

## Animal Assisted Therapy Hayvan Destekli Tedavi

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### Abstract

Animal assisted therapy is an alternative treatment method based on human-animal interaction, used as complementary to the main therapy in order to cure and enhance the living conditions in individuals affected by chronic diseases or mental disorders. Animal assisted therapy is known to be used as a complementary therapy in many illnesses and disorders such as widespread developmental disorder, cancer, Alzheimer's disease, dementia, loneliness, anxiety and depression. In various researches carried out abroad, duly conducted therapies along with an expert and competent team has given positive results. In our country, the number of studies conducted in this area is limited. In this review which tries to study animal assisted therapy in multiple dimensions, the definition, history, areas of use of animal assisted therapy and the animal species used in the treatment have been presented, and the different lifestyle applications such as childhood and old age have been interpreted. Given the positive results of animal assisted therapy in the treatment of illnesses and mental disorders, it is believed that its implementation as a complementary therapy in our country, trials of varying animal species in the treatment and its practice in other mental disorders and illnesses will be of benefit.

**Keywords:** Pets, animal assisted therapy, human-animal interaction

### Öz

Hayvan destekli tedavi, kronik hastalığı olan ya da ruhsal bozukluklardan olumsuz etkilenen bireylerde yaşam kalitesini yükseltmek ve iyileştirmek amacıyla temel tedavinin yanı sıra kullanılan ve insan hayvan etkileşimine dayanan alternatif bir tedavi yöntemidir. Hayvan destekli tedavinin, yaygın gelişimsel bozukluk, kanser, Alzheimer, bunama, yalnızlık duygusu, anksiyete, depresyon gibi bir çok hastalık ve bozuklukta destek tedavi olarak kullanıldığı bilinmektedir. Yurt dışında yapılan araştırmalarda uzman ve güçlü bir ekibin yanı sıra prosedürüne uygun olan yapılan tedaviler olumlu sonuçlar vermiştir. Ülkemizde ise bu alanda yapılmış araştırma sayısı kısıtlıdır. Hayvan destekli tedaviyi çok yönlü araştırmaya çalışan bu derlemede tedavinin tanımına, tarihçesine, kullanım alanlarına, tedavide kullanılan hayvan türlerine yer verilmiş ve çocukluk ile yaşlılık gibi farklı yaşam dönemlerindeki uygulamalarına değinilmiştir. Hayvan destekli tedavinin birçok hastalıkta ve ruhsal bozuklukta olumlu sonuçları görülen destek bir tedavi türü olarak ülkemizde uygulanmasının, tedavide farklı hayvan türlerinin denenmesinin yanı sıra diğer ruhsal bozukluk ve hastalıklarda da uygulanmasının yararlı olacağı düşünülmektedir.

**Anahtar sözcükler:** Evcil hayvanlar, hayvan destekli tedavi, insan-hayvan etkileşimi

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**HISTORICALLY** animals and humans have developed a special relationship between themselves. As depicted in the cave pictures, the oldest relationship is that of the wolves and cave dwellers around the campfires. Although ancient Egyptians have proven themselves very connected with their cats, horses and dogs were very important for companionship, traveling and hunting during the middle ages. In Greek mythology in the era of Asclepius, the deity of medicine and health, dogs and snakes played an important role in treatment processes and it was believed that sick and wounded were visited and healed during their sleep by god sometimes in human form and mostly in the form of snake or dog and (İncazlı et al. 2016).

Now, animals are an integral part of the community and the natural environment. Statistics show that most of the humans shall keep a pet during their lifetime. Animals serve not only as pets but also as an assisting friend for the physically and mentally disabled (Gammonley and Yates 1991). Animals alleviate solitude in persons with disabilities or mental disease and motivate humans by enhancing social interaction. With their calming effects, they improve physiological health, normalize and even enhance life quality. In the United States, robots providing assistance or sentimental support according to the person's needs were designed to imitate these animals (Hart and Yamamoto 2015).

Animal companions are more widespread in families with small children. In the USA more than 70% of children have pets and most of the parents indicate that the animals were adopted "for the children". This situation emphasizes the importance of children's encounter with animals especially with the animal companions (Melson 2003).

The satisfactory development in the approach to animals in social life was considered as worth studying by researchers. Numerous studies were noted in this domain's literature. Although it may be considered as a new topic yet, in addition to using animals for their workforce, for nutritional purposes, a healing psychological interaction was discovered between animals and humans and this has directed scientists and researchers to this subject. Therefore the purpose of this study prepared as a compilation is to put forth that animal assisted therapy has, in the light of the literature, a wide platform which is impossible to underrate and a qualified accumulation of knowledge. This study shall include the definition, history of animal assisted therapy, shall touch upon animal breeds used in animal assisted therapy and to psychological disorders which are treated by animal assisted therapies, finally the use of animal assisted therapy in children and old people shall be reviewed and shall be discussed in the light of the literature.

## Definition

In the literature, animal assisted therapy (AAT) has 20 different descriptions and 12 different denominations. However, as this situation causes confusion, Delta Society which is responsible of animal therapy certification in the USA, in order to standardize the terminology has described it as Animal Assisted Activities (AAA) and AAT (Yeşilkayalı and Ofluoğlu 2018). It is possible to define AAT which is the subject of this study as a treatment method consisting of human and animal interaction widely used in the recent years with the purpose to improve the quality of life of people with chronic diseases and to treat psychological disorders (Cevizci et al. 2009).

AAT is an adjuvant treatment resulting in positive developments in the physiological and psychological mechanisms of humans by taking to account biological-chemical-

physical changes arising from the interactions between humans and animals (Leaser 2005). AAT is a new interventional program with important benefits in the treatment of chronic diseases and diseases requiring long-term hospitalization (Jofré 2005). AAT is an adjuvant treatment method, which has positive outcome for the health that supports quality of life.

## History

When the historical development of AAT is considered, it appears that animals have been used in the treatment of disabled persons in the nineteenth century. In 1790, rabbits and chicken played a part in the treatment of mental illnesses in Belgium (Morrison 2007). The first documented use of animal in therapy was in York Retreat in the UK in 1792. These animals were used to improve mental behavior (Macauley 2006). In 1867 in Germany, farm animals and horses were used in the treatment of epileptic patients. In 1942, in New York patients at the Army Air Corps Convalescent Hospital have worked with farm animals and received “restful treatment”. Subsequently in 1972, the psychotherapist Boris Levinson made a survey and obtained the information that one third of New York psychotherapists were using domestic animals in the therapy. In Pikes Peak district in Colorado in 1973, the “petmobile” program of Humane Society brought animals and old persons together in the homes for seniors. In 1977 Dr. Dean Katcher and Erika Friedmann have made researches about the effects of domestic animals on the blood pressure and mortality rates. In 1980 Delta Society (a human-animal focused nonprofit non-governmental organization) was founded (Morrison 2007).

## Training animals as co-therapists

The use of dogs nowadays as co-therapists in local institutions is not a frequent situation as relatives of patients are spending more time with patients. However, certain patients believe that they will relax more when they will see a therapist who has a therapy dog. Infrequently, certain therapy specialists include therapy dogs for AAT during consultation. Their participation and cooperation plays an important role in bringing a new approach to therapy. Dr. Lois Abrams, marriage and family therapist in California with his experience with two therapy dogs, Duke and Romeo shared a descriptive story and was able to determine his patients’ emotional situation earlier. Co-therapist dogs provide relief to patients with their sense of smell and a better perception of the patients’ body language (Wuu et al. 2013). In a study, the benefit and importance of domestic animals was pointed out and their role in the cases of couples families and their inclusion to relationship dynamics and tensions was examined. The research informed that counselees adapted more easily to situations such as death, mourning and grief, thanks to domestic animals. Furthermore, the use of domestic animals in the AAT was indicated as a valuable resource especially in couple and family therapy and important method were presented to enhance the possibility using domestic animals as co-therapists (Walsh 2009). Furthermore, professionals working with families are able to use domestic animals to help, to facilitate the therapy and initiate the dialogue.

Animals included in the therapy play an active role in helping counselees to cope with negative outcomes by raising their moral. In addition, the interaction of the domestic animal with its owner in therapy environment and the behavior of the domestic ani-

mal may provide information on the person who is asking for counseling and the person's family system (Yeşilkayalı and Ofluoğlu 2018).

In general, dogs are widely used as co-therapists. As dogs are genetically friendly, clever and social creatures, they respond better to socialization and obedience training. Consequently, teaching the therapy animal certain advanced level skills are among the duties required to facilitate AAT. These duties include obedience training or agility training, participation to competitive dog trials. Horse trainings may include horse riding skills and competitive horse races. Furthermore the counselee may train some of the horses used in therapy; dogs may be rescued by them or by others. Thus, in addition for the counselee to have fulfilled a duty, having done something considered a valuable by the society may strengthen their feeling of worthiness (Chandler 2012).

## **Animal species used in AAT**

AAT may be performed with pets and especially with trained domestic animals. In a meta-analysis study, AAT promises hope as a support to interventions that are applied (Nimer and Lundahl 2007). Dogs lead therapy animals with their trainability and their social skills. Parish-Plass (2008), in a research conducted on insecure attachment due to abuse and exploitation in children, used mice, hamsters, parrots and dogs in animal assisted therapy and shared their positive effects as case. Chandler (2012) in her book indicates that dogs and puppies, rabbits, domestic cats, horses, farm animals and other interactions with animals were useful in animal assisted and pointed out that this interaction had healing and social adaptation facilitating effects. In the literature, therapy cases with horses, birds, dolphins and fish are observed.

## **Dogs**

A study points out that in home schooling, reading 15–20 minutes during ten weeks developed reading fluency by 30 % in children and three quarters of parents reported that their children were reading more frequently (Melson 2013). To assist healing in patients hospitalized at pediatric oncology sections and to facilitate their adaptation to the process an animal assisted therapy program named “A Magic Dream” was implemented. The sampling was made with the participation of 16 parents and children and 12 nurses in total. Dog assisted therapy is observed to alleviate psychological distress in parents and children, to facilitate adaptation to the treatment process and to contribute in find solace when staying at the hospital (Gagnon et al. 2004). In a one-year pilot study made to alleviate the hospitalization stress in children with cancer with the participation of volunteers and professionals and the quality of co-therapist dogs, the genuineness of the whole process and the success of patients and nurses have constituted a basis for the permanent implementation of the special care program for children (Bouchard 2004).

It is possible to see that dogs are used in other areas for therapy purposes. With the fear arising from being in a strange place such as a courthouse, their fear of the accused is likely to decrease their ability to testify. Therefore, dogs are allowed in hearings due to their reassuring qualities for children (Duman 2018). In recent times, therapy dogs are observed in patients with dissociative disorders. In AAT, in addition to facilitated interaction and communication, dogs have a calming effect for the patient's stress. Therefore, animals, that are more effective on sensitive issues and beneficial as a clinical bridge in psychotherapy are recommended (Barker et al. 2003).

Melson (2013) in a study examining the relation between reading fluency found that the stress decreased and blood pressure dropped when reading in the presence of a friendly dog (not required to be familiar in advance). This relaxing effect was found both in the case of adults and in the case of children readers. Moreover, in the association of children with domestic animals (in general dogs and cats), approving, accepting, not judging these animals studies have shown that they are an important source of emotional support.

## Horses

Used as a therapy method in individuals with mental or physical disabilities hippotherapy, briefly named as “treatment with the help of a horse”, has a neurophysiologic effect mechanism. Hippotherapy is mostly effective in perceptive, speech, communicative, social behavior and psychomotor problems and facilitates the social integration of patients. In this method, the beneficial effect of the body temperature and rhythmic movements of horses on the locomotor and nervous system is used. In addition to a trained team the fitness for the purpose of the hippotherapy horse should be taken to account for the use in individuals with mental or physical disabilities. When hippotherapy horses are selected, their body structure and psychological – behavioral qualifications should be taken to account (Köseman and Şeker 2015). Hippotherapy is known as a physical, professional and speech therapy in which the horse’s characteristic movements are used to create motor and sensory input. The use of hippotherapy is observed in the treatment of autism, cerebral palsy, arthritis, multiple sclerosis, head trauma, stroke, vertebral damage, behavioral disorders and psychiatric disorders as well as to treat other disabled patients (Koca and Ataseven 2015). Hippotherapy is supported by the literature and information on how and why horse assisted therapy is an effective therapeutic treatment is available. (Lawson 2016).

In a study, in children who are treated with therapeutic horse riding treatment increases in sensorial search, sensorial sensitivity and social motivation as well as social motivation and decreases in inattention, distraction and hyperactivity were observed. The results of the study provide evidence on how therapeutic horse riding can become a valid treatment option in the treatment of children with autism spectrum disorder (Bass et al. 2009). Other studies have indicated the physical and psycho-social benefits of horse supported therapies in children with physical diseases (All et al. 1999, Smith-Osborne and Selby 2010).

Hippotherapy is also used in children with cerebral palsy. Significant improvements were noted after hippotherapy in muscle groups displaying excessive asymmetry before the therapy (Benda et al. 2003). Furthermore, after hippotherapy important improvements were observed in these children’s walking, running and jumping scores and total scores (Cherng 2004). In a study Sterba et al. (2002) have studied the effect of hippotherapy on gross motor movements in children with cerebral palsy. After a program of 18 weeks a significant increase was observed in gross motor functions such as stretching out, sitting, squatting, running and jumping.

## Birds

A study examined the effect of colorful birds on old people. Retired persons ranging between the ages of 71 to 85 were separated into five groups and two of the groups were

given bougainvilleas and were without a television; the third and fourth groups were given budgerigars (small birds). The fifth group was used as a control group. After an implementation period of 5 months, a noticeable difference was observed in the budgerigar groups (Eyster 1984).

In a study performed from the thought that animals had a therapeutic effect the aim has been to examine the views of psychological counseling students on using animals as a protective and supportive measure in courtroom and questions were asked to the students with this purpose. As a result of the research, students have stated that they were not finding the use of animals in the court room, that the animals they preferred the most were birds and that the presence of animals in the court room would have a relaxing effect. These results indicate that emotional needs are effective largely in having animals in the courtroom (Duman 2018).

## **Psychological disorders in which AAT is incorporated**

AAT have been used in the recent years as support in several diseases and have become a treatment alternative with positive outcomes. AAT have been a focus of interest and have been preserved as a complementary and supportive method in certain therapies to improve health and life quality. The famous nurse Florence Nightingale has emphasized that domestic animals are excellent companions especially in the treatment and rehabilitation of chronic diseases (Cevizci et al. 2009). Consequently, animal human interaction in the treatment is important. This interaction requires a strong emotional infrastructure. The strength of the interaction shall result in an increase in the benefit of the therapy.

AAT is widely used. Researches indicate that when animals are included the symptoms of many diseases disappear more rapidly (Dimitrijević 2009). This new treatment resulting from human-animal interaction results in a decrease in the blood pressure and pain levels, an increase in the mobility and muscle activity (Cevizci et al. 2009). In recent years it is efficiently used especially in several psychological diseases such as diffuse development disorders, dementia and Alzheimer disease, feeling of loneliness, use of medicines due to psychological disorders, aphasia, schizophrenia and for psychological support purposes in cardiovascular diseases, and in chronic and malignant diseases such as AIDS and cancer.

The use of AAT is observed in the treatment and rehabilitation of children whose socialization side is weak or undeveloped for psychological –training purposes, in behavioral disorders, in children with low academic success and low self-confidence, in prisons to reduce aggressive behaviors, for prisoners in mental institutions, in houses of correction, in low or medium level autism, in the treatment and prevention of depression symptoms in the elderly, in neuropsychic stress, during the period of recovery after medical interventions, in arterial hypertension, cardiopathies, chronic muscular-nervous system diseases and in the treatment and rehabilitation of different motor disorders (Balarini 2003). Furthermore it is used in psychiatry patients with phobia or addiction problems, pediatric cerebral stroke, rheumatoid arthritis and other diseases. Finally, it draws attention to areas where animal assisted interventions are observed, practices at hospitals and care for the elderly, innovative school, prison, farm and community programs. Likewise, domestic animals and relational dynamics have an important role in family therapy (Walsh 2009).

## **Pervasive developmental disorders**

Pervasive developmental disorders is defined as a group of psychiatric disorder which appears at early childhood and during which social skills and behaviors do not develop adequately or in which a loss occurs. In general it affects many areas of development and causes permanent functional disorders (Cevzici et al. 2009). Martin and Farnum (2002), in the experimental study they conducted, have evaluated the quantitative results of interaction with dogs in children with pervasive developmental disorder. In the study three different options that the children could play during the therapy were presented. Those are a ball, a toy dog and a real dog. The child was required to select only one of them and establish relation with it. In the study, social and nonsocial interactions were evaluated both according to their behavioral and their verbal dimensions. In the sessions conducted with three different communication models, the desire to play and awareness of their social environment increased in the children who interacted with a therapy dog. The results of a study includes improvements in the domain of multiple functionalities which are known to deteriorate in autism spectrum disorders (increased social behaviors and communication in addition to decreased behavioral problems, autistic violence and positive improvements in stress) (O'Haire 2013). The results of another study points out that with a companion service dog, the type of connection between adolescents and a child with autism spectrum disorder provides the chance to interact despite deficiencies in social skills. Companion service dogs have an increased effect on the daily social functioning of the children and the adolescents and contribute to their social change (Hoffman 2011).

## **Stress, anxiety and depression**

Stress and anxiety are accepted as factors causing cardiovascular diseases. Researchers think that companion animals contribute in decreasing stress and anxiety. Several writers have indicated that blood pressure decreases in adults and children when a previously unknown friendly animal is present during various stressful activities (Barker and Dawson 1998). In a study, AAT is described as beneficial to depression (Folse et al. 1994). When compared with matched control group, after being visited by puppies a decrease was observed in the depressions of the residents with chronic mental disease living in supportive care homes (Barker et al. 2003).

A research was made on whether AAT alleviated mood states such as fear, anxiety and depression before electroconvulsive treatment. To 35 patients, AAT was administered on different days for 15 minutes and standard therapy was administered to the comparison group. Before and after both therapies, fear, anxiety and depression were measured according to visual analog scale (VAS). It was found that AAT reduced fear by 37%, anxiety by 18%. Consequently, it was indicated that AAT could be beneficial when used in psychiatric or medical interventions which may trigger fear or a negative social outcome (Barker et al. 2003).

## **Aphasia**

Although AAT is mentioned in the case of aphasia, there is a small number of studies indicating the efficiency of dogs in the treatment of individuals who experience speech disorder and communication problems. However it was observed that AAT was as much

effective as traditional speech therapy on individuals with aphasia and that it provided relaxation to patients (Macauley 2006).

## Schizophrenia

Although animals have been assigned to adequate psychiatric services, the numerousness of data confirming their benefits has been ironic. In a research on helpful dog-human relationship actually assisting the patient, therapeutic benefits of a co-therapist dog to schizophrenia patients were observed (Barker et al. 2003). The hedonic tone of 10 chronic schizophrenia patients who participated to interactive AAT sessions was compared with a control group treated without animal assistance. The results achieved according to the hedonic tone measured with Snaith-Hamilton pleasure scale have indicated a distinct improvement in comparison with the controls. At the same time these patients have displayed improvements and development in the use of free time and motivation (Nathans-Barel 2005). AAT improves anhedonia in schizophrenia patients (Dimitrijević 2009). Furthermore it was observed that AAT were successful on old schizophrenic patients (Barak et al. 2001).

## Dementia and Alzheimer's disease

AAT has been much more effective in isolated patients with dementia and Alzheimer disease. In a study, it was observed that attendance of psychiatric patients to group meetings held in a room where there is a finch in a cage was in higher numbers and was compared with a matched group kept in a room without birds. While positive results were obtained from Brief Psychiatric Rating Scale score, ironically introverted and unresponsive psychiatric patients' laughing, embracing a therapy dog and talking to them has been defined as positive response to the therapy. In a pilot study, 15 persons with dementia living in a nursing home have participated for three weeks to animal assisted intervention. Results have shown significant decreases in the negative behavior of patients and increases in their social interaction (Richeson 2013). A study has shown that animal assisted therapy has positive effects such as an increase in their joy/pleasure, memory, relaxation, focusing, social behavior and physical activities as well as decreases in their agitation and absent-mindedness (Wordley 2010). In patients with dementia, low heart rate was connected with the presence of a therapy dog and the socialization behavior of Alzheimer patients has improved significantly while they are near of the therapy dog (Barker et al. 2003). Consequently, animal assisted activities/interventions have a positive effect on the social behaviors, physical activities and diet programs, agitation/aggressiveness and life quality of patients with dementia (Yakimicki et al. 2018).

Edwards and Beck (2002) in a study they made on Alzheimer patients have assessed how aquarium fish present in their living environment affected the appetite problems of patients. Therefore, 60 Alzheimer patients who lived at home were included to the study. Information on their eating state were obtained during a treatment of 2 weeks in an environment where aquarium fish are present and during observation made once a week for a period of 6 weeks. Findings have shown that food intake of patients with Alzheimer disease increased significantly in the presence of an aquarium and that it continued increasingly during the observation of 6 weeks. Weight gain also increased during the study. Researchers have concluded that the presence of aquarium fish improved environmental conditions and consequently it improved the mood of patients,



that it increased their appetite. At the same time, they have indicated that patients living with aquarium fish needed less nutritional care and such decrease resulted in decreased costs in health services.

## **Relation between animal ownership with physical activity and general health issues**

Human-animal togetherness plays in general an effective role in providing spiritual and physical wellness for people of all ages. In an applied research program, the relation between animal ownership and physical activity was studied. In a sample consisting of 41514 adults (owners of cats, dogs, cats-dogs and non-domestic animals) findings of a research in which the relation between total weekly walking distance and animal ownership are studied indicated a medium level relationship between dog ownership and high physical activity (Yabroff et al. 2008). Müllersdorf et al. (2010) in a study they realized in Sweden on 39.995 participants examined the health, physical/leisure time activities, job status of those who own domestic animals and those who don't and the socio-demographic aspects related to domestic animal ownership. According to this study, animal owners have a good general health those who are not animal owners experience more mental problems. Animal owners' leisure time activities include life that is more natural or gardening activities than others are. Additionally, self-employed women between the ages of 39-45 who are domestic animal owners have more headaches, neck and shoulder pain complaints compared to others. Therefore, domestic animals have a more positive effect on domestic animal owner who have a sufficient activity level rather than those who are less active. The studies revealed that domestic animals improve the health, psychological wellness and longevity of domestic animal owners (Herzog 2011).

## **Use of AAT in children**

When studies in this domain are reviewed, it is observed that works to improve mental health hold a quite wide coverage. AAT is a method which is also use to improve severe mental disorders and behaviors of children (Niksa 2007). Rett syndrome and autism are among the pervasive developmental disorders characterized by difficulties that compel patients in all the phases of daily life. In the treatment of these diseases, "dolphin therapy" and "dog assisted therapy" are among the most preferred animal assisted therapy models (Karayağız Muslu and Conk 2011). Additionally, in children suffering from pain due to various illnesses clinical trials indicate that human – animal togetherness is effective in decreasing pain and reducing stress related to hospitalization. Children who remain long term hospitalized for cancer treatment are subject to a high level of stress. In addition to leaving their family and their living environment, they also face various interventions that may cause pain. In children receiving chemotherapy, when treatment groups with AAT and without AAT are compared, it was noted that stress levels of patients from the trial group decreased. (Bouchard et al. 2004). In a complementary study made to determine the effectiveness of visiting with animals' treatment on pediatric pain management, a sampling from 25 postoperative children between the ages of 5-18 with acute pain. Regular animal visits were found to decrease their pain by attracting their attention to a different direction (Sobo et al. 2006). In a study examining pet therapy on patients treated in the pediatric cardiology department, visits by domestic animals

were found to alleviate the stress, to normalize hospital environment, to improve the morale of the patients and the parents (Wu et al. 2002). Macauley and Guitierrez (2004) have compared the effect of AAT with the traditional treatment in male children with learning disabilities. Parents of the group treated with hippotherapy have indicated that the speech and learning abilities of their children developed better in comparison to the group which received the traditional speech therapy.

In a study realized at Arkansas Children's Hospital to evaluate the efficiency of using animals and to determine if any microorganism transmission occurred or not; more than 4000 children were taken to the AAT program. In children with sickle cell anemia who participated to the AAT program, the pain attack decreased in comparison to the control group furthermore ant transmission of infection was not observed (Yamauchi and Pipkin 2002). Another study indicated that children who had pets were less anxious and more extroverted as well as more emphatic (Sams et al. 2006).

Animals were used to assist children who had been subject to sexual abuse in helping them to express the abuse and their feelings. In therapy, storytelling is part of the treatment process. (Reichert, 1998). AAT is an effective therapy technique in reaching the inner world of children who are abused and exploited (Parish-Plass 2008).

## Use of AAT in the elderly

The positive effects of domestic animals on human psychology are not limited to children only. It is possible to state a state of wellness arising from the positive energy of domestic animals for people of all ages including the elderly. In a study conducted on a group of old people who have domestic animals and who don't have any indicated that the relation between psychological welfare and social support varied significantly for the owners of domestic animals. However, in the elderly a more complex relationship was found between wellness and domestic animal ownership (Raina 1999). Researchers have indicated that animal friendship has positive psychological benefits to the elderly living in society and in retirement homes. As physical activity levels decrease, nurses providing home care made increased efforts to access visiting dogs (Gammonley and Yates 1991).

## Discussion

Humans' perception of animals varies according to culture, age, gender and their dwelling places. Regarding class differences, farmers are observed to accept dogs as they are helpful but cats are qualified as useless by them (Pamuk 2015). Nowadays, although human-animal togetherness or having domestic animals and the use of animals in therapy may rise to the thought that it is due to cultural reasons many situations indicate that there is no statistical difference according to ethnical origin (Risley-Curtiss et al. 2006). Therefore the type of animal selected for AAT, its fitness for the therapy, its communication with the patient and the approach to the animal are key factors of AAT. Furthermore, the literature on the health benefits of animal assisted therapy was reviewed and the potential benefits of pet therapy were found noteworthy (Brodie and Biley 1999). Although certain studies on experimental basis are weak, general research points out to multiple indications with the exception of certain counter indications (Morrison 2007).

With a general approach, studies on AAT are especially quite numerous in international literature outside Turkey. Such practices are limited in Turkey and in general it is

possible to associate the reason for such rareness with our society's culture. The habit of having a pet at home is not frequent due to religious or hygienic worries. The practice of animal assisted therapy in hospitals is limited. The small number of studies in the literature is a situation, which is in line with the fact that pet ownership and AAT are not in large numbers in our country.

Although in the literature, the results of studies concerning AAT are mostly declared the benefit of the patients, there are also studies in which it is criticized from time to time or some in which no beneficial result could be obtained. As a solution to such a situation, nurses are suggested to take an active part as part of the team in visiting animal or ward animal programs in order to have a better result from the therapy (Brodie and Biley 1999). As a mutual interaction is the case in AAT, the positive effects of this therapy are observed also on the healthcare personnel working in psychiatry. Furthermore, on this subject specialists are putting forth that social service specialists could further develop AAT services. Consequently, it is indicated that social service specialists are included in practices containing animals in order to fully understand the effect of these animals on individuals and families (Risley-Curtiss et al. 2013).

## Conclusion

Consequently, this therapy technique, which has positive effects on every type of patient, takes place in an increasingly growing platform. Realizing more detailed and longitudinal studies on animal assisted therapy, increasing the animal species used in the treatment, examining the harmony between personal traits of the diseased individual and the support animals shall be important from the perspective of leading the way to the researchers in our country. Such studies shall positively change the approach to animals in our society and that interest, empathy and compassion as well as the need for them shall increase.

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