

The similarities between animals and humans in terms of the attachment theory

Reyhane Arslan*, Vocational School of Yenisehir Ibrahim Orhan, Uludag University, 16900, Bursa, Turkey.

Nuray Koc Cilekciler, Vocational School of Yenisehir Ibrahim Orhan, Uludag University, 16900, Bursa, Turkey.

Suggested Citation:

Arslan, R. & Cilekciler, N., K. (2016). The similarities between animals and humans in terms of the attachment theory. *Contemporary Educational Researches Journal*. 6(4), 161-166.

Received September 14, 2016; revised October 06, 2016; accepted November 17, 2016.

Selection and peer review under responsibility of Prof. Dr. Gulsun Atanur Baskan, Hacettepe University, Turkey.

©2016 SciencePark Research, Organization & Counseling. All rights reserved.

Abstract

The Attachment Theory is an approach that argues that the confidence inspired by the mother or by a mother substitute in an individual while still a baby leaves an emotional impact on the development of her offspring. The attachment theory, supported by studies on humans and animals, investigates the feelings of closeness and trust one living thing has for another. Many experiments made in this respect show that some feelings of humans and animals and their offspring are similar in terms of motivations and incentives. The most important of these are concepts such as childcare, abandonment anxiety and bonds of trust and security. In this study, several different scientific studies conducted on animals in terms of the Attachment Theory have been critically reviewed. Moreover, also included in this study is research on the mother-child relationship as compared with studies conducted on animals and their offspring. In the comparisons and evaluations carried out, the psychological effects of bonding, like those in humans, were also observed in animals.

Keywords: attachment theory, mothercare, animals, bowlby theory

* ADDRESS FOR CORRESPONDENCE: **Reyhane Arslan**, Vocational School of Yenisehir Ibrahim Orhan, Uludag University, 16900, Bursa, Turkey. *E-mail address:* reyhane@uludag.edu.tr / Tel.: +90 2247736042

1. Introduction

Over a period of half a century, since the term “attachment theory” was first used by Bowlby in 1958, it has been the subject of multidisciplinary research and discussion in the scientific world. An analysis of studies on the subject shows that the attachment theory has been much discussed, explored and applied in many different disciplines, including psychology, sociology, education, zoology, etc. It has become especially notable in psychotherapy.

Bowlby, when defining the attachment theory in general, started his work by recognizing the need to assess human behaviour in the context of animal behaviour. In order to better accommodate human bonding, ethology and comparative psychology were used extensively. For example, despite knowing the important differences between the types of research such as that of Lorenz, who saw the instinctive behaviour of a fledgling (Kirkpatrick, 2012, as cited in Lorenz, 1957) as functionally resembling human commitment, and that of Harlow (1958) who studied the behaviour of baby monkeys towards their artificial mothers in the laboratory, he accepted the need to be consistent when explaining human behaviour and that of animals. Bowlby (1988) assessed the problems faced throughout the evolutionary history of the species as examples of all kinds of behaviour organized around compliance as a product of natural selection. A bonding system, like psychological adjustment, was accepted as a special functional area. Consequently, the need for different behavioural programs to solve different types of adaptive problems particular to that area has attracted attention.

According to Bowlby, the universal trend of seeking proximity and establishing close ties starts from infancy. He defined the mother-child relationship through innate behaviours like the baby’s recognition of his mother’s voice and many others driven by biological markers and forming the beginning of social relationships. This relationship presents itself through actions like suckling, laughing, crying, watching, calling searching, waiting, etc., forming a template for future relations (Bowlby, 1958). However, Harlow’s thesis, put forth in his study that the connection between mother and child was due to the mother’s meeting the basic needs such as hunger and thirst during the baby’s infancy has been accepted (Tuzun & Sayan, 2006). Another study conducted by Lorenz in 1935 discussed “imprinting” as a parallel concept to the attachment theory. Imprinting in the first development phase of the so-called sensitive period is a rapidly occurring, powerful and not easily changed perceptual way of learning. Lorenz carried out research using wild geese, and discovered the imprinting response in species like wild geese that can move around immediately after birth or hatching. A flock of geese was raised by a human (Lorenz) in place of their mother or one of their own species because the first creature they saw after hatching was the man and thus, they were able to bond with him and follow him (Yorukan, 2015).

In a study on the impact of parental and school attachment connected to adolescent life satisfaction, it was found that, in the first years of adolescence, supportive relationships have an important place in students’ lives. One of the important findings of the study was a factor that can be changed at the school level, namely, attachment to the teacher. This demonstrates its relationship with student life satisfaction. This finding shows the relationship established between students and teachers is important for the students’ happiness (Ozdemir & Koruklu, 2013).

2. The Attachment Theory

The attachment theory is an explanation of the reasons for the human propensity of building strong emotional bonds with other people and the importance of this to the people themselves. Currently, the mother-child relationship as explained by Bowlby, based on the attachment theory, is widely accepted in many scientific fields and in applications across psychology, and continues to be extremely effective (Kirkpatrick, 2012). Research findings on the attachment theory and the bonding effect have

focused more on infancy, adolescence and adulthood, but in recent years, studies of old age have increased.

According to a research study on infancy and childhood, all emotional and behavioural patterns are encompassed simultaneously by the baby's positive reaction to his parents or primary caregiver, and the feeling of relief when he is aware of their presence. Bonding develops between the infant and the primary caregiver, and this strong bond gives security to the infant. During the second half of the first year, the infant begins to become attached to the person who responds to his needs. Moreover, in childhood and adolescence, many emerging sources of psychopathology are closely associated with the nature of the infant's relationship with the primary caregiver. Bonding not only affects infancy, but also affects early childhood, late childhood, adolescence and adulthood. Bonding may be associated with psychopathologies like propensity to violence, self-harm, substance abuse and addiction, neglect, abuse, and so on. Therefore, early identification of relational problems is important in terms of preventive mental health. Thus, an evaluation of the early mother-infant and environment-infant relationship should be conducted and appropriate advice and support provided (Soysal et al., 2005).

According to the research of Calisir (2009) on the attachment theory, internal working models developed for infancy are a determinant of personality development and possible future psychopathology. Individuals have different bonding styles and different characters, and thus differ in their emotional response to these feelings and from each other in their actions. As the bonding system is activated, if the person being bonded with is accessible, a "security-based strategies" situation, or emotional stabilization, emerges. When inaccessibility of the attachment figure is combined with other problems, in order to manage his emotions, the individual must decide whether to carry on seeking proximity or not.

This condition, called "secondary attachment strategies", includes taking extreme action or choosing inaction and results in the activation of two different strategies. A number of studies supported by substantial and consistent data have found that insecure attachment approaches are related to the emotional regulation and the depressive symptomology of the secondary attachment strategies used.

According to Yildiz (2012), in terms of the attachment theory, similarities and differences exist between old age and infancy, childhood and adulthood; however, old age also has unique developmental characteristics. In old age, bonding, getting care, being dependent, living with losses, suffering from physical and psychological disease, and establishing social relations are prominent factors. Whether the process of bonding in old age is positive with a secure attachment, or not, is linked to factors affecting the overall well-being of the elderly, such as social support, life satisfaction and quality. A secure attachment approach is associated with showing more positive adaptation to chronic illness. With anxiety, avoidance or an ambivalent attachment style, the chronically ill elderly can more easily fall into despair, making death seem more attractive, and they may wish to die. Adult children who bond with secure attachment to their elderly parents have fewer problems in caregiving. Yet, to compensate for perceived gaps in social relationships and trust, religious belief and behaviour was determined to significantly impact elderly individuals exposed to loss of confidence and control.

3. Bonding in Animals

The source of social behaviour can be traced back to infancy. One social behaviour that can be seen at the beginning of life is when the baby does not bond with the mother (Morgan, 1991). This phenomenon has been found in some animals that need help with this type of bonding in the first period of their lives, considering that growth is faster in animals. One of the most important studies on maternal bonding in animals was Harlow's experiment (Schrier & Harlow, 1958). In a 1958 study on monkeys conducted by Harlow, the element of maternal deprivation was used. In the experimental

setup, in order to understand the basic motive of the monkeys, they were given two choices: a cloth-covered object to cling to or an uncomfortable metal one to cling to and drink milk from. In the experiment, as soon as the monkeys had climbed on the metal post and drunk milk, they immediately returned to the cloth-covered one.

This showed that not only nourishment, but also comfort was important. In another study using rhesus monkey babies, a heated metal area and a cold, cloth-covered area were prepared. The monkeys were observed to prefer the heated metal area. This experiment demonstrated the importance of the heat factor, and supports Harlow's view that the mother not only provides for physical needs, but at the same time she provides comfort and warmth. Later, Harlow examined rhesus monkeys that were raised apart from their mothers in social deprivation and observed that they were unable to form sufficient social relationships. Introversión, awkwardness in establishing social relationships and sexual apathy were identified in the context of inadequate social relationships. At the same time, indifference to their offspring was observed. According to Harlow, the mutual bond of love formed between mother and child is the greatest contribution to the future life, followed by the formation of trust in relationships with other people (Tuzun & Sayar, 2006).

As for other findings of Harlow's studies, when monkeys grew up deprived of the real mother-infant relationship, they had difficulty mating, and female monkeys punished their own offspring severely. Similar results were obtained by Lorenz in his study carried out on birds. These findings may be an indicator that the lack of the early bonding experience and the duration of the withdrawal affect the quality of later relationships. This lends support to Bowlby's theory. Bowlby pointed out that the attachment relationships of rhesus monkeys observed by Harlow as a result of his experiments resemble the first attachment relationship of humans. The attachment theory in animals, as in humans, is based on trust/security.

4. The Attachment Theory in Terms of Animals and Humans

In research conducted by Muslu et al. (2011), animal-assisted therapy and attachment were evaluated. The effectiveness of this treatment is supported by both historical and current research, and child-animal interactions have shown psychological, emotional, social and physical benefits for the children. For example, strong bonding between humans and animals affects individual social behaviour and the related mechanisms of personality traits and cognitive aspects. Participating in animal care causes an individual's own problems to go away. Clinical trials have shown the effectiveness of the human-animal bonding in pain management, and this can also be seen in hospital initiatives related to stress reduction.

In the Bowlby studies, the term "attachment" is defined as a strong bond between two people. On the other hand, according to Kruger and Serpell (2006), regarding the attachment theory, the animal fulfils the task of "transitional object" in animal-assisted therapy. The transitional object helps in lessening the stress of separation from the primary caregiver and serves as a calming element. In the treatment process, at the start, the animals are defined as attachment figures or transitional objects, although these functions are actually different from each other. Attachment is a long-term emotional bond. In contrast, there is no long-term bond with a transitional object, but rather a transition from one state to another.

The feeling of loneliness can be the starting point in establishing an attachment. In this respect, Weiss (1973), noting the lack of social properties to specify loneliness, argued that there were two types of loneliness: social and emotional. Social loneliness is caused by the absence of social networks and can be solved by satisfying social relationships, while emotional loneliness is due to lack of

attachment figures and failure to establish close relationships. However, it is possible to resolve emotional loneliness via satisfactory bonding relationships, he argued.

According to Peplau and Perlman (1984), loneliness is caused by social inadequacy, by an individual's lack of social relationships, or by the absence of satisfactory ones. Wood et al. (2005) stated that pet owners, through their pets, interact with other individuals who own pets. They suggested that through this attachment, pet owners are surrounded by a number of pet owning acquaintances with whom they have established relationships. In the study, they found that pet owners were more comfortable communicating with strangers compared to non-pet owning individuals. Similarly, they emphasized that the pet owners with high levels of attachment to pets exhibited low levels of loneliness.

In a manner similar to imprinting in animals, bonding is also observed in humans. Imprinting as a bonding event must take place in the "sensitive" period. Bowlby suggested that the sensitive period for bonding occurs under two and a half years of age, approximately, and after this age, the ability to bond is lost. In fact, in children who were not exposed to humans in childhood and had lived with animals, their human behaviour afterwards was seen to resemble that of animals. For example, compared to other children found in the forest at an early age, a three-year-old girl found in the Indian jungle walked on all fours, growled, ate and drank like a bear, and tried to bite and scratch those attempting to capture her. Furthermore, although this girl learned to eat and drink like a human, she never learned to speak. She was only able to understand what was being said, and often laughed aloud. Although this point to the existence of a potential heredity factor in terms of early development and whether it is as effective as previously thought, this example reveals the need for the process of socialization and human interaction, and especially the need for a socio-cultural environment, in order to mobilize the human potential. The concept of imprinting initiates the infant attachment to the mother, and in the process of bonding to the infant, his or her mother is seen. Infants prefer responding to parents who talk a lot and are very active rather than to those who just sit passively. Infants respond more readily to the human voice than to other sounds, and they are attracted to human faces. At this point, as seen in animals, the infant's choice of the object they will bond with is made known (Yorukan, 2015).

5. Evaluation and Conclusion

Research shows that attachment of infants and children to adults, the elderly to adults or to children, humans to animals, animals to humans, and animal offspring to their parents is considered to be a multidirectional bond. The human bond between mother and baby and its contribution to the development of the child in future is similar to the bond found in animals. This bond includes incentives like the feeling of security felt by the infant being fed by its mother, and the mother's care of her young contributes positively to the surrounding social relationships. It is not correct to limit bonding as a concept only between mother and offspring. At the same time, reinforcement of a living creature's feeling of security, and his behaviour and any contact or communication with another living creature also enter into the case of attachment.

Results from nearly all of the studies dealing with the attachment theory have found that there is a direct relationship between attachment and social life. Thus, those people having the expected level of attachment at certain age periods form better social relationships, although the resolving of psychological problems is an important supporting factor. A disruption in one of these attachments can lead to negative consequences and deficiencies in a person's social life. The level of bonding that should exist between person and person, person and animal, or animal and person opens the door to happier individuals and a happy social life. In particular, the cultural levels of society are directly related to educational standards. In other words, if the educational levels of the population are high

and the family-kinship ties in the social culture are especially strong, social life in those communities, in terms of both humans and animals, will run more smoothly.

References

- Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psycho-Analysis*, 39, 350-373.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Calısır, M. (2009). The relationship of adult attachment theory and affect regulation strategies to depression. *Current Approaches in Psychiatry*, 1(3), 240-254.
- Kirkpatrick, L. A. (2012). Attachment theory and the evolutionary psychology of religion. *International Journal for the Psychology of Religion*, 22(3), 231-241.
- Kruger, K. A., & Serpell, J. A. (2006). Animal-assisted interventions in mental health: Definitions and theoretical foundations. *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*, 2, 21-38
- Morgan C.T. (1991). *Psikolojiye giris*. 8. Baskı (H, Arici et al, Trans.), HU Psikoloji department Publishing, Ankara.
- Muslu, G.K., & Conk, Z. (2011). Animal-Assisted Interventions and Their Practice in Children, *Dokuz Eylul Universitesi Hemsirelik Yuksekokulu Elektronik Dergisi*, 4(2), 83-88
- Ozdemir, Y., & Koruklu, N. (2013). Parental Attachment, School Attachment and Life Satisfaction in Early Adolescence. *Elementary Education Online*, 12(3), 836-848.
- Perlman, D., & Peplau, L. A. (1984). Loneliness research: A survey of empirical findings. *Preventing the harmful consequences of severe and persistent loneliness*, 13-46.
- Schrier, A. M., & Harlow, H. F. (1958). Effect of reserpine on avoidance of humans by rhesus monkeys. *The Journal of general psychology*, 59(2), 149-155.
- Soysal, A. S., Bodur, S., & Iseri, E. (2005). Attachment process in infancy: A review. *J Clin Psychiatry*, 8, 88-99.
- Tuzun, O., & Sayar, K. (2006). Attachment theory and psychopathology. *Dusunen Adam: The Journal of Psychiatry and Neurological Sciences*, 19(1), 24-39.
- Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, MA, US: The MIT Press.
- Wood, L., Giles-Corti, B., & Bulsara, M. (2005). The pet connection: Pets as a conduit for social capital?. *Social Science & Medicine*, 61(6), 1159-1173.
- Yildiz, M. (2012). Baglanma kurami acisindan yaslilik donemine genel bir bakis. *Sosyal Bilimler Dergisi*, 36(1), 1-30.
- Yorukan, T. (2015). *Baglanma ve Sonraki Yaslarda Gorulen Etkileri*. Is Bankası Kultur Yayinlari.