

Does owning a cat
reduce anxiety?



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Cats and Anxiety

Abstract

This paper examines if owning and caring for a cat reduces anxiety. There is limited research on the effect cats have on people. Research has been done on how anxiety affects the brain and body. This paper explores some of the effects of anxiety. Research on the effect of cats on the symptoms of anxiety is also explored in this paper. The lack of communication between parts of the brain in a person with anxiety is examined, along with how oxytocin affects this communication. An examination of how cats can lower the risk of issues such as heart attack, high blood pressure, and depression is included in this paper. Benefits of owning a cat are explored as well. While there are inferences that could be made about how owning and caring for a cat can reduce some symptoms of anxiety, this paper ultimately concludes that further research must be done to determine if owning and caring for a cat reduces anxiety itself.

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Cats and Anxiety

Anxiety is an issue that millions of people deal with in their lives. For some, it is a mild issue, for others, it is a chronic problem in their lives. While I have never been diagnosed with anxiety, I do believe that I suffer from anxiety to some degree. I have had times in my life where I have felt completely overwhelmed. This overwhelmed feeling is so strong that it leads me to the point where I just freeze. When this happens, I can feel my heart beating so hard it feels as if it is about to beat out of my chest.

During these times of anxiety, it feels that everything and nothing is wrong all at the same time. I have struggled with finding a way to reduce my

anxious feelings. While there are anti-anxiety medications available, I try to find more holistic ways to deal with any physical and mental ailments that may come my way.

I have tried a variety of things trying to find a more holistic way to deal with the anxiety that I sometimes feel. I have tried yoga, meditation, and exercise, to name a few. As a person who is typically loud, yoga and meditation were a little too quiet for me. I still had a multitude of overwhelming thoughts swirling through my head as I tried to quietly do my yoga and meditation. Exercise did seem to be more helpful, however, finding the time in my busy schedule tended to stress me out even more.

I began to analyze my anxiousness. I started by looking at what events and issues I felt were bringing on my anxious feelings. I eventually noticed that I did not always feel as anxious during my trigger events and issues. This led me to realize that when I spent time focusing on my cats, I felt less anxious.

In my personal experience, owning and caring for a cat reduces anxiety. The goal and objective of this paper is to examine the following question. Does owning and care for a cat reduce anxiety?

Literature Review

While there has been some research done on therapy animals, there has been limited research done specifically on cats and their effects on mental health. However, research has been done on the effects of anxiety on the brain and body. Research has also been done on how cats can improve health in humans.

Anxiety

In the United States, anxiety is the most common mental health disorder (National Alliance on Mental Illness, 2017). Roughly 40 million adults suffer from anxiety in the United States (National Alliance on Mental Illness, 2017). There is no known specific cause for anxiety (Mercola, 2013). According to an article by Dr. Mercola, anxiety, just like stress, produces a “fight or flight” response in the body (Mercola, 2013). Hormones such as cortisol are released during such times of anxiety and stress (Mercola, 2013). Certain areas of the brain, such as the amygdala and the hippocampus, play a large part in anxiety disorders (Mercola, 2013).

Aside from the release of hormones like cortisol being released during times of anxiety, multiple physical symptoms can occur. Physical symptoms related to the respiratory system and cardiovascular system may be present while in an anxious state. Shortness of breath is one issue of the respiratory system that can be caused by anxiety (Cherney, 2018). Rapid and shallow breathing is another respiratory system symptom that anxiety can produce (Cherney, 2018). The symptoms of anxiety involving the cardiovascular system can be chest pain, rapid heart rate, and heart palpitations (Cherney, 2018). Risk of high blood pressure is increased with anxiety as well (Cherney, 2018). Anxiety can also leave your immune system weak (Cherney, 2018). Depression, insomnia, muscle tension, headaches, and social isolation are also among the effects that anxiety can have on a person (Cherney, 2018).

Research has also been done on how the hormone oxytocin can reduce the effects of anxiety. Oxytocin is commonly referred to as the “love hormone”

(Brain & Behavior Research Foundation, 2014). Oxytocin is thought to be a stress-reducing hormone (Brain & Behavior Research Foundation, 2014). Research has been done to examine the relationship between the amygdala section of the brain and oxytocin (Brain & Behavior Research Foundation, 2014).

The amygdala is an almond shaped part of your brain that is in the body's limbic system (Wonderopolis, n. d.). The amygdala is the part of the brain that is responsible for processing many emotions (Wonderopolis, n. d.). The amygdala is also responsible for your body's reaction to fear (Wonderopolis, n. d.). It is believed that abnormal functioning of the amygdala is related to anxiety and other disorders such as autism (Wonderopolis, n. d.).

Research found that people who suffer from anxiety have less communication between their amygdala and the other parts of their brain (Brain & Behavior Research Foundation, 2014). The researchers found that oxytocin increased the communication between the amygdala and other parts of the brain in those suffering from anxiety (Brain & Behavior Research Foundation, 2014). This increase in communication, due to oxytocin, allowed those with anxiety to reach brain communication levels comparable to those who are not suffering from anxiety (Brain & Behavior Research Foundation, 2014).

Further research needs to be done on the effects of oxytocin and those who suffer from anxiety (Brain & Behavior Research Foundation, 2014). However, the current research shows an encouraging outlook for use of oxytocin in the reduction of the effects of anxiety (Brain & Behavior Research Foundation,

2014). While there are also medications and therapy treatments for anxiety, stress and relaxation techniques can be used as supplementary forms of anxiety treatment (National Alliance on Mental Illness, 2017).

Cats

Cats have been domesticated since around 12, 000 BCE (Mark, 2012). The domestication of cats began in Mesopotamia (Mark, 2012). Since their domestication, cats have played important roles throughout many cultures. Ancient Egyptians held cats in such high regard that anyone who killed a cat received the death penalty (Mark, 2012). Ancient Egyptians were not the only culture that revered cats. In Persia, cats were also very honored. There is a Persian legend that the prophet Muhammed, by placing his hand in blessing, created the design of the ' M' on the forehead of the tabby cat (Mark, 2012). This legend increased the reverence for Persian cats (Mark, 2012). Japanese culture believes the cat to be lucky, and therefore, cats are thought of highly (Mark, 2012). Throughout history, cats have held high regard in the lives of humans.

The great respect cats have received in history could be due, in part, to the various health benefits cats have on humans. According to an article by Igor Purlantov, cats have various health benefits such as helping prevent children from asthma and allergies (Purlantov, n. d.). Studies have also shown that cats can help lower cholesterol, cardiovascular disease, and the risk of a heart attack (Purlantov, n. d.). One study found that those who did not own cats were at a 40% higher risk of dying from a heart attack than those who

did own a cat (Pietrangelo, Ann, n. d.). Purlantov also mentions that cats can reduce loneliness (Purlantov, n. d.).

An improved immune system is another benefit of having a cat (Purlantov, n. d.). Studies have shown that cat owners are less likely to have high blood pressure (Purlantov, n. d.). Purlantov's article states that having a cat can reduce stress and anxiety and can improve moods and depression (Purlantov, n. d.). Purlantov notes that by putting your thoughts on caring for a cat can take your mind off your worries (Purlantov, n. d.).

In her article, Ann Pietrangelo mentions that caring for and cuddling a cat can reduce stress in humans (Pietrangelo, Ann, n. d.). Pietrangelo states that according to marriage and family therapist Michelle Tapia, a reduction of anxiety and depression can be found among those around cats (Pietrangelo, Ann, n. d.). The act of petting a cat can help soothe a person, self-calm them, and lower the intensity of their emotions (Pietrangelo, Ann, n. d.). Cats are typically one of the lower maintenance animals to care for (Pietrangelo, Ann, n. d.). The low maintenance care of a cat is usually less stressful than care for higher maintenance animals (Pietrangelo, Ann, n. d.).

Christina Heiser reiterates much of the same information from previous articles and research findings in her article, "Forget What You've Heard. Being a Cat Lady is Healthy." Heiser's article mentions that those who love cats may be more introverted, yet more open-minded than those who love dogs (Heiser, 2017). Cats may also help to prevent children from developing an allergy to animals (Heiser, 2017). Children who are exposed at a young

age to cats may be able to build a natural tolerance against an allergy against them (Heiser, 2017).

Compared to dogs, research has shown that cats are also less expensive to care for (Heiser, 2017). Cat owners could save hundreds of dollars more each year than those who own a dog (Heiser, 2017). As has been mentioned before, Heiser's article states that cats are good for your heart. Research has shown that there is a connection between a lower risk of dying from a heart attack or stroke and owning a cat (Heiser, 2017). Lower blood pressure and calmed nerves can be helped by hearing a cat's purr (Heiser, 2017).

Heiser's article mentions that cats can help to lower stress levels (Heiser, 2017). When you pet a cat, your body releases the oxytocin hormone (Heiser, 2017). When oxytocin is released you may feel your stress level lower (Heiser, 2017). A survey done in 2015 showed that 40 percent of women strongly believe that their cat is good for their physical health (Heiser, 2017). This same survey also showed that 52 percent of women strongly believe that their cat is good for their mental health as well (Heiser, 2017).

Discussion

The literature reviewed provides a variety of information about anxiety and cats. It has been shown that anxiety has effects not only in the brain but throughout the body as well. Anxiety is a cause of the brain releasing the chemical cortisol. A "fight or flight" response is triggered during times of anxiety and stress. Those who have anxiety were found to have lower

communication levels between their amygdala and the other parts of their brain.

The body reacts to anxiety in numerous ways. Both cardiovascular and respiratory systems can be affected by anxiety. Shortness of breath, rapid breathing, and shallow breathing are a few of the respiratory symptoms caused by anxiety. Cardiovascular symptoms of anxiety include chest pain, rapid heart rate, and heart palpitations. A person's risk of heart attack, high blood pressure, and stroke are increased due to anxiety. Anxiety can also weaken the immune system. Difficulty sleeping, muscle tension, and headaches can also be effects of anxiety. During times of anxiety, depression and social isolation may occur.

Since those with anxiety have shown a lower communication level between the amygdala and other parts of the brain, increasing this communication level could reduce anxiety. The hormone oxytocin has been found to do just this. Oxytocin is considered to be the stress-reducing hormone and it increases the communication between the other parts of the brain and the amygdala.

Cats have been held in high standing throughout history. This could be a possible indication of their value for mental and physical health. Having a cat at home can reduce allergies to cats when children are exposed to cats from a young age. Cats can also lower cholesterol. The frequency of a cat's purr can help to lower blood pressure as well. The risk of cardiovascular disease and risk of a heart attack is also lowered by having a cat around. An increased immune system is another benefit of owning and caring for a cat.

Owning and caring for a cat can reduce loneliness. Increased moods can also be a result of cat ownership. Depression can improve by being around cats. Caring for and owning a cat can help to take your mind off other problems that you may be having. Cats are less expensive to care for than dogs. Cats also require lower maintenance care than a dog does. The act of petting a cat releases the hormone oxytocin in the body, which can in turn, reduce stress and anxiety.

Limitations

While there are a multitude of studies done on how animals, in general, can reduce anxiety, there are very limited studies done on how cats can reduce anxiety. Throughout the research, dogs have been studied far more extensively than cats have been. There are many studies on therapy animals, but again the studies are done using mostly dogs.

There is limited research on cats in general. Since this research is limited, the research on how different age groups might be affected by cats is also very limited. Some research did show that females seem to be cat owners more than males. It cannot be said if this is due to more female cat owners coming forward for research than males, or if there is another reason there appears to be more female cat owners.

Conclusion and Future Research

Specific research was extremely limited on how owning and caring for a cat can reduce anxiety. Various research did show that those with anxiety have slower communication between the amygdala and other parts of the brain.

Research also has shown that oxytocin increases the communication between the amygdala and other brain parts. Since it has been demonstrated through research that petting a cat releases oxytocin, we might speculate that the oxytocin released from petting a cat would also increase the communication between the amygdala and other parts of the brain.

Social isolation is one by-product of anxiety. Owning and caring for a cat can reduce social isolation and loneliness. Depression is another symptom of anxiety. Having a cat has been shown to reduce depression. Anxiety also lowers a person's immune system, while owning and caring for a cat increases a person's immune system.

The risk of heart attack is increased in those with anxiety, but research has shown that cat owners have a lowered risk of heart attack. The purring of a cat can reduce high blood pressure in a person, which may offset the increased risk of high blood pressure in those with anxiety.

If a person suffering from anxiety has multiple problems on their mind, owning and caring for a cat could help them to keep their mind off their troubles. Since cats are less expensive than dogs, it may be beneficial for a person with anxiety to own a cat, rather than a dog, so they have less worry about finances. Cats also require lower maintenance for their care than dogs, which may also help to ease some worry about time constraints a person with anxiety may feel.

Future research should study cats specifically and their effect on those suffering from anxiety. It may also be helpful to research if there are varying

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results on the effectiveness of cats reducing anxiety between different age groups and genders. While owning and caring for a cat may reduce some symptoms of anxiety, more research needs to be done to determine if owning and caring for a cat reduces anxiety itself.

References

- American Psychological Association. (2011, July 11). *The Truth About Cats and Dogs: Pets Are Good for Mental Health of ‘ Everyday People’* . Retrieved from American Psychological Association: <https://www.apa.org/news/press/releases/2011/07/cats-dogs.aspx>
- Brain & Behavior Research Foundation. (2014, December 29). “ *Love Hormone” Oxytocin Shows Promise in Treating Anxiety Disorders | Brain & Behavior Research Foundation* . Retrieved from Brain & Behavior Research Foundation: <https://www.bbrfoundation.org/content/love-hormone-oxytocin-shows-promise-treating-anxiety-disorders>
- Cherney, K. (2018, July 20). *12 Effects of Anxiety on the Body* . Retrieved from Health Line: <https://www.healthline.com/health/anxiety/effects-on-body#1>
- Gorka, S. M., Fitzgerald, D. A., Labuschagne, I., Hosanagar, A., Wood, A. G., Nathan, P. J., & Phan, K. L. (2015). Oxytocin Modulation of Amygdala Functional Connectivity to Fearful Faces in Generalized Social Anxiety Disorder. *Neuropsychopharmacology, Vol. 40* , 278-286.
- Heiser, C. (2017, August 18). *Forget what you’ve heard. Being a cat lady is healthy*. Retrieved from NBC: <https://www.nbcnews.com>

com/better/health/forget-what-you-ve-heard-being-cat-lady-healthy-ncna789676

- Jason E. Schiffman MD, M. M. (2011, November 25). *Anti-Anxiety Medications Explained | Psychology Today* . Retrieved from Psychology Today: <https://www.psychologytoday.com/us/blog/anxiety-help/201111/anti-anxiety-medications-explained>
- Mark, J. J. (2012, November 17). *Cats in the Ancient World – Ancient History Encyclopedia* . Retrieved from Ancient History Encyclopedia: <https://www.ancient.eu/article/466/cats-in-the-ancient-world/>
- McConnell, A. R., Brown, C. M., Shoda, T. M., Stayton, L. E., & Martin, C. E. (2011). Friends With Benefits: On the Positive Consequences of Pet Ownership. *Journal of Personality and Social Psychology, Vol. 101* (No. 6), 1239-1252. Retrieved from American Psychological Association: <https://www.apa.org/pubs/journals/releases/psp-101-6-1239.pdf>
- Mercola, D. (2013, December 5). *Anxiety in Your Brain: What Happens When Anxiety Attacks?* Retrieved from Mercola: <https://articles.mercola.com/sites/articles/archive/2013/12/05/anxiety.aspx>
- Miles, J. N., Parast, L., Babey, S. H., Griffin, B., & Saunders, J. M. (2017). A Propensity-Score-Weighted Population-Based Study of the Health Benefits of Dogs and Cats for Children. *Anthrozoos, Vol. 30* (No. 3), 429-440. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/08927936.2017.1335103?needAccess=true#aHR0cHM6Ly93d3cudGFuZGZvbmxpbmUuY29tL2RvaS9wZGYvMTAuMTA4MC8wODkyNzkzNi4yMDE3LjEzMzUxMDM/bmVIZEFjY2Vzcz10cnVlQEBAMA==>

- National Alliance on Mental Illness. (2017, December). *Anxiety Disorders | NAMI: National Alliance on Mental Illness* . Retrieved from National Alliance on Mental Illness: <https://www.nami.org/Learn-More/Mental-Health-Conditions/Anxiety-Disorders>
- Pietrangelo, A. (2016, November 7). *Anxiolytics: Everything You Need to Know* . Retrieved from Health Line: <https://www.healthline.com/health/anxiolytics>
- Pietrangelo, A., & Watson, S. (2017, June 5). *The Effects of Stress on Your Body* . Retrieved from Health Line: <https://www.healthline.com/health/stress/effects-on-body#1>
- Pietrangelo, Ann. (n. d.). *5 Ways Cats Make You Feel Better | Care2 Healthy Living* . Retrieved December 4, 2018, from Care2: <https://www.care2.com/greenliving/5-reasons-cats-make-you-feel-better.html>
- Purlantov, I. (n. d.). *Studies Confirm Health Benefits of Having a Cat | Igor Purlantov - Academia.edu* . Retrieved December 4, 2018, from Academia: https://www.academia.edu/1449356/Studies_Confirm_Health_Benefits_of_Having_a_Cat
- Wonderopolis. (n. d.). *What Does Your Amygdala Do? | Wonderopolis* . Retrieved December 9, 2018, from Wonderopolis: <https://wonderopolis.org/wonder/what-does-your-amygdala-do>