months	1 (2.0)
More than 5 months	37 (72.5)
Unknown	6 (11.8)
Time Spent in Current Incarceration	
Less than 1 month	6 (11.8)
2 months	17 (33.3)
3 months	6 (11.8)
4 months	4 (7.8)
5 months	4 (7.8)
More than 5 months	8 (15.7)
Unknown	6 (11.8)
Charge for Current Incarceration	
Drug Possession	22 (43.1)
Theft	7 (13.7)
Multiple Charges	4 (7.8)
Other	9 (17.6)
Unknown	9 (17.6)

Bivariates Statistics with Full Sample (N=17)

Statistical analyses revealed positive findings that should encourage further research into AAIs. The following results reflect differences found for participants that successfully completed five weeks in the HfH program. Analyses of the 17-participant sample revealed significant reductions in PCL-C (*t* (df=16), 3.030, *p*=.008) and CESD (*t* (df=16), 1.738, p=.101) scores when comparing their first and last week in the HfH program (Table 4). PCL-C scores went down from an average of 36.24 (*SD*=14.42) at week one to 27.23 (*SD*=10.49) at week five. Similarly, CESD scores dropped from 36.94 (*SD*=11.62) at week one to 32.18 (*SD*=12.50) at week five. Significant differences were not found for GAD-7, loneliness, self-esteem, and resiliency scores.

Table 4.

Bivariate statistics for sample that completed five weeks in the program (N=17)

	Week 1 *M* (*SD*)	Week 5 *M* (*SD*)	*t*	*Df*	*p*
CESD (depression)	36.94 (11.62)	32.18 (12.50)	1.74	16	.101*
GAD-7 (anxiety)	6.59 (5.81)	5.53 (5.94)	.924	16	.369
Rosenberg's Self Esteem	17.76 (6.77)	17.41 (6.65)	.350	16	.731
PCL-C (PTSD)	36.24 (14.42)	27.23 (10.49)	3.03	16	.008*
UCLA Loneliness Scale**	49.27 (8.63)	42.55 (14.34)	1.55	10	.152
Brief Resiliency Scale**	3.82 (1.03)	4.10 (.91)	-1.65	9	.134

**The UCLA Loneliness Scale and the Brief Resiliency Scale were added once data collection had already begun therefore their sample sizes are different from the rest of the measures in the bivariate analysis. For the UCLA Loneliness Scale *N*=11 and for the Brief Resiliency Scale *N*=10.

Bivariate Statistics with Clinical Range Samples

Additional t-tests were run over individuals who had clinically significant scores (moderate to severe) for each measure. These analyses revealed an even stronger effect on PCL-C scores (*t* (df=8), 4.498, *p*=.002) for participants (n=9) who had clinically significant PTSD symptoms and a significant reduction in GAD-7 scores (*t* (df=8)= 2.622, *p*=.031) for individuals (n=8) who had moderate to severe anxiety (Table 5). PCL-C scores dropped from 47.11 (SD=10.66) to 30.33 (SD=12.48), while GAD-7 scores went down from 11.11 (*SD*=4.08) to 7.67 (*SD*=6.32). Analyses of clinically significant scores could not be run for CESD because everyone scored within range for clinical depression. Similarly, analyses could not be run on resilience scores because nobody fell within the range for low resilience. Finally, significant findings were not found for self-esteem in the second wave of analyses.

Table 5.

Bivariate statistics for samples with clinically severe scores

	N	Week 1 *M* (*SD*)	Week 5 *M* (*SD*)	*T*	*Df*	*P*
GAD-7 (anxiety)	9	11.11 (4.08)	7.67 (6.32)	2.62	8	.031*
Rosenberg's Self Esteem	8	23.75 (4.95)	21.62 (7.07)	1.29	7	.239
PCL-C (PTSD)	9	47.11 (10.66)	30.33 (12.48)	4.45	8	.002*

Chapter 5: Discussion

The current study explored the psychosocial impact that an AAI program can have among a group of inmates in Dallas, TX. I did this by tracking changes in 17 participant scores in a variety of psychosocial measures over eight months, while they were enrolled at the Home for Hounds Program located in the Dallas jail. Changes in depression, anxiety, PTSD, loneliness, self-esteem, and resilience scores were tracked as part of this study. This type of program is novel and as a result there are gaps in the literature that have prevented this type of intervention from having a strong evidence base. Some of the gaps found include differences in sample sizes, populations, and program formats, as well as the fact that some programs do not track any data to measure outcomes. Research on AAIs demonstrates that this is an area worth looking into but until there can be a consistent way to measure and track change, the ability of this intervention to be launched on a larger scale will be limited. The goal of this study was to help expand the literature and begin filling some of the gaps outlined above.

The main finding in this study were the significant reductions in PTSD scores after successful completion of the HfH program. These scores reduced significantly in the first analysis with participants who completed five-weeks in the program (n=17) and showed even stronger effects for individuals who had extreme PTSD scores (n=9). This finding is consistent with earlier studies that found that AAIs can have positive effects on PTSD symptoms (Balluerka et al., 2014; Bergen-Cico et al., 2018; Hunt & Chizkov, 2014; Krause-Parello & Friedmann, 2014; Mims & Waddell, 2016; Zilcha-Mano et al., 2011). The rates of PTSD currently found in jail populations (15.9%) are about four times those found in the general population (3.6%)

(National Institute of Mental Health, 2018). AAIs might be an effective strategy in helping reduce these high rates and improve mental health amongst incarcerated individuals.

Other positive outcomes found in this study included significant reductions in depression and anxiety scores. However, reductions in anxiety symptoms were only significant for individuals who had moderate to severe scores. These findings are consistent with earlier studies that have found that AAIs can lead to reductions in anxiety, depression, and an improvement in overall mood (Ambrosi et al., 2018; Berry et al., 2012, Muela et al., 2017; Nepps et al., 2014; Olsen et al., 2016; Peluso et al., 2018; Schramm et al., 2015). In addition, these findings are consistent with the "oxytocin system activation theory" of AAIs, which highlights the potentially therapeutic and calming effects of AAIs (Beetz et al., 2012; Beetz & Bales, 2016; Carter & Porges, 2016; Heinrichs et al., 2003; Insel, 2010; Uvnas-Moberg, 2003). These effects in addition to the other positive outcomes found in this study should justify further analysis of AAIs and their implementation in other correctional institutions.

Analyses did not confirm my hypothesis that participation in an AAI program would lead to significant differences in self-esteem, loneliness, and resilience. Few studies have looked at these aspects of AAI programs, but they measure important psychosocial constructs that might impact an inmate's health and well-being. It is also worth noting that the lack of effects on self-esteem are consistent with the findings of Richardson-Taylor & Blanchette (2001) but contradict Peluso et al. (2018), who found AAIs to have positive effects on self-esteem. The lack of significant differences in loneliness also contradict earlier studies that found AAIs to significantly lower levels of loneliness for people in AAI programs (Richardson-Taylor &

Blanchette, 2001). These variables should be further analyzed to better determine how AAI programs might be impacting them.

It is also important to note that there were aspects of the HfH programs that might provide alternative explanations for these findings. HfH participants experienced a unique environment which might have led to the effects found in this study. The living environment for HfH participants differed in significant ways from that of other inmates and pods within the jail. The HfH pod was painted and decorated in a way that simulated a dog park. In addition, inmates were separated from the general population and were paired with other inmates during their participation in the program. Being away from the general population, in a decorated pod, having a teammate assigned to them, and potentially have more opportunities to spend time outside might be elements that could explain the positive effects found in this study. These elements might make the environment lower risk, less stressful, and more conducive to positive interactions between inmates and staff.

Similarly, most participants in the program were White males with children and highlights the type of individuals who might be more likely to enroll, be selected, or be successful in the HfH program. A possible explanation might be the caretaking abilities and skills associated with being a father, which could be transferred over to the care of a dog. Another possible explanation could be cross-cultural differences and the ways in which different races might perceive dogs and the interactions with dogs (Gray & Young, 2011**)**. However, it is also worth noting that those enrolled in the program were 56.9% Caucasian, 9.8% African American, and 25.5% Hispanic, which differ from the rates reported in Texas jails during the 2018 fiscal year, which are 40.5% Caucasian, 29.9% African American, and 29.7% Hispanic

(Texas Department of Criminal Justice FY Statistical Report, 2018). Research shows that African-Americans in the criminal justice system are more likely than Whites to be arrested, convicted, and receive long sentences (The Sentencing Project, 2018). Systemic discrimination that exists at the national level might also be impacting African-Americans' ability to enroll, be selected, or complete inmate programs aimed at rehabilitation and improvement of well-being. These distinctions highlight possible explanations of why certain demographic groups may be more likely to enroll or be successful in AAI programs.

Limitations

Inmates who participated in the HfH program at the Dallas County Jail showed positive outcomes as a result of their participation. However, definitive conclusions cannot be drawn based on the data alone due to the limitations that could have hindered the study or tainted the data. Some of the most significant limitations are related to the unpredictability of enrollment, participation, and completion of the HfH program. Only about one third of participants who were enrolled in HfH successfully completed the five-week curriculum. Furthermore, the small sample size is a limitation that does not directly hinder the value of the findings, but it does turn them into pilot and exploratory data.

Similarly, there are limitations in data collection that hinder and limit a researcher's ability to track changes in an inmate's responses and symptoms. Some participants missed data collection sessions due to doctor or court appointments. In addition, there was inconsistency in the format of data collection sessions, due to unprecedented circumstances such as participants needing to take the dogs out or take their medication. In addition, medication use was not accounted for during data collection, which means the effects or lack of effects found in the data

could be due to the benefits or side effects of the medications that the inmates were taking at the time. However, future studies might want to explore the possibility that a combined intervention that incorporates both medication and an AAI could be therapeutically beneficial for inmates.

Finally, complete confidentiality and privacy within the jail was impossible, which is a limitation that could affect data collection. Every step was taken to ensure the greatest amount of privacy and confidentiality during enrollment and data collection. However, data collection and enrollment were performed inside a private room with clear glass doors and windows. Other inmates in the program and the officers themselves were able to see who was and wasn't participating in the program. Future studies must collaborate with jail staff and explore ways in which data collection and enrollment can be done in a more confidential and private manner, while avoiding the undue pressure that the presence of officers and other inmates might create.

Future Studies

The literature on AAIs is limited and while this research project expands this literature it does not provide the evidence necessary to fully demonstrate the effects that AAIs can have in correctional settings. Future studies should find programs where a larger percentage of inmates complete the whole program and develop a research strategy where court and medical appointments will not interfere with data collection. In addition, future studies might want to track the effects that AAIs can have on the oxytocin system as well as account for the effects of medication and novel, possibly safer carceral living conditions, to better assess the degree to which AAIs are positively impacting inmates. They can do this by incorporating a biological component where they can track changes in oxytocin while monitoring symptoms of anxiety, depression, and PTSD.

Future studies should also collect longitudinal data and monitor recidivism rates. These data could help show how improving an inmate's psychological well-being and social interactions, through an AAI, may help reduce risk for recidivism. In addition, longitudinal data may demonstrate potential employment opportunities for inmates and economic benefits that AAI programs may have when compared to pharmaceutical treatment or no treatment. These longitudinal assessments could help provide evidence of the rehabilitative qualities that AAI programs can have in correctional settings.

Practice and Policy Implications

As social workers some of our duties include providing services to people in need, challenging social injustice, and respecting the dignity and worth of the human person (NASW, 2017). We do not forfeit these duties when our clients engage in illegal and/or immoral acts that might impact their freedom and well-being. In fact, we should be motivated to help these individuals because they might be the ones that may benefit the most from our services. Incarcerated individuals often suffer from mental illness, social injustice, and segregation from the community (Bronson & Berzofsky, 2017; Prins, 2014; The Sentencing Project, 2018). These often lead to a decline in their mental health and an increased risk for recidivism (Alper et al., 2018; Bronson & Berzofsky, 2017; Prins, 2014). Therefore, it is our duty as social workers to find and help develop interventions that can help address the needs of incarcerated individuals.

There is undeniable evidence that the United States is currently struggling with high recidivism rates and a high prevalence of mental illness in correctional institutions (Alper et al., 2018; Bronson & Berzofsky, 2017; Prins, 2014). AAIs might prove to be an effective strategy to begin addressing these issues. Future policies must research how, when, and where correctional

AAIs can be effective and develop consistency in the administration and measurement of these programs.

Policies that aim to incorporate AAIs in correctional settings must develop structured programs that can track both quantitative as well as qualitative data to make replication possible. This evidence could then be used to justify the expansion of these programs into other jails. Future policies that incorporate AAIs in correctional settings must also develop a manual of operations that describe in detail what an AAI program is, how it should be implemented, and what the responsibilities of each individual should be (ex. Officers, inmates, researchers, etc.). These guidelines would then allow other jails to replicate the program, maintain consistency in the measurement of outcomes, and disseminate this rehabilitative model to other jails across the nation. Eventually this could lead to the development of local, state, and national policies that can utilize AAIs as a way to rehabilitate inmates and reduce recidivism rates.

The potential benefits associated with the implementation of AAI programs are not limited to the inmates who participate in them. The community may also benefit from these programs, when they successfully help released inmates with re-entry and employment opportunities. Communities may become safer and more productive when released inmates can find jobs and avoid recidivism. In addition, in the long term we may find AAI programs to be more cost effective than its alternatives. Pharmaceutical treatment or no treatment may lead to higher costs in the long term than an implementation of an AAI at a local jail. These are some additional ways in which AAI programs may prove to be effective interventions that can benefit not only inmates but also the communities where they live.

Chapter 6: Conclusion

It is encouraging to see the criminal justice system in the United States beginning to implement novel strategies that could potentially rehabilitate inmates or reduce recidivism rates. The high recidivism rates combined with the high prevalence of mental illness in correctional populations demonstrate a need for correctional institutions to provide appropriate interventions that address these mental health needs. Failing to address these needs could prolong an inmate's stay in a correctional setting, increase their recidivism rates, or even impact the correctional environment and the safety of other inmates and staff. Therefore, researchers and policy makers should continue to explore ways in which an AAI can be effective in addressing an inmate's biopsychosocial needs. If AAIs prove to be effective strategies then they could lead to not only an improvement in an inmate's well-being but also be beneficial for the community as a whole. It can be beneficial for the community by reducing recidivism rates and releasing inmates who are more psychologically stable, equipped with job training, and better able to reincorporate into society.

Social workers must continue to research and incorporate this type of intervention in correctional settings. Inmates are a vulnerable and marginalized population that at times do not receive the services they need to empower and rehabilitate them. As social workers it is our ethical responsibility to continue advocating for this population and advocate for policies and practices that aim to improve their emotional, social, and psychological well-being.

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Appendix: Measures and HfH Documents

Demographics Survey

Your responses will be kept entirely confidential:

For the following questions please fill in the black or circle the appropriate answer

1. How old are you? _____
2. What is your race/ethnicity?
   - Caucasian
   - African American
   - Hispanic/Latino
   - Asian American
   - Other_____
3. What is your marital status?
   - Single
   - Married
   - Divorced
   - Widowed
4. How many children do you have? _____
5. What is your level of education? _____
6. How long have you spent in past incarcerations?
   - Less than 1 month
   - 2 months
   - 3 months
   - 4 months
   - 5 months
   - More than 5 months
7. How long have you spent in your current incarceration?
   - Less than 1 month
   - 2 months
   - 3 months
   - 4 months
   - 5 months
   - More than 5 months
8. What was the charge for your current incarceration?
   - Robbery
   - Drug Possession
   - Theft
   - Assault
   - Driving While Intoxicated (DWI)
   - Other: _____
9. How many weeks have you been part of the Home for Hounds program? (Circle appropriate answer)

   1 2 3 4 5+

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CES-D Scale
(Radloff, 1977)

Below is a list of the ways you might have felt or behaved recently. Please tell me how often you have felt this way during the past week.

1	2	3	4
rarely or none of the time (less than 1 day)	some or a little of the time (1 - 2 days)	occasionally or a moderate amount of time (3 - 4 days)	most or all of the time (5 - 7 days)

During the past week:

1. I was bothered by things that usually don't bother me. _____
2. I did not feel like eating; my appetite was poor. _____
3. I felt that I could not shake off the blues even with help from my family or friends. _____
4. I felt that I was just as good as other people. _____ (R)
5. I had trouble keeping my mind on what I was doing. _____
6. I felt depressed. _____
7. I felt that everything I did was an effort. _____
8. I felt hopeful about the future. _____ (R)
9. I thought my life had been a failure. _____
10. I felt fearful. _____
11. My sleep was restless. _____
12. I was happy. _____ (R)
13. I talked less than usual. _____
14. I felt lonely. _____
15. People were unfriendly. _____
16. I enjoyed life. _____ (R)
17. I had crying spells. _____
18. I felt sad. _____
19. I felt that people dislike me. _____
20. I could not get "going". _____

Note: "R" indicates that an item is reverse-scored.

GAD-7

Over the last 2 weeks, how often have you been bothered by the following problems? *(Use "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3

(For office coding: Total Score T____ = ____ + ____ + ____)

Rosenberg's Self-esteem Scale

Instructions:
Please indicate your degree of agreement with each of the following statements by circling the appropriate option for each statement.

SA = Strongly Agree
A = Agree
D = Disagree
SD = Strongly Disagree

1. On the whole, I am satisfied with myself.

   SA A D SD

2. At times I think I am no good at all.
   SA A D SD

3. I feel that I have a number of good qualities.
   SA A D SD

4. I am able to do things as well as most other people.
   SA A D SD

5. I feel I do not have much to be proud of.
   SA A D SD

6. I certainly feel useless at times.
   SA A D SD

7. I feel that I'm a person of worth, at least on an equal plane with others.
   SA A D SD

8. I wish I could have more respect for myself.
   SA A D SD

9. All in all, I am inclined to feel that I am a failure.
   SA A D SD

10. I take a positive attitude toward myself.
    SA A D SD

PCL-C

The next questions are about problems and complaints that people sometimes have in response to stressful life experiences. Please indicate how much you have been bothered by each problem in the past month. For these questions, the response options are: “not at all”, “a little bit”, “moderately”, “quite a bit”, or “extremely”.

		Not at all	A little bit	Moderately	Quite A Bit	Extremely
PCL1	Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?	1	2	3	4	5
PCL2	Repeated, disturbing dreams of a stressful experience from the past?	1	2	3	4	5
PCL3	Suddenly acting or feeling as if a stressful experience from the past were happening again (as if you were reliving it)?	1	2	3	4	5
PCL4	Feeling very upset when something reminded you of a stressful experience from the past?	1	2	3	4	5
PCL5	Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful experience from the past?	1	2	3	4	5
PCL6	Avoiding thinking or talking about a stressful experience from the past or avoiding having feelings related to it?	1	2	3	4	5
PCL7	Avoided activities or situations because they reminded you of a stressful experience from the past?	1	2	3	4	5
PCL8	Having trouble remembering important parts of a stressful experience from the past?	1	2	3	4	5
PCL9	Loss of interest in activities that you used to enjoy?	1	2	3	4	5
PCL10	Feeling distant or cut off from other people?	1	2	3	4	5
PCL11	Feeling emotionally numb or being unable to have loving feelings for those close to you?	1	2	3	4	5
PCL12	Feeling as if your future somehow will be cut short?	1	2	3	4	5
PCL13	Having trouble falling or staying asleep?	1	2	3	4	5
PCL14	Feeling irritable or having angry outbursts?	1	2	3	4	5
PCL15	Difficulty concentrating?	1	2	3	4	5
PCL16	Being “superalert” or watchful or on guard?	1	2	3	4	5
PCL17	Feeling jumpy or easily startled?	1	2	3	4	5

UCLA Loneliness Scale
(Version 3, 1988)
(Russell, Peplau, & Cutrona, 1980; Russell & Cutrona, 1988)

The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described by writing a number in the space provided. Here is an example:

How often do you feel happy?
If you never felt happy you would respond "never" (1); if you always feel happy, you would respond "always" (4).

1	2	3	4
NEVER	RARELY	SOMETIMES	ALWAYS

1. *How often do you feel you are "in tune" with the people around you? _____
2. How often do you feel you lack companionship? _____
3. How often do you feel there is no one you can turn to? _____
4. How often do you feel alone? _____
5. *How often do you feel part of a group of friends? _____
6. How often do you feel you have a lot in common with the people around you? _____
7. How often do you feel you are no longer close to anyone? _____
8. How often do you feel your interests and ideas are not shared by those around you? _____
9. *How often do you feel outgoing and friendly? _____
10. *How often do you feel close to people? _____
11. How often do you feel left out? _____
12. How often do you feel your relationships with others are not meaningful? _____
13. How often do you feel no one really knows you well? _____
14. How often do you feel isolated from others? _____
15. *How often do you feel you can find companionship when you want it? _____
16. *How often do you feel there are people who really understand you? _____
17. How often do you feel shy? _____
18. How often do you feel people are around you but not with you? _____
19. *How often do you feel there are people you can talk to? _____
20. *How often do you feel there are people you can turn to? _____

Scoring: Items that are asterisked should be reversed (i.e., 1 = 4, 2 = 3, 3 = 2, 4 = 1), and the scores for each item then summed together. Higher scores indicate greater degrees of loneliness.

THE OHIO STATE UNIVERSITY

Brief Resilience Scale (BRS)

Please respond to each item by marking one box per row		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
BRS 1	I tend to bounce back quickly after hard times	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BRS 2	I have a hard time making it through stressful events.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
BRS 3	It does not take me long to recover from a stressful event.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BRS 4	It is hard for me to snap back when something bad happens.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
BRS 5	I usually come through difficult times with little trouble.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BRS 6	I tend to take a long time to get over set-backs in my life.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

Scoring: Add the responses varying from 1-5 for all six items giving a range from 6-30. Divide the total sum by the total number of questions answered.

My score: _____ item average / 6

Homes For Hounds – Application

Name (print):_____Bk-In #_____Housing_____

To be eligible for Homes for Hounds you must meet the following criteria:

- Have six months clear disciplinary record
- Pending/ Current charges cannot be Aggravated
- If you are unsure you may still submit an application for review

1. Why are you interested in this program and why should we consider you? Explain?

2. How do you think this program will help you?

3. How do you feel about doing things as a group and sharing experiences and responsibilities?

4. Explain how you will be willing to devote the time and effort required for this program?

Signature:_____Date:_____

Do not write in this box---Office Use Only

Offense:_____Disciplinary:_____

_____Age_____Interviewer:_____Application

Date:_____Approved/Denied_____Reason:_____

_____

Curriculum Overview

WEEK 1

- What is CGC (Canine Good Citizenship)
- Classical vs. Operant Conditioning
- Force Free Guidelines
- Doggie Body Language (Do's and Don'ts for Petting) (Observing signs of stress)
- Managing for Success (Tone, voice, verbal command)
- Tools (clickers, food, treats, pouches, harnesses, leashes)
- How To Pet your Dog / Assign Dog
- Crate Games (using verbal Release Que "Free"
- Collar Grabs (Let's be friends / Trust me)
- Attaching the Leash
- How to Transfer dogs outside (Door Manners)
- HOMEWORK ASSIGNED – CRATE GAMES, COLLAR GRABS< STUDY HANDOUT MATERIAL

WEEK 2

- Crate Games Extended
- Click for attention Introduction to the Mat
- Crate Games (increase distance)
- Hand Targeting
- MAT MAGIC – Relax, Calm, Stationary
- Introduction to CGC Specifics
- CGC1-Acccepting a friendly Stranger (Using MATS)
- CGC@ - SIT Politely for Petting
- Talk about CGC3 – Appearance and Grooming – Wednesday Grooming Day

WEEK 3

- Crate Games
- Conditioning to Handling (Leave it / No Mugging)
- Leash Manners
- CGC4 – Out for a walk (walking on a loose lead
- CGC5 – Walking through a crowd Continued – Addition of more distraction
- Capturing SIT (Introducing the Platform, Verbal Que)
- HOMEWORK – CAPTURING SIT AND CREATING DISTANCE< ADDING DISTRACTION

WEEK 4

- Crate Games
- Capturing Down with Platform Continued addition of Distance (Verbal Que)
- CGC6 – Sit and Down Command and Staying in place
- Partner Recall Game- Back & Forth with Collar grabs
- CGC 7– Coming when called (Partner interactions)
- HOMEWORK – DOWN FROM A DISTANCE, come when called, distraction
- Using Mat – Distraction and reaction to another dog and person
- CGC8 - Reaction to another Dog
- CGC9 – Reaction to Distraction (person, toy, food)
- Zen Bowl – Leave It
- CGC10 – Supervised Separation

WEEK 5

- Review for all Dogs
    - Crate games
    - Relax on a mat
    - Capturing down / sit on platform
    - Down and sit from a distance
    - Leave it, no mugging
    - Accepting a friendly stranger
    - No problem grooming
    - Zen Bowl
    - Doorway
    - Recall

- **CGC TESTING**
- **GRADUATION / PICTURES**