The Efficacy of Dog-assisted Therapy in Enhancing the Treatment Outcomes for Children, Adults, and the Elderly

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Abstract: In times there has been a growing interest, in Canine assisted Therapy and animal assisted therapy as complementary methods to effectively support individuals of age groups who are facing mental health challenges. The purpose of this review is to evaluate how effective Canine assisted Therapy is in improving treatment outcomes for health issues in children, adults, and older adults. It also aims to identify promising interventions from existing research and explore the benefits and future directions of these additional approaches. Several studies have emphasized the effectiveness of animal assisted therapy across age groups. In children Canine assisted Therapy has proven valuable not for those with autism spectrum disorders but for those dealing with anxiety and needing help with reading. Among adults this form of therapy has shown to reduce test anxiety regulate mood and play a significant role in managing conditions such as anxiety, depression, and traumatic stress disorders. For adult's animal assisted therapy has shown potential in improving mood enhancing motivation, for therapy and promoting activity as a means of preventing and alleviating Alzheimer disease. Although these discoveries show potential it's crucial to recognize some limitations in the research. These limitations include factors such, as the number of participants involved the duration of the studies conducted and the voluntary nature of participants. It is necessary to conduct research to validate the effectiveness of animal assisted therapy and explore its wider range of applications.

Keywords: Canine assisted Therapy, animal assisted therapy, dog-assisted therapy, autism spectrum disorder

1. Introduction

Canine assisted Therapy, also known as animal assisted therapy (AAT) has gained attention as an approach, for individuals with mental health disorders. The aim of this review is to explore the effectiveness of dog therapy in enhancing treatment outcomes for children, adults and the elderly who face health challenges. By analyzing existing research and studies we can gain insights into the benefits, limitations and future possibilities of this therapeutic intervention.

Dog assisted therapy has become a recognized method for improving health treatment results across all age groups. It has emerged as an intervention in the field of healthcare due to the increasing prevalence of mental health disorders particularly among vulnerable populations such as older adults and those with cognitive impairments. The demand for pharmacological treatments has become more pressing. One of the reasons why dog assisted therapy holds value is its unique ability to provide

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individuals, with non judgmental emotional support and comfort during difficult times. This special therapeutic environment promotes well being by offering companionship and fostering a deep sense of peace. These advantages extend beyond individuals living in nursing homes or clinical settings; they benefit a population struggling with illness or chronic conditions.

In situations therapy involving dogs has demonstrated the ability to decrease symptoms of depression and improve quality of life.

A study conducted by Schroeder and Prasath emphasizes in 2022 that dog assisted therapy is based on the bond formed between humans and animals through their interactions. [1] This bond forms the foundation of animal assisted therapy. The extensive research covered a range of topics including the use of animal assisted therapy, in populations exploring the experiences of children with pets and examining the infrastructure supporting research on human animal interactions.

Animal therapy involves utilizing animals to provide benefits to individuals. Specifically animal assisted therapy (AAT) has proven effective in addressing physical health conditions such as anxiety, depression, post traumatic stress disorder (PTSD) and chronic pain. Jones, Rice and Cotton found in 2019 that implementing AAT yielded results, for diagnoses and symptomatology. [2] When this approach is used alongside treatments, for internalizing disorders and posttraumatic stress disorder it offers benefits. It has effects on anxiety, anger and externalizing disorders well. Moreover the implementation of CAP shows outcomes on factors, like increased engagement and socialization behaviors while also reducing disruptive behaviors during treatment sessions.

2. Canine-assisted Therapy in Enhancing the Treatment Outcomes for Children

Canine-Assisted Therapy yields multiple positive effects on children. Firstly, for children facing cognitive disabilities or experiencing stressful situations, the non-judgmental comfort provided by an animal proves highly relatable and supportive. This can significantly aid children in coping with their challenges. Secondly, canine-assisted therapy has shown promise in helping children with attention deficit and autism enhance their ability to navigate various life events.

In addition to its beneficial impact on children with mental health issues, dog-assisted therapy has also proven effective in complementing children's reading education. Many children struggling with reading difficulties often grapple with elevated anxiety levels and diminished self-esteem within academic settings. Dogs, being non-judgmental and highly approachable, offer a unique and comforting presence, fostering a sense of ease in children. This is particularly relevant as a non-pharmacological approach to treatment, especially in children who are in the critical stage of growth and development. Utilizing non-pharmacological methods helps minimize the potential physiological risks associated with medication in young individuals.

Children with autism spectrum disorder (ASD) often experience anxiety symptoms, and finding effective interventions for alleviating anxiety is an ongoing concern. One potential approach showing promise is dog-assisted therapy. However, the specific impact of this therapy on reducing anxiety in children with ASD requires further research. A study by London and his colleague found in 2020 that participants reported positive outcomes when dogs were involved as non-judgmental play partners and non-verbal communicators, which helped build trust and rapport during therapy sessions.[3] Similarly, Jones, Rice, and Cotton (2019) also noted the potential of canine-assisted intervention for adolescents with mental health disorders but emphasized the need for more research on its long-term effects and underlying mechanisms. Another study by Rodrigo-Claverol revealed in 2023 that adolescents who participated in a therapy program developed a positive perception of therapy dogs and formed strong bonding and attachment relationships due to the animals' spontaneous behavior [4]. This suggests that animals used in therapeutic contexts can facilitate the development of secure and affectionate connections.

Therapy dogs serve a vital role not only in assisting children with autism but also in supplementing reading education for individuals with dyslexia. In a 2017 article published in Monitor on Psychology, Winerman explored in 2017 the effective utilization of therapy dogs within literacy programs [5]. Specifically, she detailed the Reading Education Assistance Dogs (R.E.A.D.) program, which dispatches trained therapy dogs and their handlers to libraries and schools, aiding young readers—particularly those struggling to enhance their literacy skills. The R.E.A.D. program operates on the premise that the presence of a therapy dog can alleviate anxiety and stress among children, thereby facilitating improved focus during reading sessions. Moreover, these remarkable canines offer companionship and support, fostering confidence and motivation within struggling readers.

3. Canine-assisted Therapy in Enhancing the Treatment Outcomes for Adults

The benefits of dog-assisted therapy extend beyond children and encompass today's adults facing a myriad of mental health challenges. Adults, at times, grapple with difficulties in socializing, leading to feelings of isolation. In such instances, an emotional support dog can play a pivotal role in alleviating this sense of isolation and expanding socialization opportunities. The presence of a therapy dog often facilitates the formation of new social circles, providing adults with valuable companionship and support.

In 2021, Anderson and Brown conducted a study to examine the impact of animal-assisted therapy (AAT) on anxiety levels in nursing students.[6] A convenience sample of nursing students was randomly divided into two groups: a control group and an intervention group. The intervention group experienced a brief interaction with therapy dogs before taking a medication dosage calculation exam. The results revealed that the intervention group exhibited significantly lower anxiety scores compared to the control group following the exam. These findings suggest that a short encounter with therapy dogs can effectively reduce pre-exam anxiety among nursing students.

The study's findings align with previous research demonstrating the positive effects of AAT on reducing anxiety. For instance, Schroeder and Prasath discovered in 2022 that involving dogs in training helped individuals divert their attention during emotional crises. Participants assigned to think about triggering negative thoughts and then engaging in recreational activities with a dog showed better management of suicidal ideation. These results indicate that AAT shows promise as an intervention for mitigating anxiety and suicidal thoughts across various populations.

4. Canine-assisted Therapy in Enhancing the Treatment Outcomes for the Elderly

The effectiveness of Canine-Assisted Therapy in Enhancing Treatment Outcomes for the Elderly is analyzed and explored. When it comes to physical conditions, animal-assisted therapy has shown potential in assisting people with correct movement and promoting regular exercise. There is substantial evidence supporting the effectiveness of using therapy dogs to alleviate symptoms among hospitalized adults. A study conducted on this topic found that patients had increase-d interactions with trainers when dogs we-re present, suggesting that dogs can facilitate social interactions and elicit positive emotional responses.[8]

The study spe-cifically targeted individuals aged 65 and olde-r who were hospitalized. The research included a treatment group of 17 participants and a control group of 14 participants. All patients underwent assessments using the Brief Mental Status Examination and the 15 item Geriatric Depression Scale. Additionally, each participant participated in individual therapy sessions lasting 30 minutes each over a span of ten weeks.

To observe- and understand the interactions between older adults, therapy dogs, and dog trainers, researchers implemented a meticulous approach to documenting nonverbal exchanges. The findings from the treatment group were especially noteworthy as they showcased reductions in their Geriatric

Depression Scale scores, highlighting the specific benefits of dogassisted therapy in this context. (Ambrosi et al., 2018) In a study conducted by Santaniello and his colleagues in 2020, it was observed that patients in the early to moderate stages of Alzheimer's disease showed notable enhancements in both cognitive function and mood after undergoing a combination of animal-assisted therapy (AAT) and reality orientation therapy (ROT). This unique approach involved structured games involving dogs during AAT sessions, which were specifically designed to stimulate various neurocognitive functions such as spatial and temporal orientation, memory, calculation, and language skills. The results of this study shed light on the potential benefits of AAT and ROT in improving the overall well-being and cognitive abilities of Alzheimer's patients.

5. Limitation

The role of animal-assisted therapy (AAT) in improving health outcomes is currently under investigation, with ongoing consideration of the limitations seen in existing trials. Three primary limitations include the inadequacy of the sample population, the short duration of the studies conducted, and the impact of participant voluntariness. The study by Rodrigo-Claverol et al. (2023) is notable for only incorporating two AAT sessions, potentially insufficient to ascertain long-term effects. Moreover, their research solely encompassed adolescents from three hospitals, thereby restricting generalizability to other populations.

Santaniello and his collogues faced some limitations in their study in 2020. Firstly, there was an imbalance in the number of patients receiving AAT, as well as variations in the gender distribution among participants. Additionally, the age range of patients included a wide span. Furthermore, the animal-assisted intervention duration was comparatively short, specifically lasting for only six months.

Anderson and Brown discovered in 2021 that students who voluntarily participated in the study may have had a different experience compared to those who were randomly assigned. This disparity arises because self-selected students likely possessed a greater interest in AAT or held distinct expectations of the research. Furthermore, the participants lacked awareness regarding the study's nature before undergoing the intervention, potentially influencing their subsequent responses.

These limitations underscore the necessity for further investigation into AAT. To assess its effectiveness in different populations and determine its long-term effects, it is imperative to undertake larger, meticulously designed studies. Furthermore, conducted studies should explore how participant voluntariness impacts the outcomes of AAT.

6. Conclusion

Research on Animal-Assisted Therapy (AAT) is in its nascent stages. However, available evidence suggests that AAT holds promise as a beneficial intervention for a diverse population. Numerous studies demonstrate that AAT effectively mitigates anxiety, depression, and stress while enhancing social interactions and boosting self-esteem. Nevertheless, extant research on AAT has certain limitations. Most studies are relatively small-scale and short-term, with a dearth of long-term investigations into the lasting effects of AAT. Additionally, some studies highlight the potential influence of factors such as the specific dog breed involved, intervention duration, and participants' traits on the effectiveness of AAT.

Despite its limitations, the available evidence strongly indicates that AAT shows promise as an intervention deserving further investigation. To confirm the efficacy of AAT and assess its effectiveness in different populations, it is imperative to conduct larger and more rigorous studies. Moreover, a deeper exploration of the mechanisms underlying AAT's operation and identification of the factors influencing its effectiveness are crucial considerations.

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References

- [1] Schroeder, K., & Prasath, P. R. (2022). Positive Psychology and Therapy Animals: A Conceptual integration for Counseling practice. Journal of Mental Health Counseling, 44(4), 312–326. https://doi.org/10.17744/mehc.44.4.03
- [2] Jones, M., Rice, S. M., & Cotton, S. M. (2019). Incorporating animal-assisted therapy in mental health treatments for adolescents: A systematic review of canine assisted psychotherapy. PLOS ONE, 14(1), e0210761. https://doi.org/10.1371/journal.pone.0210761
- [3] London, M. D., Mackenzie, L., Lovarini, M., Dickson, C. F., & Alvarez-Campos, A. (2020). Animal Assisted Therapy for Children and Adolescents with Autism Spectrum Disorder: Parent perspectives. Journal of Autism and Developmental Disorders, 50(12), 4492–4503. https://doi.org/10.1007/s10803-020-04512-5
- [4] Rodrigo-Claverol, M., Manuel-Canals, M., Lobato-Rincón, L. L., Rodriguez-Criado, N., Roman-Casenave, M., Musull-Dulcet, E., Rodrigo-Claverol, E., Pifarré, J., & Miró-Bernaus, Y. (2023). Human—Animal Bond Generated in a Brief Animal-Assisted Therapy Intervention in Adolescents with Mental Health Disorders. Animals, 13(3), 358. https://doi.org/10.3390/ani13030358
- [5] Winerman, L. (n.d.). Allies, sidekicks and pals. https://www.apa.org. https://www.apa.org/monitor/2017/06/animal-companionship.
- [6] Anderson, D., & Brown, S. (2021). The effect of animal-assisted therapy on nursing student anxiety: A randomized control study. Nurse Education in Practice, 52, 103042. https://doi.org/10.1016/j.nepr.2021.103042
- [7] Santaniello, A., Garzillo, S., Amato, A., Sansone, C., Di Palma, A., Di Maggio, A., Fioretti, A., & Menna, L. F. (2020). Animal-Assisted Therapy as a Non-Pharmacological Approach in Alzheimer's Disease: A retrospective study. Animals, 10(7), 1142. https://doi.org/10.3390/ani10071142
- [8] Ambrosi, C., Zaiontz, C., Peragine, G., Sarchi, S., & Bona, F. (2018). Randomized controlled study on the effectiveness of animal-assisted therapy on depression, anxiety, and illness perception in institutionalized elderly. Psychogeriatrics, 19(1), 55–64. https://doi.org/10.1111/psyg.12367