

# Why Companion Animals Are Beneficial During COVID-19 Pandemic

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Unnati G Hunjan, MSc<sup>1</sup>  and  
Jayasankara Reddy, MSc, MBA, PGDCNP, PhD<sup>1</sup>

## Abstract

Companion animals and pets can be helpful during the novel coronavirus-19 pandemic. Interactions with them and positive physical contact lead to a variety of physiological and psychological benefits. It also releases biochemicals which can further boost the immune system and enhance health and well-being. This perspective discusses the benefits of these interactions, the modes of interactions and the activities that can be used. It also highlights the individuals that should avoid this approach and the status of the animal's health before engaging with them.

## Keywords

COVID-19, behavioral health, relationships in healthcare, population, health, patient/relationship centered skills

The number of cases diagnosed with the novel coronavirus (COVID-19) are on the rise, so is the distress of individuals. There have been multifarious reasons for feeling anxious and dejected, including, their routines, work and lifestyle being disrupted, the lockdown, limited availability of essentials, the concern of contracting the virus, or of loved ones being impacted. Constant exposure to warnings and upsetting news via social media or television adds to the stress and negative emotions experienced. India and China have the highest prevalence of depression. It has affected over 322 million people over the world, out of which about half prevail in South-Eastern Asia and the Western Pacific region (1). A health survey from NIMHANS, Bengaluru, reported that about 1 in 20 Indians has depression (2). The prevalence rate of anxiety and depression in the Indian population has increased in recent times, which is further amplified by the current circumstances. The prevalence rate of anxiety disorders in India, based on a meta-analysis with a sample size of 33 572 samples, is 5.8% with a higher prevalence in urban communities as compared to the rural ones (3). Anecdotal evidences of psychologists and therapists also show how these cases have been on the rise ever since the advent of the virus and due to increase in uncertainties around jobs, health concerns, and ability to perform daily tasks.

Through the field of psychoneuroimmunology, it is now well-established that stress, anxiety, and depression can dysregulate our immune system. In periods of high stress, such as psychosocial stressors, separation anxieties or subjective experiences of severe depression or anxiety, a large amount

of cortisol is released in an individual's body. This further reduces the immunocompetence toward infectious diseases, cancer, and other conditions that a body's cellular immunity would have resisted otherwise (4). Changes in the functioning of the immune system make individuals more susceptible to infections, inflammation, slow down healing (5), physiological ailments like headaches, difficulties sleeping, the occurrence of herpes, bowel dysregulation (6), and other diverse health implications. This process by means of which stress and anxiety of individuals, leads to poor health, can be mediated by companion animals. These companion animals are pets that stay with the owners, who further benefit from their presence. The pets can further be working as therapy animals or emotional support animals; however, companion animals are any animals that stay with their owners and provide companionship to them.

This companionship provides multifarious advantages, including physical and psychological (7). These animals can be a great source of entertainment, distraction, and companionship. Just a mere 15 minutes interaction with companion animals can help release a variety of helpful neurochemicals in our body (8). Neurotransmitters such as oxytocin,

<sup>1</sup> Christ University, Bangalore, Karnataka, India

## Corresponding Author:

Unnati G Hunjan, Christ University, Hosur Rd, Bhavani Nagar, S.G. Palya, Bangalore, Karnataka 560029, India.  
Email: unnatihunjan5@gmail.com



dopamine, prolactin, endorphins, norepinephrine, and beta phenylethylamine are released, and there is also a reduction in cortisol levels (9). These provide a variety of advantages. Oxytocin, especially, is released in both, humans and nonhuman animals after an interaction and positive physical contact. Positive physical contact is when an animal and its owner are in close physical proximity and are comfortable with touch. It has a positive impact on them, for example, petting a dog that is seeking and welcoming it. This helps reduce depressive and anxiety-related symptoms, improves memory, perception of oneself and social skills. It also impacts the immune system, providing an increased pain threshold, and anti-inflammatory effects, that is, it reduces inflammation or swelling in the body (10). Oxytocin has widespread pathways in the brain and hence regulates a variety of functions and release of other neurotransmitters too. An increased dopamine level contributes to the experience of pleasure and provides motivations and processing of rewards (11). Release of endorphins helps with providing relief from pain and stress, and norepinephrine helps patients' focus, be attentive, and regulate the heart rate and sleep-wake cycle. Phenylethylamine helps regulate mood and lowers tiredness. Lastly, high levels of cortisol reduce immunocompetence, suppressing the immune system and making the body susceptible to infections. Interactions with companion animals then help to regulate these chemicals, including a reduction in cortisol levels, which is very helpful for maintaining good health.

During the COVID-19 crisis, the lockdown, at a time when the risk of falling ill is high, and when the access to resources and daily supplies is limited, these are much-needed benefits, especially if they can be brought about by mere engagements with companion animals. Interactions with these animals also lead to a variety of physiological benefits, wherein many studies and surveys have reported a lower number of visits to the doctors, lower health-related costs incurred, and better self-reported wellbeing (12). Through continued interactions, blood pressure and heart rate are reduced, along with a reduction in chances of developing coronary infections and diseases. It also helps to lower fatigue in individuals and improves their mood. These animals keep people's morale high and motivate them to continue or seek treatment. They also help to improve self-concept, and improved overall satisfaction with life has been reported. These individuals then tend to engage more in positive and enhancing behaviors, with lesser destructive, aggressive, and self-harm tendencies (13). The overall well-being can be tapped upon, through positive interactions with animals.

Engaging with an animal can take many forms. Patients often find it safer and more comfortable to open up and speak to or in the presence of an animal (14). The non-judgmental and loving approach of animals induces feelings of trust, calmness, and well-being. This makes it easier for them to speak about emotional and personal topics readily, rather than suppressing those thoughts and emotions. Patients can also read to these animals or converse about the animal, giving human-like qualities to them and discussing how that animal would react in

certain situations based on their characteristics. This will help them ease into the interactions. Teaching these animals commands or tricks helps patients gain more self-confidence, assertiveness skills, and patience and engages their cognitive functions. Other activities may include petting the animal, lying down or sitting with it while working from home, or even just cuddling with it. One of the best ways for release of oxytocin is through touch, which is positive for both the human and nonhuman animal. It helps with bonding, feelings of companionship, and forming better relationships. Based on the kind of animal and its individual interests, specialized games could also be designed. For example, for food motivated animals, treats can be hidden around the room and under or behind objects that are safe for the animal to approach. This engages and mentally stimulates the animal, as it searches for these treats. Lockdowns are difficult for humans, but it can be very stressful for animals too, who are used to a certain routine which is now disrupted. Thus, engaging them can be helpful for them and for the humans. However, a few hours per day that should be spent to provide them time and space to be alone. Soon after the lockdown is lifted and the virus managed, these animals will have to go back to the old routine of being alone during work hours. A few hours per day will help them stay used to that routine and not be a drastic change once again, as humans return to their previous lifestyles.

Given the advantages of contact with animals, individuals with companion animals and pets are encouraged to continue interactions with them. Even though interactions with nonhuman animals are extremely enriching, that enhance health and well-being, one should be cautious while newly introducing an animal to individuals. These might not be suitable to all humans, as some might have an allergy or aversion to animals. Personal preferences and health conditions should be gauged before interactions. With the increasing concerns regarding coronavirus, the Center for Disease Control and Prevention has ascertained that there is no evidence of companion animals, including pets, can spread, or be a source of this virus for humans (15). The same has been mentioned by many international organizations, including the World Health Organization. If the animal is healthy, well-groomed, and has had regular checkups, they pose minimal risk of transmission of any kind of zoonotic diseases to humans, and this includes individuals with immune deficiencies (16).

Therefore, based on my clinical experience, I believe that tapping upon these benefits through interactions with nonhuman animals is essential and highly recommended during this lockdown. Based on the evidence of the advantages it brings about, it can help boost the immune system of individuals and release many helpful biochemicals in our brains and bodies which will aid our journey through this pandemic. These interactions keep the humans and companion animals engaged, while being beneficial too. They help an individual stay healthy and happy in these uncertain times, while providing an additional source of respite from their daily stressors. The activities highlighted in this paper, along with other customized tasks, can be incorporated in daily routines to

keep the companion animals mentally stimulated and healthy as well. In that way, the human–animal interactions will be beneficial for all being involved!


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### ORCID iD

Unnati G Hunjan  <https://orcid.org/0000-0003-2029-095X>

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### Author Biographies

**Unnati G Hunjan** is an animal-assisted therapist, psychologist, founder of Therapeutic Paws, India, and a former professor. Neuropsychology and animal-assisted interventions (AAI) are the focus areas of her PhD, where she attempts to study the impact of AAI on various aspects of neuropsychological functioning. She has facilitated various workshops and lectures related to AAI at national and international platforms. Some of her recent presentations were at Miami University and IAHAIO conference in New York. Currently, she is working with and studying therapy dogs, cats and horses, but hopes to incorporate other animals too in the near future. As the founder and director of Therapeutic Paws, she aims to establish the field of AAI in India, providing ethical standards of practice, certifications and creating opportunities for others aspiring to pursue it.

**Jayasankara Reddy** is an associate professor of Psychology at Christ University, Bangalore. He is guiding a team of research scholars for the award of MPhil and PhD degree in Psychology in the area of Neuropsychology, Cognitive Neuroscience, and Health Psychology. He is also chairman and member of Academic council, Board of Studies, and Board of Examination in Psychology for PG/MPhil/PhD programs in various universities and autonomous colleges. He has span of 17 years of experience in academic, research, and consulting in Neuropsychology and in Cognitive Neuroscience. He has received 3 times Best Research Paper Award in the area of Neuro Psychology in various National and International conferences. Further, he has delivered Lectures and invited talks in various National Seminars/Workshops/Conferences and acted as a Resource Person for Refresher Courses in various colleges and conferences.