

The Pet Attachment Affects The Person's Mental Condition

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Abstract. People are more willing to have pets in current society. The interaction with pets brings pet attachment to owners. Studies try to find the benefits of the pet; the pet attachment is the measurable variable to evaluate the benefits and function of the pet. The essay discusses the emotional support of pets by dividing it into positive and negative emotional conditions. Each condition introduces two studies to develop the benefits of pets. In the positive emotion condition, the studies show that different kinds of companion animals can increase the owners' well-being. The study also figures out that the interaction with and presence of pets contribute to the positive mood of the owners. In negative emotion, two studies studied two periods, which bring long-lasting stress and negatively impact people's mental health. The result shows that companion animals can display the function of buffering negative impacts and promoting positive moods. The studies mainly take surveys to measure the data from the participants. Studies conclude that pet attachment to companion animals has emotional support and positively impacts mental health in daily life.

Keywords: pet attachment; companion animal; mental health.

1. Introduction

The increasing number of companion animals present in people's lives since More people realize the demand for pets. The earliest evidence of dog companied humans can be traced around 33,000 to 32,000 years ago. Moreover, around 60% of people in the U.S., Canada, and Australia now own a pet [1]. Many studies about the effect of companion animals were done to find out the benefits of companion animals. Most of the subject was dog owners, and few included animals like cats. This paper will discuss the benefits that companion animals can bring to the owners in different periods, including different kinds of animals. Meanwhile, the benefits will focus on the emotional condition of the owners, which is divided into favorable and unfavorable emotional conditions. The research will describe how companion animals will contribute to forming positive emotions in owners and how they help owners overcome negative emotions. The result will emphasize the importance of building relationships with companion animals.

1.1. Pet attachment

Pet attachment is human, and animals form close emotional relationships, which can benefit both humans and pets. Recently, pet attachment has been present more frequently in humans and companion animals. Since the benefits of pet attachment increase the owner's well-being, which cannot be directly observed from the behavior, most studies consider self-report surveys to ask owners to reflect on their mental condition. Then, they combine the data to evaluate the well-being of the pet owners [2]. Furthermore, recent studies indicate that more people are attached to their pets than their family members. Some people feel the loss of pets the same as the feeling of lost children. It is reasonable to infer that the pet can contribute to positive emotional support in the owners' daily lives; at the same time, the pet can also support the owners when they need to overcome negative emotions. The other human needs help to replace this function easily. Even more, the intense strength of pet attachment can reduce people's tendency to childbearing and cause the increasing age of birthing their first child [3].

1.2. Companion animals

Companion animals are domesticated animals that can meet the requirements of the owner's emotions and behaviors and companion owners in daily life. The most popular animals are dogs, cats, and fish. The data shows that more than 184 million pet dogs and cats live in the U.S. [2]. With the development of techniques, companion animals are not limited to dogs, cats, and fish; animals like reptiles, rabbits, and hamsters are also popular. However, most studies focus on dogs since they are more cooperative with the researchers, making it easier to get the data. This does not mean other companion animals will not have the same effect on the owners. More studies need to be done by focusing on and including more companion animals.

2. Positive Emotion

The prior study discusses the studies of the role of pet ownership and attachment in older adult [4]. Riding a horse has a similar pattern to walking with a dog, which can strengthen the body at a physical level. However, increasing physical health is not the only result a pet can bring to owners; closely interacting with a pet also improves the owner's well-being. Previous studies compared dog owners and cat owners and found lower pet attachment than dog owners. This study will focus on horse owners and compare them with dog owners. The study wants to prove that recreational horseback riders present similar pet attachment scores with dog owners, regardless of gender. Meanwhile, the attachment cooperates with physical body, mental, and social well-being. 184 dog owners and horseback riders tend to participate in the study by sending emails to invite them, and they all fit with the requirements. Researchers sent question sheets to 184 eligible people, and 124 individuals responded to the questionnaire. After evaluating the answers, all 124 individuals met the qualify to participate in the study. The questionnaire includes four sections; meanwhile, the Life-Impact Scale PALS-35 was used to evaluate the pet attachment. When the researchers evaluated the well-being, the FAHW 12 was used. A single Kunin item range was used to evaluate the mood in the period of interaction with animals and the mood after the interaction. The study researcher created another section of the questionnaire to evaluate the influence of interaction with animals on owners' well-being. The last part of the questionnaire was used to collect the background of participants, like gender and age, and find out the potential confounding factors that may influence the result. The mean and standard deviation were calculated for metric data in the statistical data analysis. The chi-square test and Mann-Whitney test were used in comparing groups. The result shows that 88% of horseback riders were female, and 63% of dog owners were female, which indicates that most gender of participants were female. In pet attachment evaluation, horse riders presented lower "love" scores than dog owners, but the "regulation of emotions" score was higher than dog owners. Meanwhile, the "personal growth" and "negative impact" scores of dog owners and horse riders had no difference. Horse riders of both genders showed no difference in pet attachment, which was the same as the condition of dog owners. However, "love" factor scores were higher in female riders than male riders, which differs with the condition of dog owners. Besides two factors, the other subscales present no differences in genders in both dog owner and horse rider groups. The study combined the pet attachment score with physical, psychological, and social well-being scores and found no difference between dog owners and horseback riders. The study concludes that recreational horseback riders present similar pet attachment scores with dog owners, regardless of gender, and this attachment cooperates with the physical body, mental, and social well-being. The study presents a high score of pet attachment in horseback riders and dog owners, even though some score of subscales have a significant difference.

This study has limitations in the study method since the researchers used a questionnaire to ask participants to self-report their conditions. There was no objective measurement to determine the physical body health. However, this study is still unique since the previous studies mainly focused on dog and cat owners, merely paying attention to other companion animals. This study proves that pet attachment is not limited to cats and dogs; the interaction of horses also can display similar functions

and abilities to a dog. The study extends the current cognition of pet attachment. Furthermore, it proves that this pet attachment can contribute to the well-being of owners.

The other prior study discusses using the experience sampling method to determine the relationships between the presence of and interaction with companion animals and in the daily life condition the emotional well-being of owners [5]. To develop the study, researchers recruited 55 adult students from the university, which also satisfied the requirements of the experiment. In the procedure, the researchers ask participants to download an app called RealLife Exp. The app will send ten questionnaires to participants in the next five days by randomly selecting ten points. The questionnaire will be invalid after 15 minutes, and the participants who cannot finish at least 17 questionnaires will be excluded from the data analysis. The questionnaires were used to evaluate four sections in the study: companion animal, momentary affect states, positive affect, and negative affect. Since the Experience Sampling Method data have a multilevel structure, multilevel regression modeling was demonstrated in R. The result indicated that 55 of 71 participants were satisfied with the quality of the study; the data will include 55 participants and exclude 16 participants. The multilevel regression indicates an association between the presence of companion animals and NA. There is an association between the interaction level with a companion animal and PA. Meanwhile, the passive presence of a companion animal relates to fewer negative effects. In contrast, the active presence relates to higher levels of PA. These results indicate that companion animals can buffer the negative emotions of owners. Meanwhile, the positive effect of emotion is present in the interaction with companion animals. The study had limitations in method since the data collected from the self-report survey and 5-day survey may have caused the selection bias. The previous study concluded that dog owners are more satisfied with their lives [6], which also indicates the positive effect that companion animals can bring. However, the study did not focus on how satisfaction is contributed. Compared with the previous studies, this study further develops the relationship between companions and well-being in active or passive interaction with companion animals, which can supplement the previous study by demonstrating specific benefits.

3. Negative Emotion

Companion animals play important roles when owners are through a challenging period; as the previous study mentions, companion animals can be considered as buffers for negative emotions. The study about effects of companion dog during COVID-19 briefly introduce how the dogs helped their owners go through the COVID-19 period and help owners deal with their negative feelings [7]. During the COVID-19 period, many people faced financial and work loss issues. Meanwhile, because of the “lockdown,” people also suffer from social distancing mandates and the resultant social isolation; most social interactions were replaced by online connection. As a result, the feeling of isolation and loneliness could not be solved. The long-lasting feeling of isolation and loneliness will lead to anxiety and stress, which impact the well-being of humans. The study claims that the previous study indicate the relationship between dogs and humans can help owners reduce feelings of isolation and loneliness; the study wants to detect further the role dogs play in the COVID-19 period. The researchers posted the online survey for people above 18 years old with no limitation of citizenship, and they all have companion dogs; at last, 4105 responses were recorded. The researchers created a new survey tool to evaluate the social interaction condition and human-animal bond strength. The responses were changed into qualitative measurement by creating Excel and cooperating with content analysis. Due to the large number of responses, the researcher finally chose four open-ended questions from different topics to collect the data and finish the evaluation. The result indicates that most dog owners feel less stress during COVID-19 by dismissing their feelings of isolation, loneliness, distraction from COVID-19, and increased mental health.

However, part of the response has more stress with companion dogs; they censors that if they get COVID-19, their dogs will not have shelter and care from others. Other people may worry that they cannot afford the vet medicals and dog food. Those who responded stated that there is no impact on their lives; they have a relatively stable income and live in the country yard, which has less impact

from COVID-19. The conclusion is that COVID-19 brings stress and anxiety to people, but the owners with companion dogs can feel less stressed and less lonely. The way that companion dog buffers owners' negative feelings is to disrupt owners' attention. Meanwhile, spending time with companion dogs can strengthen the bond between humans and dogs, which increases pet attachment. The study is focused on the recent period and has substantial evidence to discuss the benefits the dogs can bring to owners. The future study has a contrast result as this study: the lower income and unemployed people with companion animals harm their experience during COVID-19. However, some owners claim that companion animals positively impact their experiences, which is similar result with this study [1].

The negative emotion is not limited to isolation and loneliness; stress plays an important in the negative impact on mental health. The study *Effect of Dog Presence on Stress Levels in Students under Psychological Strain: A Pilot Study* discusses how the presence of a dog helps students release stress, which indicates that a companion dog can help people deal with negative emotions [8]. Since stress is common to humans and can lead to a negative physical response, the lasting stress may contribute to the disease and cause death. Students during the final week usually face lasting stress, which can promote the potential energy of students. However, the stress cooperates with the risk of several disorders and mental issues. The interaction with the dog can be a possible method to deal with the final issues. The study wants to test the hypothesis that students who interact with a dog can lower their stress compared with students who participate in a relaxed activity or do nothing. Researchers recruited 39 students to participate; the range of age was from 19 to 44 years old. Due to the limitation of the condition, the participants were all females. Meanwhile, to exclude the confounding factors, the participants did not report mental or physical health problems, which may overlap the measurement in the study. Based on the preference of the participants, they were divided into three groups: interact with dogs, play with anti-stress toys, and no affect groups. To make the stress level visible, the researcher measured the blood pressure and heart rate and asked participants about their moods before and after the 10 minutes of the activities. The study analyzes data by group depending on how the participants release their stress. Meanwhile, repeated ANOVA was run to find the differences between groups. The results demonstrate that in interact with dogs' group, no difference in systolic or diastolic pressure was observed, no statistical difference in heart rate reduction, and no one reported further negative feelings in mood. In group B, participants interact with relaxation toys; there is a significant decrease in pressure, no difference in heart rate, and no statistical difference in changing mood. In group C, data shows a difference in decreasing pressure and heart rate but no difference in mood. After that, the research tested the difference between the three groups and found no difference in pressure, heart rate, and stress assessment. However, there is a significant difference in mood; group A significantly differs from groups B and C. The ANOVA test was run to develop the differences between the three groups, indicating a significant decrease in change in measured values. The conclusion is that the interaction did not present a significant change in heart rate and blood pressure. However, according to the participants' report, the interaction with the dog can release and improve the negative mood. The result is similar with the pervious study about college students and house-trained dog, the final result demonstrates the dog can release the anxiety and stress of the college students and reduced the sadness, improves the happiness [9]. The conclusion on improving mood is similar to the future study of PTSD service dogs help buffer conflict of resilience military family and play roles in rebuilding emotions [10]. It suggests that interaction with dogs can block negative moods and encourage positive moods.

4. Conclusion

The changes in society encourage more people and families to consider raising pets, and the interaction with pets will build a bond between owners and pets as time passes. The bond makes the owner attach to the pet; then, the attachment will display the function in the pet owner's life. The apparent effect on owners is the emotional effect; as the previous research studies, pet attachment can contribute to the founding of positive emotion. The pet contributes to positive emotions in daily life

when the owners interact with the pet. The study suggests a change in owners' mood before and after the interaction with the pet. Besides the interaction period, the presence of companion animals can display the same function as the interaction with the companion animals. With the development of the pet market and techniques, compared with the past, the kinds of pet are not limited to dogs and cats. People are now able to raise pets like reptiles and horses. The pet attachment is not unique to dogs and humans or cats and humans; the attachment is bonded between different kinds of companion animals and humans. The study on pet attachment of horseback riders and dog owners demonstrate that pet attachment exists in other kinds of pet, and they also display a similar function to human as a dog. The few differences in subset data cannot deny the well-being that horses can bring to their owners. Negative emotions may cause mental issues in humans; during COVID-19, dealing with negative mood impact is a critical issue. The study points out the potential benefits pet attachment could bring to owners and how pet attachment works in dealing with negative moods. The data display that the pet can be considered a buffer in negative mood impact and encourage positive emotions. Next, the study focuses on the conditions in ordinary life that can cause lasting stress to people. They study the student's interaction with the dogs in the final week and record the data to measure the impact of the dogs in relaxing people from negative emotions and the environment. Though the measure in physical data demonstrates no difference, the report of feelings proves the influential work in overcoming the negative mood.

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