

#### Abstract

The use of animal-assisted therapies and interventions has been documented since the early 1600s in both a formal and informal capacity. Animal-assisted therapies have a wide range of roles, guidelines, and populations which they can assist in. Future providers should understand the significance of the human-animal bond and the range of advantages this special bond can contribute to clients' mental health and wellbeing.



## **Overview**

The use of animal-assisted interventions (AAI) in therapeutic cases has become increasingly popular throughout the years (Souter & Miller, 2007). AAIs are used with the intent to promote both physical health and mental-wellbeing for people with disabilities, including everything from physical disabilities to mental disorders such as depression and anxiety (Souter & Miller, 2007). AAI's can fall into one of two specific categories: animal-assisted therapy (AAT) or animal-assisted activities (AAA). AATs are as defined as a goal-directed intervention that is typically associated with a specially trained animal and health professional (Maujean, Pepping, & Kendall, 2015; Nepps, Stewart, & Bruckno, 2014; Schramm, Hediger, & Lang, 2015). The idea behind an animal-assisted goal-directed intervention is "to focus on enhancing physical, cognitive, behavioral, and emotional functioning" within the individual<sup>[1]</sup> (Schramm et al., 2015). The second type of AAI, referred to as an animal-assisted activity (AAA), is more generalized and much less structured in its intervention compared to that of AATs (Maujean et al., 2015). Where AATs were limited to therapeutic type interventions AAAs are more lucrative in encompassing benefits associated in areas of motivation, education, and therapy with the general goal of fulfilling positive psychological outcomes through affirmative interactions with an animal (Maujean et al., 2015; Nepps et al., 2014).

# Animal Assisted Therapy

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#### Background

Animal assisted therapies have been performed informally from the early days of psychotherapy. Sigmund Freud accounts the role of his own dog Jofi during psychotherapy sessions, frequently commenting on how Jofi's conduct and moods reflected "a mirror of process happening in the client" (Bachi & Parish-Plass, 2017). Chu, Lium Sun, & Lin (2009) believe that "pet companionship can have positive influences on human physiology, psychology, and socialization." Historical accounts dating back to the 1600s have observed animals contributing to the wellbeing of individuals (Fine & Eisen, 2008). For example, in 1867 a disorder treatment facility named Bethel in West Germany created a treatment program referred to as a wall-less institution where the use of companion animals became incorporated into their facility's treatment plan (Bustad, 1981; Morrison, 2007). This treatment program was such a great success that it is still used in Bethel's therapeutic programs.

Levinson was the first to develop the term pet therapy, also referred today as animal-assisted interventions (AAI) or animalassisted therapy (AAT), where he originally advocated its use for children in residential treatment (Friedmann, Katcher, Thomas, Lynch, & Messent, 1983; Levinson & Mallon, 1969; Mallon, 1994). Levinson observed increased positive affect and self-worth in his children patients when in the presence of an animal. He suggested that animals could fulfill an emotional need for individuals by providing a form of unconditional love and social support (Folse, Minder, Aycock, & Santana, 1994). Throughout the years the term pet therapy has been more refined to include more specific forms and degrees of animal-assisted interventions in order to help integrate the use of companion animals in current treatment plans for a variety of health facilities (Chu, Liu, Sun, & Lin, 2009).

# **Evidence**

Empirical research and comprehensive meta-analyses have shown that being in the presence or interacting with an animal helps decrease psychological arousal such as stress, anxiety, and boredom, as well as improving physiological markers of health by reducing blood pressure and heart rate (Allen et al., 1991; Barker, Knisely, McCain, & Best, 2005; Berget, Ekeberg, & Braastad, 2008: Chu et al., 2009: DeMello, 1999: Folse et al., 1994: Friedmann et al., 1983: Kamioka, 2014: Maujean et al., 2015). More specifically, studies have shown the psychological benefits that AAIs have on individuals include decreasing symptoms of depression (Barker et al., 2005; Berget et al., 2008; Chu et al., 2009; Friedmann et al., 1993; Schramm et al., 2015), anxiety (Berget et al., 2008; Chu et al., 2009; Nepps et al., 2014; Souter & Miller, 2007), and feelings of loneliness (Souter & Miller, 2007). One early study conducted by Folse et al. (1994) showed the benefits of AAIs in decreasing psychiatric symptoms. The experiment contained self-reported depressed students who were then randomly assigned to one of three groups, which included either a control group, an AAT group, or an AAT group with psychotherapy. The results showed that the Beck's Depression Inventory (BDI) posttest scores for the AAT groups were significantly lower than that of the control group (Folse et al., 1994). As well as decreasing psychological symptoms, other studies have found the AAI can also help individuals improve socialization skills (Barker et al., 2005; Chu et al., 2009), self-esteem (Chu et al., 2009; Souter & Miller, 2007), self-efficacy (Chu et al., 2009). and coping abilities (Berget et al., 2008). Improvements of self-esteem in individuals were observed in the study conducted by Chu et al. (2009) where they looked at the positive psychiatric effects of AAAs on randomly assigned schizophrenic inpatients. In other words, animals can lower arousal of the sympathetic nervous system (Friedmann et al., 1993) by helping individuals perceive comfort, safety, and confidence within their environment (Chu et al., 2009). These psychotherapeutic effects can further improve mood and self-esteem and in turn promote increased socialization behaviors in some individuals (Chu et al., 2009; Friedmann et al., 1993).

Not only have studies shown the psychological benefits of AAIs but also have seen improvements in individual's physiological health (Barker et al., 2005; Barker, Knisely, McCain, Schubert, & Pandurangi, 2010; Chu et al., 2009; Friedmann et al., 1983; Friedmann et al., 1993). The physical benefits if AAIs include motivating individuals to get active, promoting self care (Chu et al., 2009) and reducing the risk of cardiac disease (Friedmann et al., 1993) by lowering blood pressure, heart rate, and pulse rate. The specific benefits of reduced cardiovascular response were seen in two studies conducted by Friedmann et al. (1983,1993). From these two studies Friedmann et al. (1983, 1993) observed that the mere presence of an animal could help reduce physiological stress responses. Furthermore, the greatest decrease in blood pressure and heart rate are seen in individuals who displayed in those who had a greater positive perception of animals. A later study by Barker et al. (2010) also indicated the potential benefits of AAIs in the reduction of physiological symptoms of stress. As a result of these consistent findings, some researchers have further explored the possible reasons for the benefits we see in AAI research.



# **Populations & Current Trends**

There are countless roles and populations in which AATs can be utilized. For example, incorporating AAI into psychotherapy, AAA in retirement communities, animals working with individuals on the Autism Spectrum Disorder, AAI for children with executive and emotion disorders, AAA in college and universities to reduce student stress, treating human trauma with AAI in child maltreatment and adult posttraumatic stress, etc (Fine, 2019).



## Treatment Guidelines & Recommendations

Animal-assisted therapy (AAT) research is needed to uncover the underlying processes that induce therapeutic effects. The study findings would be useful in understanding how the treatments function so that best practice practices could be applied. There is a lack of understanding of how AAI is used, and there is a need to demystify the process (Fine, 2019; Fine, 2010). A more suitable link between clinical practice and best practice research is also required. Practitioners are advised to focus more on the importance of program assessment and documentation. AAT is built on the therapist's, client's, and animal's deep emotional connection and growing relationship. The most significant conclusion from this study was the particular applications of the animal in a therapeutic environment (Fine, 2019; Fine, 2010). Few studies have been conducted to investigate the role that animals play in modifying the therapeutic effects of an environment (Fine, 2010). A qualified and knowledgeable physician should be able to notice a wide range of advantages that animals may provide (Fine, 2019; Fine, 2010).

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