



The Study of Teenage Stress of Pet Owners and Non-Pet Owners during the COVID-19 Pandemic

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ABSTRACT: In December 2019, the new coronavirus outbreak forced many countries to quarantine in their own homes. It can cause a lot of stress. For example, the increasing number of infected people makes us anxious. This leads people to find ways to relieve stress. In this research, we analyzed whether raising animals could really help reduce stress. We collected information from pet owners and non-pet owners who are between 13 and 19 years old using an online questionnaire. Survey samples were selected through a volunteer sampling method with a total of 120 responses. We analyzed data using the Statistical Package for Social Science (SPSS). The results of the analysis showed different outcomes for stress in the teenage pet owners and non-pet owners during the COVID-19 pandemic. However, there was no different outcome in the aspect of attitudes toward pets between pet and non-pet owners. Our results revealed that the stress of non-pet owners was higher than the pet owners. Therefore, people who keep pets experience less stress from quarantine during the coronavirus outbreak than those who do not keep pets during quarantine. Our analysis revealed that the attitude toward pets of pet owners and the attitude toward pets of non-pet owners were very similar and still above the mean attitude toward pets of pet owners and non-pet owners are both at a good level.

KEYWORDS: Attitudes toward pets, COVID-19, Pet, Stress, Teenager.

1. INTRODUCTION

Coronavirus disease (COVID-19) is a newly discovered infectious disease, which first emerged in Wuhan, China, and was reported in late December 2019. (Hongzhou Lu, Charles W. Stratton, Yi-Wei Tang, 2020) It spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. (World Health Organization. Coronavirus, 2020) Therefore, mask-wearing, hand hygiene, and physical distance are necessary to prevent the spread of COVID-19. Moreover, emergency lockdowns have been initiated in countries across the globe, and the effect on health, wellbeing, business, and other aspects of daily life are felt by societies and individuals. (Derek K Chu, Prof Elie A Akl, Stephanie Duda, et al., 2020) For adolescents, such lockdowns result in school closures, having to learn online, exam cancellations as well as being restricted socially. (Gunn Pungpapong, Rasmon Kalayasiri, 2021) Furthermore, the government's policy to cope with the pandemic was to change the learning system from face to face to virtual which caused students to be more stressed than before the pandemic. (Livana, P. H., Mubin, M. F., & Basthomi, Y., 2020) The higher stress and anxiety level experienced during the lockdowns is caused by the increased use of media applications that enable teleconferencing, telecommuting, online learning, and social relations, and prolonged screen time on tablets, phones, and other smart devices. (N Mheidly, 2020). Due to this reason, the government suggested many ways to reduce students' stress. For example, students should use strategies like yoga, exercise, and watching television. Some students resorted to other stress coping strategies including emotional and instrumental support from family, friends, and pets. (H Yasmin, 2020) This led to the exponential rise in the number of pets worldwide, and the reason for this growth was to help human's mental health as they were coping with coronavirus lockdown. (BBC News, 2021) In addition to that, interacting with animals has been shown to decrease levels of cortisol (a stress-related hormone) and lower blood pressure. Other studies have found that animals can reduce loneliness, increase feelings of social support, and boost a human's mood. (The Power of Pets | NIH News in Health, 2018) Furthermore, keeping a pet at home has been found by some researchers to be beneficial for the owner in many aspects. For example, pet owners benefit from better understanding of animal physiology and behavior, more positive attitudes, and better self-reported health. Moreover, current research provides equivocal evidence that the owning of pets affects attitudes toward wild animals and holds less favorable attitudes toward hunting, compared with people without pets. (Prokop, P., & Tunnicliffe, S. D., 2010) Due to



these reasons, having pets can reduce negative attitudes in many ways including negative attitudes toward COVID-19. Undoubtedly, because of the coronavirus outbreak, there is a significant increase in negative attitudes, loneliness, and anxiety in teenagers. For instance, the fear of getting infected by the virus or the fear of meeting others have caused the feelings of isolation in both pet owners and non-pet owners. This research aims to explore the teen stress of pet owners and non-pet owners during the COVID-19 pandemic.

2. RESEARCH QUESTIONS

To achieve the purpose of this study, the following questions were addressed.

3. Is there a difference in stress levels between pet owners and non-pet owners during the COVID-19 pandemic?
4. Is there a difference in attitudes toward pets between pet owners and non-pet owners during the COVID-19 pandemic?

3. METHODOLOGY

A cross-sectional survey was carried out in a sample of adolescents in Bangkok, Thailand. To evaluate the differences in teen stress between the pet owners and non-pet owners during the COVID-19 pandemic, the 26-question questionnaire was designed. The questionnaire was divided into three sections: (1) personal information, (2) attitude towards pets (Aki Tanaka, Jun Saeki, Shin-ichi Hayama, and Philip H. Kass, 2019), and (3) stress level survey (Cohen, S., Kamarck, T., and Mermelstein, R., 1983 and ISMAUK, 2017; TCTI, 2002; Marlia Clelia Zurlo, Maria Francesca Cattaneo Della Volta and Federica Vallone, 2020). The three-part questionnaire was inspected and verified by three language and psychological specialists with an Item-Objective Congruence Index (IOC) rating of more than 0.5 in each statement (Ronna C. Turner and Laurie Carlson, 2009). A 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree) was featured in the online survey questionnaire. The response was to express to what extent they agree and disagree with the specific statement. We then distributed the questionnaire via Line and Instagram applications. In respect of the sampling procedure, a convenience sampling method was taken in this study. The initial participants were 30 students, and the quantitative data is analyzed using Statistical Product and Service Solutions version 26.0 (SPSS). The Cronbach's Alpha Reliability Test was utilized in each question to reassure that the survey result was reliable, and the reliability score was 0.889 which was widely accepted (Lee J. Cronbach, 1951). After the exact number of 120 responses was collected for data analysis, means of teenage stress and attitudes toward pets in both pet and non-pet owners were calculated by using a T-test. Moreover the process of data collection was done voluntarily, anonymously, and confidentially

4. INSTRUMENTS

The following questions were sent to participants to collect the survey data.

Part 1: Personal information

1. What is your age?
2. What is your gender?
3. Do you or your family personally own a pet?
4. What kind of pet do you have?
5. How many hours a day do you spend with your pet?
6. What is your average monthly cost of owning a pet?

Part 2: Attitude towards pets

7. Pets make me happy.
8. A pet acting funny can amuse and entertain me.
9. Petcare that costs 4,000 THB per month is too much.
10. I feel like pets are messing with me while I work.

Part 3: Stress levels survey

11. I often find myself nervous.
12. I am frustrated when things are out of my control.
13. I feel that difficulties are piling up so high that I cannot overcome them.
14. I have been experiencing mood swings.



15. I usually have no concentration and am memory-impaired.
16. My body feels tense all over.
17. I feel short of breath after mild exercises like climbing up four flights of stairs.
18. It is important for me not to show my emotions to my family.
19. I feel really sensitive and irritable.
20. I feel like I cannot trust anyone.
21. I do not feel good about myself.
22. I am not optimistic about my future.
23. I feel tired and disinterested in life.
24. When I am stressed, it is difficult for me to release my stress.
25. I feel stressed from social isolation during the COVID-19 pandemic.
26. I feel stressed about my relationships with friends during the COVID-19 pandemic.

5. RESULTS AND DISCUSSION

Table1: General information about participants (N = 120)

		Valid Percent
1. Age	13-15 Years	31.7
	16-19 Years	68.3
2. Gender	Male	22.5
	Female	72.5
	Other	5.0
3. Pet owner and non-pet owner	Pet Owner	70.8
	Non-Pet Owner	29.2

Table 1 shows the general information about our participants. The majority of age range was between the ages of 16 to 19 years old with 68.3 percent and 13 to 15 years old with 31.7 percent of the total population. Moreover, the participants were female with 72.5 percent of all participants, male with 22.5 percent, and other with 22.5 percent. Lastly, most of our participants were pet owners with 70.8 percent and non-pet owners with 29.2 percent.

Table 2: The difference of Stress level between Pet Owner and Non-Pet Owner(N=120)

	N	mean	SD	t	p
Stress of Pet Owner	85	2.480	.933	-3.796*	.000
Stress of Non-Pet Owner	35	3.096	.748		

*Difference is significant at the level 0.05

From table 2, it can be seen that the pet owners participating in the activity are valuable. The stress level was 2.480, which was below average. However, for non-pet owners, the stress level was 3.096, which was considered above average. They also found that the p-value was 0.00 and the t-value was -3.79 and therefore non-pet-owning participants had higher stress levels than pet-owning



participants. Furthermore, between pet owners and non-pet owners, there was a statistically significant difference on the 0.05 stress level.

Table 3: The difference of Attitudes toward pets between Pet Owner and Non-Pet Owner (N=120)

	N	mean	SD	t	p
Attitudes toward pets of pet owners	85	3.591	.419	-1.086	.279
Attitudes toward pets of non-pet owners	35	3.686	.467		

The table shows the results of attitudes toward pets of pet owners and attitudes toward pets of non-pet owners. There were 85 pet-owning participants, 35 of which were non-pet owners. Result analysis performed attitudes toward pets of pet owners are 3.591 and attitudes toward pets of non-pet owners is 3.686. Both values were higher than average and were not significantly different. A t-value of -1.086 and a p-value of .279 were found. This table can be used in further research about attitudes toward pets to help understand more about people’s thoughts on pets.

6. CONCLUSION

Our study on the teenage stress of pet owners and non-pet owners during the COVID-19 pandemic was based upon the hypotheses that there were differences in teenage stress levels between pet and non-pet owners throughout social isolation during the COVID-19 outbreak and whether attitudes toward pets in both groups were different or not. We asked groups of adolescents in Bangkok, Thailand to complete a questionnaire. 120 teenagers, aged 13 to 19 years old, both males and females, were chosen through a volunteer sampling method. Afterward, the quantitative data analysis was statistically conducted by SPSS; the results illustrated that the teen stress levels of pet and non-pet owners are divergent. Based on means of the results, youngsters who own pets experienced a low amount of stress, whereas those who do not own pets encountered a high amount of stress during the COVID-19 lockdown. The effect of pets on human mental health and wellbeing during COVID-19 lockdown in Malaysia study (Dasha Grajfoner, Guek Nee Ke, and Rachel Mei Ming Wong, 2021) suggests that pets can have a positive impact on some aspects of mental health and wellbeing in challenging times, where contact with other humans may not be possible. Furthermore, the effects of the Spanish COVID-19 lockdown on people, their pets, and human-animal bond research (Jonathan Bowen, Elena García, Patricia Darder, et al, 2020) indicates that pet owners gained substantial support from their pets, and that support was increased when the owner’s Quality of Life (QoL) was impaired. Although the stress levels outcome was different in both groups, attitudes toward pets were very compatible. The rationale behind this might be that the decision on pet ownership was generally made by the guardians since there would be an additional responsibility, specifically during the COVID-19 outbreak. To clarify this, people and their pets in the times of the COVID-19 pandemic study stated that “for some, the added costs of caring for an animal during economic hardship may lead to relinquishing the animal to a shelter. The uncertainty about the fate of the economy and the financial concerns may outweigh the relationship and bond between some humans and their companion animals. For others, daily routines of care, rather than the expense of the animal, during times of quarantine or social isolation prove to be too great a burden and result in relinquishing the animal to a shelter” (Aviva Vincent, Hanna Mamzer, Zenithson Ng, et al, 2020). In the future, we could extend our study to discover how and why teen pet owners and non-pet owners have a different amount of stress levels, while their attitudes toward pets are positive on a larger scale, and this study can serve as a guideline for further studies on teen stress and attitudes toward pets of pet owners and non-pet owners during the COVID-19 pandemic.

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