



The Study on the Effect of Owning Pets, Dogs or Cats, On the Rates of Stress and Depression in Thailand

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ABSTRACT: Several studies have reported that pets can help people decrease their stress and depression. This encourages people to own either cats or dogs to help their mental health. This research aims to find the effectiveness of pets owning on the rate of stress and depression between petting dogs and cats. This research may help people who struggle with mental health. If this research confirms that dogs and cats have an impact on stress and depression, this may help people decide whether to own dogs or cats. On the other hand, if owning dogs or cats doesn't have a correlation, people may need to see other ways or may discuss other factors that would come after buying a cat such as time, price, and pet's behavior. Thus, we conducted a survey consisting of 33 questions. We had 26 pilot responders, revealing 0.819 for pet owners and 0.899 for non-pet owners. Our results from one-way ANOVA (F-test) show no correlation between dog owners, cat owners, and non-pet owners for their stress and depression rates (p -value = 0.333). This suggests that owning pets is not the main factor that could help people to step away from stress and depression.

KEYWORDS: Cats, Depression, Dogs, Pets, Stress.

INTRODUCTION

Southeast Asia has become one of the most stressed areas, as high as 59 percent (Beacon International group., 2021). In Thailand, more than half of volunteers agree that it is stressful to live in their country due to factors such as education and lifestyle, family history, life experience, and daily hassles. Stress can have positive outcomes if experienced in the appropriate amount. Stress may make you more effective at working and/or boost job performance (Bravo, 2021). A healthy amount of stress can help support relationships essential for their health and improve memory and vitality. Nowadays, many students and employees in Bangkok and urban areas have high rates of depression and stress, which lead them to mental disorders, cause difficulty in social life, and become a major problem that can lead to many possible crimes and suicides (Czerepak, 2021). There are opportunities for stress and depression to lead to various diseases, including high blood pressure, muscular pain, heart disease, insomnia, immune system problems, and obesity. This is evidenced in a study by Isabel Vasquez showing that high stress can cause systolic blood pressure to increase by 15.2 mmHg and diastolic blood pressure to increase by 8.5 mmHg (Vasquez, 2023).

The cause of stress comes from various factors, including high rates of competition in education, competition in occupation, problems in finance, health, lifestyle, and family issues. The problems become stronger when there are more problems that arise during COVID and online situations. The rise of technology makes jobs more limited, which leads to a high rate of stress and a connection to depression. To solve the issue of stress, many approaches have been undertaken, such as being active, connecting with people, challenging yourself, and trying to be positive (Vasquez, 2023). Exercise can help boost emotion, reduce depression, clear thoughts, and make people calm. Society can help and become a great supporter for those facing mental problems. Challenge yourself for a goal; it may help you to have more confidence, become a kind of sport, and become more active. You can become more positive by reflecting on your accomplishments. This can make you feel more relaxed and reduce stress and depression. Activities with friends may help with relaxation and may help you find solutions to problems you are facing (NHS, 2022). According to research by the American Psychiatric Association, they illustrate the connection between petting pets and relaxation, which may improve mental health and reduce the impact of depression (American Psychiatric Association, 2023). A study shows petting cats can be therapy animals due to their ability to calm owners down and reduce stress. Additionally, cat petting can produce stress-reducing hormones, which reduce heart rates and blood pressure to normal. Cats are a great companion for independent owners who feel lonely in the same ways as family, friends, and romantic relationships (Ningthoujam, 2023). Another study suggests that cats correspond to the owner's emotions, such as anxiety and depression. Cats can detect human emotions and change their actions to



make their owners feel better (N.D., 2023). On the other hand, petting dogs can help humans release oxytocin as trust and relationships develop. Oxytocin hormones can make people feel more relaxed and make their emotions feel better (Ranard et al., n.d.). Additionally, dogs can prevent mental health issues such as anxiety and depression by releasing several hormones while you interact with them, such as dopamine and serotonin. These hormones can calm you down and keep you active with activities such as cuddling and playing. The owner may pay attention to the present moment rather than being anxious about various things (Jelinek, 2023). Having said that, the outcome can be the opposite: owning a dog can result in a high risk of stress through their behavior when dogs don't get enough enrichment, such as training and activities, or pay no attention. Sometimes people may get a dog that doesn't fit them and may be disappointed in a dog that needs more specific care. For instance, dogs may be outstanding with other dogs (Lowrey, 2022). Moreover, there is some depression when their dog passes away, which requires responsibilities and skills for treating a dog. There is some research that illustrates that cats can cause symptoms of anxiety and depression to rise due to their behaviors, price, preexisting confidence, and esteem issues (Lawrenz, 2022).

So, pets might need some responsibilities and attention to their needs. Many researchers agree that dogs and cats can help to have a close relationship and take some schedule and activities to make their owner feel better. But once they have no ability to treat their pets well, they may feel more pressure and stress instead of receiving treatment. This survey will research how accurately pets such as dogs and cats help treat stress and depression among Thais. This project may prove that owning pets correlates with the rate of stress and depression.

METHOD

We performed a cross-sectional survey to assess the effect of owning dogs or cats on the rates of stress and depression in Thailand. The survey research contains 33 questions, which are categorized into sections: 1) General information and 2) Levels of stress and depression. 5-points Likert scale questions were used as options in the questionnaires, which ranged from strongly disagree to strongly agree. Before our questions were published, each question was reviewed by three specialists to obtain the Item-Objective Congruence index (IOC) greater than 0.5. We tested Cronbach's alpha on 26 pilot respondents to reveal the internal reliability of the questionnaire, which gave a result of 0.819 for pet owners and 0.899 for non-pet owners. During the survey research in September 2023, our online questionnaire was distributed to teenagers, adults, and elderly in Thailand. By using all online platforms, such as Line or Instagram, we obtained a total of 117 participants. The data was analyzed using the Statistical Package for Social Sciences (SPSS) program version 29. While we were using this program, One - way ANOVA (F-test) was used to test all the factors. The analyzes with p - value < 0.05 were considered to be significant.

RESULTS

Table 1. General Information.

General information	Frequency	Valid Percent
Gender		
Female	56	48.3
Male	54	46.6
Others	6	5.2
Age		
Under 15	3	2.6
16-20 years old	101	87.1



21-30 years old	5	4.3
31-40 years old	4	3.4
41-50 years old	2	1.7
51-60 years old	1	0.9
Above 60 years old		
Status		
Educated	103	88.8
Employed	10	8.6
Unemployed	1	0.9
Superannuate		
Others		
Education level		
Primary school		
Secondary school	62	53.4
University	52	44.8
Others	2	1.7
People in your family		
1	3	2.6
2	6	5.2
3	20	17.2
4	37	31.9
5	28	24.1
6	12	10.3
7	1	0.9
Above 8	9	7.8
Select your pet		



Friendly dog	22	19.0
Unfriendly dog	11	9.5
Cat	30	25.9
None pet owner	45	38.8
Others	8	6.9
How long have you had a dog.		
Less than 2 years	2	1.7
2 years and above	13	11.2
Greatest benefit you have received from owning your dog.		
The best true friend	2	1.7
A dog can watch over the house.		
Mental happiness and relieve stress.		
Practice responsibility		
Good health	12	10.3
Know how to plan		
Others	1	0.9
How long have you had a cat.		
Less than 2 years	11	9.5
2 years and above	17	14.7
Greatest benefit you have received from owning your cat.		
The best true friend	5	4.3
Mental happiness and relieve stress		
Practice responsibility		
Good health	21	18.1
Know how to plan		
Others	2	1.7



Table 1 shows the personal details of the participants collected. Most of the participants were 56 females, followed by 54 males, and some participants preferred others. Most of the participants were 16-20 years old 101 people (87.1%), 21-30 years old 5 people (4.3%), 31-40 years old 4 people, under 15 years old 3 people (2.6), 41-50 years old 2 people (1.7) and the least participants were 51-60 years old 1 person (0.9). Many of them have pets as dogs and cats.

Table 2: Descriptive Statistics (Mean and Standard Deviation)

	N	Mean	Std.Deviation
Friendly dog’s owner	22	2.6491	0.658
Cat’s owner	30	2.7427	0.805
None pet owner	43	2.5042	0.602

In Table 2, among 22 participants who own a friendly dog, the mean score is 2.6492. Among 30 participants who own cat has been resulted that the mean score is 2.7427 and among 43 none pet owner has been resulted that the mean score is 2.5042.

Table 3. One-Way ANOVA table; the effect of owning dogs or cats on the rates of stress and depression in Thailand.

Self-awareness	SS	df	MS	F	P-Value
Between Groups	1.042	2	0.521	1.113	0.333
Within groups	43.081	92	0.468		
Total	44.123	94			

In Table 3, the one-way ANOVA shows no significant differences between dog owners, cat owners, and non-pet owners for their stress and depression rates (p-value = 0.333).

DISCUSSION

Having pets as friends is a popular thing for people all over the world including Thai people, such as owning dogs, owning cats, or owning other animals, etc. Some people say that it helps them reduce stress, such as reducing stress from work, etc. On the other hand, there are some people who disagree with this. Additionally, we want to raise awareness of reducing stress by owning pets as friends, whether it really helps reduce stress or not.

Most Thai people feel more stressed throughout the day by spending the day at school, at work, doing school activities, and working. It makes sense to own pets as friends to help reduce stress. The report states that approximately 49% of Thai people own pets as friends. Currently, there is evidence that pets help their owners have better mental health. Because they make their owners feel like they have friends next to them. And it can also reduce stress. For example, having a dog helps people with depression improve their mental health. Taking the dog for a walk encourages the owner to exercise. Relax your mind, it also provides an opportunity to meet other dog owners. This helps patients socialize and relieve feelings of loneliness.

The data indicates that playing with dogs and cats results in the body releasing more happiness chemicals, serotonin and dopamine, making owners feel extremely calm and happy.



Perhaps due to a lack of respondents, our results show no differences in stress between people who own pets as friends and people who don't. And some people who own pets may not own them for the reason that having pets is to reduce stress because there are many people who own pets and want to be healthy rather than focusing on stress.

CONCLUSION

This study shows there is no correlation between stress level and petting pets. Moreover, there was no significant difference between cat owners, dog owners, or non-pet owners' stress and depression rates. Thus, this study suggests that stress is likely due to other factors like issues from work, family, finances, love, and academics. The result may be unreliable due to our limited population size, question items, control group, and specific types of pets. However, this study could be improved further by increasing the number of responses and have more specific questions directed towards the types of dogs. This research may help someone who decided to buy dogs or cats to relieve their stress and depression acknowledge that outcome may not be accurate and finding other ways to support their mental health would help solve the problems.

REFERENCES

1. Beacon International group. (2021, December.). *Southeast Asia is highly stressed*. Asian Insurance Review. Retrieved August 18, 2023, from <https://www.asiainsurancereview.com/Magazine/ReadMagazineArticle?aid=45163>
2. Bravo. (2021, December 15). *The Positive Side of Stress - Cleveland*. Bravo Wellness. Retrieved August 18, 2023, from <https://www.bravowell.com/resources/the-positive-side-of-stress>
3. Czerepak, S. (2021, December 15). *Can Stress Cause Depression and Anxiety? The Long and Short Answers - MHM Group*. Mental Health Management Group. Retrieved August 18, 2023, from <https://mhmggroup.com/can-stress-cause-depression-and-anxiety/>
4. Vasquez, I. (2023, July 3). *Can Stress Cause High Blood Pressure? A Cardiologist Explains*. EatingWell. Retrieved August 19, 2023, from <https://www.eatingwell.com/article/8051058/does-stress-cause-high-blood-pressure/>
5. NHS. (2022, September 9). *10 stress busters*. NHS. Retrieved August 19, 2023, from <https://www.nhs.uk/mental-health/self-help/guides-tools-and-activities/tips-to-reduce-stress/>
6. American Psychiatric Association. (2023, March 1). *Americans Note Overwhelming Positive Mental Health Impact of Their Pets in New Poll; Dogs and Cats*. American Psychiatric Association. Retrieved August 23, 2023, from <https://www.psychiatry.org/news-room/news-releases/positive-mental-health-impact-of-pets>
7. Ningthoujam, N. (2023, July 5). *Cuddle your pet every day for these health benefits | HealthShots*. Healthshots. Retrieved August 23, 2023, from <https://www.healthshots.com/mind/happiness-hacks/cuddle-your-pet-every-day-for-these-health-benefits/>
8. N.D. *Can Cats Sense Depression and Anxiety?* (2023). US Service Animals. Retrieved August 23, 2023, from <https://usserviceanimals.org/blog/can-cats-sense-depression-and-anxiety/>
9. Ranard, C., Shannon, A., & Jones, M. (n.d.). *How Cats Help Improve Mental Health | The Catnip Times*. AKC Reunite. Retrieved August 23, 2023, from <https://www.akcreunite.org/catsimprovementalhealth/>
10. Jelinek, J. (2023, February 9). *Service dogs for anxiety: Everything you need to know*. Medical News Today. Retrieved August 23, 2023, from <https://www.medicalnewstoday.com/articles/322784#what-are-service-dogs>
11. Lowrey, S. (2022, February 16). *Is Your Dog Stressing You Out? – American Kennel Club*. American Kennel Club. Retrieved August 23, 2023, from <https://www.akc.org/expert-advice/training/is-your-dog-stressing-you-out/>
12. Lawrenz, L. (2022, August 2). *You, Your Cat, and Anxiety or Depression*. Psych Central. Retrieved August 23, 2023, from <https://psychcentral.com/health/your-cat-depression-anxiety#summary>

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