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Diamantakos, Vangelis; Chaniotakis, Ioannis

*Published in:*

Open Access Library Journal

*Publication date:*

2024

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[10.4236/oalib.1111277](https://doi.org/10.4236/oalib.1111277)

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*Citation for published version (APA):*

Diamantakos, V., & Chaniotakis, I. (2024). Human-Animal Relationship through the Ages, Animal Assisted Intervention Programmes and the Role of Animals in Child Development. *Open Access Library Journal*, 11(3).  
<https://doi.org/10.4236/oalib.1111277>



# Human-Animal Relationship through the Ages, Animal Assisted Intervention Programmes and the Role of Animals in Child Development

Evangelos Diamantakos<sup>1</sup>, Ioannis Chaniotakis<sup>2</sup>

<sup>1</sup>Animal Department, Hartpury University, Gloucestershire, UK

<sup>2</sup>Healthcare Directorate of Hellenic Air Force General Staff (HAFGS), Athens, Greece

Email: vdiamantakos@gmail.com

**How to cite this paper:** Diamantakos, E. and Chaniotakis, I. (2024) Human-Animal Relationship through the Ages, Animal Assisted Intervention Programmes and the Role of Animals in Child Development. *Open Access Library Journal*, 11: e11277. <https://doi.org/10.4236/oalib.1111277>

**Received:** January 31, 2024

**Accepted:** March 23, 2024

**Published:** March 26, 2024

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## Abstract

The long-term relationship between humans and animals and the advantageous effects of animals on human health and well-being are well-documented in present literature. This relationship has evolved over the years, leading to a shift in human perception and behaviour towards animals. In our present day, Animal Assisted Intervention (AAI) programmes are regarded as contributors to human physical and psychological well-being. According to current literature, interactions with animals and AAI programmes appear to benefit children's psychological, emotional, social, and learning development. The article emphasises that while animals can contribute to children's development, this should not be considered a panacea but rather an additional means and part of a holistic intervention facilitated by accredited professionals.

## Subject Areas

Psychology

## Keywords

Human-Animal Relationship, Animal Assisted Interventions, Children Development, Children Well-Being

## 1. Introduction

In recent decades, it has been witnessed a general trend of people, especially those residing in the modern urban centers of developed countries, returning to

a natural way of life and reconnecting with the natural environment [1] [2] [3]. The modern urban environment, in combination with the organisation of society and the contemporary lifestyle within it, has solved many human/social problems and has improved the quality of life in various aspects of daily life. However, the framework in which the modern individual lives and moves, along with the significant benefits it provides, has also brought about a series of negative impacts on both physical and mental health. The lack of clean environmental atmosphere, sufficient physical exercise, quality communication and interaction with others, as well as exposure to stimuli from the natural environment, are conditions and experiences that are missing from the lives of people in advanced countries of the modern Western world [4] [5] [6] [7] [8].

Under this perspective, one of the significant aspects of modern human life is the lack of contact between humans and animals, which, as current research indicates, not only provided food and assistance in work but also contributed to physical and mental well-being [9] [10] [11]. Within this context, the international scientific community has extensively explored, among other things, the beneficial impact of animals, especially companion animals, on the management, treatment, improvement, and therapy of physical and mental health problems in humans [12]. The human-animal relationship can provide benefits to individuals of all ages [13]-[18]. The participation of appropriately trained animals, under the guidance of an experienced trainer, can be part of a therapeutic, management and/or social activity intervention program, where beneficiaries can either observe or actively participate in it [19] [20] [21] [22].

## **2. Historical Overview of the Relationship between Humans and Animals**

The long-term relationship between humans and animals begins from the time when prehistoric humans discovered the nutritional value of animals—which they could hunt and kill—was crucial for their survival [23] [24] [25]. As humans began to get organised into small societies and settle permanently in various regions, a need to capture and reproduce animals emerged in an attempt to secure food in periods when hunting would not be feasible (e.g. adverse weather conditions, prey shortage/scarcity). This closer interaction with animals helped humans observe their behaviours, discover and get benefited by the products they could offer, and appreciate the services they could provide [26]. Consequently, caring for and providing food to these animals ensured a variety of benefits, including their meat, the production of high-nutrient goods (e.g., milk, cheese, etc.), skin for clothing and footwear, and also valuable assistance in safeguarding settlements, hunting, transportation, and agriculture. Over the centuries, humans' dependence on the assistance provided by animals led them in many cases to consider them “divine”, worship them, and elevate them to religious symbols [27]. In modern history, especially from the 20th century onwards, there is a distinct trend among people in the so-called “Western World” to establish closer relationships; particularly with dogs and cats. This has led to

the current perception of considering these two species, along with several other species (pets), as companion animals [28]. This closer bond has facilitated contemporary humans to (re)discover additional aspects of the benefits and contribution of animals, both in occupational fields and areas related, to their physical and psychological health [29] [30] [31].

### 3. Perceptions of the Beneficial Impact of Animals on Humans in Previous Times

The beneficial role of animals in improving the physical and/or psychological health of humans is well-documented in ancient Greek, Egyptian, Chinese and Roman civilisations and cultures [32]. According to evidence found in manuscripts and art masterpiece, there was a strong belief in the therapeutic properties of animals' presence and interaction with humans. Among them, in ancient Greece, it is remarkably notable the perception about the positive effect of horses on individuals with physical and mental disabilities; during equine-assisted therapies [33]. Additionally, animals are portrayed in many folktales, stories, and myths in various cultures as speaking, conversing, and helping humans [34]. These beliefs regarding the relationship between humans and animals may represent an internal human need for closer contact with the animal kingdom as we share many genetic similarities, and it is an integral part of the natural environment where humans live and coexist with [35] [36].

In recent history, the first reference for the utilisation of animals as a means of promoting human mental health date back to 1792 at the Quaker Retreat Residence in England [37]. Patients suffering from mental illnesses could walk in outdoor areas and interact with companion and farm animals. This activity was part of the patients' daily routine and integrated into their therapeutic programme.

The first official reports in the 21st century regarding the participation of animals in therapeutic programs can be traced back to the 1940s at the Air Force Convalescent Hospital of New York City. Animals were introduced to patients and offered encouragement, and motivation to alleviate their physical and psychological illnesses/weaknesses [38]. This was achieved through the delivery of treatment programmes involving animal care provision, interaction (e.g., touching, petting), or simple observation of animals.

In the most contemporary world, Boris Levinson [39] was the first to discuss the positive contribution of animals to clinical psychology. In a related study, he presented the conclusions of his observations regarding the beneficial role of dogs during therapy sessions with a child with psychological disorders. The study, titled "The Dog as a Co-therapist," revealed the psychologist's views on the active participation of dogs in therapy sessions. Since then, many other scientists have expressed ideas in the same direction. Among these studies, those of Friedmann *et al.* [40] and Katcher *et al.* [41] were the first to be conducted according to the scientific standards of that time, paving the way for a more careful study of the "alternative" method of Animal-Assisted Interventions.

#### 4. Animal Assisted Interventions (AAIs)

One of the areas that has been extensively studied by the scientific community in recent decades is the beneficial impact of animals on the overall mental and physical well-being and health of humans [42] [43] [44] [45]. Since Boris Levinson [39] conducted the first scientifically recorded session with an animal until today, various AAI programmes have been implemented in different countries of the so-called “Modern-Western” world. The core participants of these programmes are the animal, the owner-trainer accompanying it, and the individual/s who will interact with the animal with an aim to get benefited. However, there is a very important differentiation among the various types of AAIs:

The Animal Assisted Therapy (AAT) and Animal Assisted Education (AAE) programmes require the presence of a qualified professional in the fields of health, sports, social services, or education (e.g., doctor, athletic trainer, teacher, physical therapist, psychologist, social worker, speech therapist, etc.), as appropriate, who will conduct targeted activities aimed at the physical and/or psychological well-being of the individual/s participating in them [46]. The animal should have veterinary, behaviour and obedience certification/approval issued by registered and certified professionals (e.g. veterinarian and clinical animal behaviourist). Moreover, the animals should at all times be accompanied by their owners-trainers. Last but not least, the owners-trainers should also be assessed/certified for their ability to control the animals, take care of them and promote their welfare [47] [48]. Collaboration between the professional (in the fields of health, sports, social services, or education) and the owner-trainer is necessary and crucial for the successful and uninterrupted delivery of the AAI sessions in order to benefit the individual/s who participate in these programmes.

The Animal Assisted Activities (AAAs) do not require the presence of a qualified professional as explained above in the AAT and AAE programmes. However, the collaboration between the owner-trainer and the aforementioned professionals is highly recommended and encouraged so to establish an action plan and/or conduct research/studies in the AAI field. The beneficiary’s interaction with the animal focuses on conducting activities with the aim of providing opportunities to improve the quality of the participant’s life, with key benefits including encouragement, engagement, learning, motivation and social or general well-being [46]. In these programmes—similar to the AAT and AAE ones—veterinary, behaviour and obedience certification/approval along with the owner-trainer assessment/certification for their ability to control the animals, take care of them and promote their welfare are essential prerequisites [47].

#### 5. The Role of Pets in Child Development

It is a common belief among child psychologists that children identity along with the personal, social, and emotional development of children are important factors not only for their mental health but also for physical well-being [49] [50]

[51] [52] [53]. Dogs, along with other pets, are considered to positively contribute to the overall developmental process of children [54] [55] [56]. According to Kidd & Kidd [57], children who feel boredom, loneliness, or sadness tend to seek contact and engage with their pets. Contact and interaction with pets, including dogs, are seen as a “natural remedy” method to combat adverse environmental factors that disrupt the emotional balance of children [58] [59] [60]. Children appear to turn to their pets in an effort to feel comfort and security [61] [62] [63].

Social interaction among children is considered one of the most essential processes contributing to the healthy psychological development of children [64]-[69]. One of the most significant factors promoting social interaction during “middle childhood” is play. Sturner and Howard [70] argued that playing with other children helps a child become familiar with various forms of nervousness, express their feelings, deal with problems, express disagreements, find solutions, and learn the transition from a passive to a more assertive stance during a conflict, dispute, or disagreement. During play, children have the opportunity to combat the detrimental effects of loneliness and expand their social circle [71] [72] [73] [74] [75]. Pets can also promote social interaction. Children consider their pets valuable assistants in creating new friendships [36] [76] [77] [78]. The external appearance, characteristics, and behaviour of pets appear to attract the interest of other children. Whether children already know each other or not, pets contribute to “break the ice” in the entire approach/interaction and conversation process. This is further supported by findings from relevant research [79] [80] [81], suggesting that pets serve as social “lubricants” that promote and enhance social interaction among children.

Furthermore, pets seem to play a significant role in helping children better understand the concept of empathy and act with it later in their lives [82] [83] [84]. The findings of these studies revealed a relationship between owning a pet during childhood and the manifestation of humane behaviours later in adulthood. The responsibilities associated with living with a pet and ensuring its well-being appear to influence children in demonstrating empathy towards their fellow humans later in their adult lives [85] [86]. Feeling responsible for an animal and being ready to cope with both daily and potential future problems that may arise, seem to be related to how children perceive their future relationships and interactions with other people.

It has been studied that when children come into contact with animals, there is an improvement in their ability to assimilate a learning process [87] [88] [89]. Dogs appear as four-feet assistants that reduce the arousal levels resulting from external factors during the learning process. These external factors, which can be generated by various environmental stimuli, are involved in the learning process according to the Yerkes and Dodson Law [90]. Endenburg and Baarda [91] argued that dogs can positively influence a child’s sense of responsibility and increase their self-confidence. This, in turn, enhances self-esteem and promotes the thinking process [92] [93]. The results of research in applied Animal As-

sisted Therapy programmes [94] align with the initial research of Schubauer-Leoni and Perret-Clermont [95], who claimed that when children feel selfless acceptance and positive reinforcement during their social interactions, various learning processes become easier and less challenging.

## 6. Conclusion

Despite the positive results shown in the so far conducted research and study, the potential beneficial role of the animals in children well-being cannot be considered a panacea but only as an additional means and part of a holistic intervention effort for improving their physiological and psychological health and social behaviour. These interventional efforts are already provided by various professionals and paraprofessionals in the various health, care and education institutions and/or practices and it is regarded that animals may further contribute to the cure, management or treatment of children health, social and well-being issues.

## Conflicts of Interest

The authors declare no conflicts of interest.

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