

## Grounded by Purrs and Petting: Experiences with Companion Cats during COVID-19

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The COVID-19 pandemic has demonstrated negative impacts on the psychological well-being of humans around the world. Most communities have followed social distancing mandates, resulting in social isolation and changes to daily work and social routines. Extended periods of social isolation can lead to boredom, loneliness, and increased risk for physical and mental health concerns. For many individuals during the pandemic, their household members and cats have represented their only daily contact with living beings. Cats have been shown to form strong attachments to their owners and to reduce humans' stress responses, yet there is a dearth of research, especially when compared to dogs. The purpose of this qualitative study was to explore the thoughts, experiences, and concerns of adults regarding their relationships with their companion cat during the initial months of COVID-19. Data were collected between March 30<sup>th</sup> and May 1<sup>st</sup>, 2020, via an online questionnaire. Respondents (n=956) were recruited through social media outlets and human-animal focused organizations. Directed content analysis methods informed the process for discovering themes in the data. Themes include participants' enhanced bonds, increased quality time, gratitude, worries about their cat's well-being, and a reduced sense of isolation and emotional distress.

*Keywords:* companion-animal relationships, human-cat bond, social isolation, cat guardianship

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Social relationships are fundamental to our well-being. While digitally based technology can help people stay connected (Merchant & Lurie, 2020), it may not replace in-person human contact. The COVID-19 pandemic however, in order to reduce the risk of infection, has created the need to limit social contact. Social distancing mandates, enacted throughout the world, have radically altered how some people are able to engage with others. Although this has been an important step in moderating the disease's transmission trajectory, there are concerns that these restrictions will have short- and long-term mental health and well-being consequences (Galea et al., 2020). Reduced social contact, along with pandemic-related feelings of uncertainty and fear, can negatively impact our mental health and feelings of control (Rettie & Daniels, 2020; Taha et al., 2014; Taylor & Asmundson, 2020), often leading to distress and a reduced ability to function (World Health Organization, 2005).

Recent studies have underscored the extent of psychological anguish due to the COVID-19 pandemic. Williams et al. (2020) qualitatively assessed the perceptions and experiences of 27 adults living in the United Kingdom regarding social distancing and social isolation measures due to COVID-19. Their results indicated a substantial negative impact on mental health and well-being due to social and economic losses. In China, researchers reported an increase in negative emotions and a decrease in positive emotions and life satisfaction (Shigemura et al., 2020), numerous psychological problems (Qiu et al., 2020), as well as moderate to severe negative psychological impact such as depression and anxiety (Wang et al., 2020). In a United States survey, Palsson et al. (2020) found pandemic-related emotional distress in 90% of the respondents, and over half noted an increase in stress when compared to pre-COVID-19 times. As Carvalho Aguiar Melo and de Sousa Soares (2020) noted, humans, as social beings, may experience an increase in fear, anxiety, depressed mood, and loneliness, especially if the economic burden of the pandemic increases.

Yet, there is a type of social connection that does not increase the risk of COVID-19 infection; it involves companion animals, those which humans have as pets or for personal company. There is ongoing evidence that pet guardianship benefits humans in both physiological and psychological ways. This includes lowering stress, heart rate and blood pressure, increasing perceived self-esteem, and decreasing experiences of isolation and loneliness (Brooks et al., 2018; Hughes et al., 2020; Levine et al., 2013). Conversely, literature also reveals that pets may not buffer isolation (Herzog, 2011) and may even create deleterious effects such as increased depression, panic attacks (Müllersdorf et al., 2010), and decreased physical health (Koivusilta & Ojanlatva, 2006; Wells, 2019) than non-pet owners. Humans have been found to develop attachments with their companion animals in similar ways as they do with other humans (McConnell et al., 2019) and these relationships are often classified as non-judgmental and unconditional (Johnson et al., 2019).

Similar to human relationships, pets can provide a sense of security and well-being (Sable, 1995), and pets are often viewed as part of the family (Raupp, 1999). Companion animals can provide an additional source of social support, especially for those companion animal guardians who are highly attached to their pet (Meehan, et al., 2017). It is assumed that inter-species attachment bonding develops in the same way as bonding between humans in providing protection and security (Noonan, 1998). The attachment relationship between humans and pets is reinforced by the fact that pets are often viewed as part of the family (Raupp, 1999). The most common companion animals are dogs and cats (American Pet Products Association 2018), yet the majority of human animal bond studies have focused primarily on dog guardianship – with fewer investigating the cat-human relationship (Humphrey et al., 2020; Saito et al., 2019). This imbalanced representation may be due to the fact that cats are often portrayed as an

independent species that requires limited human contact (Eriksson et al., 2017; Potter & Sims, 2015) and that may prefer spending time playing with cat toys (Edwards et al., 2007). With 58 million cats owned in the United States alone (American Veterinary Medical Association, 2021), it is clear that the human-cat relationship is a notable and impactful one. The majority of human-animal bond literature focuses on dog-human relationships, and places dogs within a distinctive category because of their ability to form secure attachment bonds to humans (Topál et al., 2005). However, research has demonstrated similar attachment relationships between cats and humans (Vitale et al., 2019). da Silva Garcia and Martins (2016) found that the presence of a cat or petting a cat can reduce guardians' heart rate and blood pressure. Additionally, cats were also found to have more exploration and play confidence when their guardians were present (Edwards et al., 2007) and cat guardians were noted to be a prominent part of a cat's social environment (Eriksson et al., 2017). Conversely, Potter and Sims (2015) investigated cats' bonds with their owners and found there to be no evidence that cats form secure attachments with their guardians. While there is a dearth of information about human-cat bonds and the extant literature portrays inconsistent findings, the current timing of the pandemic presents fruitful opportunities to learn about the human-cat bond and how these attachments may support healthy adaptation to crises.

### **Purpose of the Present Study**

Most communities during the COVID-19 pandemic encountered public health guidelines which prohibited people from gathering in large numbers, which resulted in many individuals spending more time at home with their companion animals. This increased time together presented opportunities for cat-human relationships to strengthen or experience strain. This study engaged a qualitative design to explore how cat guardians portrayed their relationship with their companion cat during the COVID-19 pandemic.

## **Method**

### **Study Participants**

A total of 956 respondents completed the questionnaire between March 30, 2020, and May 1, 2020. Table 1 displays the study sample sociodemographics. Of note, the majority of respondents were women (91.9%), with one other adult in the home (51.2%) and had no children living at home (90.8%), while most respondents lived in the United States (95.7%).

### **Participant Recruitment**

Cat guardians were recruited via social media outlets, personal relationships with cat owners, and human-animal focused organizations (e.g., Facebook cat-focused groups, Human Animal Interaction Section of American Psychological Association, Instagram, Next Door). A cover letter explaining the goal of the study, the affiliation of researchers, and a link to the Qualtrics survey website was provided for potential participants. Eligible participants gave consent to the study by clicking the box at the bottom of the study cover letter that stated, "I provide consent" to participate in the study. Eligible participants were required to be at least 18 years of age and must have been living with a companion cat during the initial months of the COVID-19 pandemic (March- April 2020). The study was approved by the Institutional Review Board at the lead author's university.

### **Data Collection**

To capture the experiences of living with a companion cat during the time of a pandemic, the research team created a novel survey tool that they pilot tested with cat owners. In addition to sociodemographic variables, the parent study included questions about participants' levels of social restriction, and access to social support, cat food, and medical care. Within the parent study the research team included four open-ended prompts (see below) that are the focus of this

qualitative research study. The four open-ended prompts invited participants to share their thoughts about ways in which COVID-19 impacted their relationship and feelings about living with their cat during COVID-19. The prompts included:

- Do you feel the increased amount of time you are spending with your cat is strengthening your relationship or creating strain in the relationship?
- There are many stressors that can come with COVID-19. Do you feel that having a cat adds, reduces, or has no impact on your stress level?
- Now that you have completed the questionnaire, please tell us anything else you would like us to know about how COVID-19 has impacted your relationship with your cat or your feelings about living with a cat.
- Please share any additional thoughts about how COVID-19 has impacted your relationship with your cat.

Of the 956 respondents, we systematically sampled the first 10% of responses to each prompt, utilizing a random number generator to randomly sort participants. Thus, respondents were not “cherry-picked”. This random sampling method fostered an equal probability for selection of participants’ responses (Singh, 2003). Due to the large amount of qualitative data and variability in the number of participants who responded to each of the four open-ended prompts, the research team started by systematically sampling the first 10% of responses to each of the four open-ended prompts. If, after coding these responses and the data did not reach saturation, the research team would then have coded the next 10% of responses.

#### **Data Analysis**

Researchers used directed content analysis, a qualitative method that is more structured than conventional content analysis and guided by theory or prior research (Hickey & Kipping, 1996; Potter & Levine-Donnerstein, 1999), to analyze participants’ responses. Content analysis aims to validate or elaborate on a theoretical framework by integrating participants’ lived experiences (Hsieh & Shannon, 2005). Investigators begin by identifying key concepts as initial coding categories (Potter & Levine-Donnerstein, 1999). Next, operational definitions, based on theory, were determined for each coding category. In the current investigation, human-animal interaction/pet attachment and continuing bonds theories (Field, 2008; Packman et al., 2011), as well as research on positive emotions (Armenta et al., 2017; Fredrickson, 1998) and pandemics (Fredrickson, 1998; Van Bavel et al., 2020) guided the development of initial coding categories. The researchers were also guided by the categories used in a parallel study on dogs (Bussolari et al., 2021). The major strength of directed content analysis is that “existing theory can be supported and extended” (Hsieh & Shannon, 2005, p. 1283).

Participants’ responses were independently coded by each of three researchers and then reviewed by all three together until consensus was reached and tracked in a master codebook. As new themes appeared in the data, the team marked the emergence of each theme in the master codebook. The coders, as a team, discussed coding trends, patterns among respondents, and nuanced meanings. The team monitored for saturation and noted, within the master codebook, the point in which new data no longer elicited new codes (code saturation) or further flushed out meanings for the codes (meaning saturation) (Hennink et al., 2017). This procedure was followed for each of the four prompts. The research team kept an audit trail throughout data analysis to track emerging themes, code definitions, as well as code and meaning saturation (Hennink et al., 2017).

**Table 1**  
*Sample Sociodemographics (N=956)*

Category	n (%)	<i>M(SD)</i>	Range
<b>Gender</b>			
Woman	875 (91.5)		
Man	74 (7.7)		
Non-binary	3 (0.3)		
No answer	4(0.4)		
<b>Country</b>			
United States	915 (95.7)		
Canada	4 (0.4)		
United Kingdom	8 (0.8)		
Australia	2 (0.2)		
Other	27 (2.8)		
<b>Age</b>		53.99 (3.94)	18-86
Under 30	69 (7.4)		
30-39	109 (11.6)		
40-49	144 (15.4)		
50-59	253 (27.0)		
60-69	220 (23.5)		
70-79	132 (14.1)		
Over 80	11 (1.2)		
<b>Adults living in the home</b>			
One	339 (35.5)		
Two	489 (51.2)		
<b>Children living in the home</b>			
None	868 (90.8)		
One	65 (6.8)		
Two or more	23 (2.4)		
<b>Cats living in the home</b>			
One	294 (30.8)		
Two	318 (3.3)		
Three	134 (14.0)		
<b>Restriction level</b>			
Non-essential businesses closed; ordered to stay at home	791(82.7)		
Non-essential businesses closed; not ordered to stay at home	131 (13.7)		
Some stores/businesses and restaurants closed	23 (2.4)		
No current restrictions	7 (0.7)		
Other	4 (0.4)		

## Results

The COVID-19 pandemic and its associated mortality, distancing restrictions, and psychosocial stressors highlighted ways in which companion cats can buffer stress and offer outlets for touch, affection, and social support. Additionally, participants highlighted strains in their relationships with their cats and in their ability to garner veterinary care and cat food and supplies. Similar codes emerged across participants' responses to the open-ended prompts. Findings from the study centered on four key themes: *enhanced human-cat bonds, relationship strains, guardians' worries for their cat's well-being, and psychosocial benefits to guardians' well-being.*

### **Enhanced Human-Cat Bonds**

#### ***More Quality Time Spent with Cat***

Changes in public health mandates displaced many cat guardians from their usual office locations, leading to increased time at home with their cats. This increased time together, commonly portrayed as "quality time", was a welcomed change for most guardians. They enjoyed the increased snuggles, petting, and playtime. One individual shared, "I simply have more time now to sit and cuddle with her since I don't have to commute to work for over two hours every day" (26-year-old woman). In addition to their own enjoyment, participants frequently reported that their cats appeared to garner emotional benefits. Of importance, during the pandemic, increased quality time together often resulted in participants' describing enhanced attunement and intuition between both the guardians and their cats concerning what was needed to support each other.

Participants expressed awe, and at times, disbelief, that they could build stronger attachments with their cats:

While I have been home all day every day, our bond has strengthened - before this she was an aloof cat, I knew she recognized me as a source of food and treats and liked me for that, however during this time she really has become more affectionate and has been my little shadow as I move about the house (38-year-old woman).

Many participants reflected on the silver linings of the pandemic in relation to their ability to nurture their relationship with their cat:

While we were already very bonded, it's been nice to have my cat there to play, cuddle, nap, or spend time with generally. I wish I always had this much time to be with them and I'm really trying to take advantage of it while I can. I think our relationship has only gotten stronger (27-year-old woman).

The shift to home offices and education created additional unanticipated time and opportunities to advanced human-cat bonds.

#### ***Cat Provides Love and Comfort***

Many individuals spent significant amounts of time isolated from fellow humans and longed for human touch and companionship. However, cats appeared to reduce feelings of loneliness and filled many guardians' need for love. Frequently, guardians mentioned their cat's unconditional love and the way that they shared "non-judgmental love... and just there for me" (64-year-old woman). Individuals enduring the pandemic alone found their cats to be a tremendous source of comfort. One single expectant mother shared, "Because of my cats, I've never felt lonely or isolated. They also help me keep a healthy routine and remind me how lucky I am" (39-year-old woman). Others echoed the feeling that their cat is "someone to share this rather scary time with" (52-year-old woman) and helped guardians to feel "grounded and safe"

(38-year-old man). Many participants noted how the love shared by their cat nurtured their sense of well-being.

### **Relationship Strains**

#### ***Cat Behaviors***

The stressors resulting from spending most every waking and sleeping moment together caused strains within the relationships of a few participants and their cat companions. Cats' desires to play and seek attention from their guardians sometimes elevated stress for those working at home as described by one guardian: "Trying to keep her on a regular schedule and out of my work has been a challenge and we sometimes get a little angry with each other" (51-year-old woman). To offset their cat's energy and desire for attention, many participants intentionally augmented their positive interactions with their cats: "I am noticing their frustrations with me when I'm not engaging with them, so I try to play with them more, listen to their needs, and respect their wishes" (30-year-old woman). Most participants thought these changes in behaviors were directly related to their increased time together and gave their cats some leeway for their antics.

Several participants reported "no impact" when describing how having a cat impacted their level of stress during the pandemic. These responses frequently reflected guardians who had limited changes to their pre-pandemic interactions with their cats, those with full access to resources, or being a veterinarian who could meet all their cat's medical needs.

### **Guardians' Worries for Their Cat's Well-Being**

#### ***Reduced Access to Veterinary Care and Cat Supplies***

A small number of guardians reported that due to concerns about the ability to access cat food, supplies and medical care, having a cat during the pandemic increased daily stressors. The early months of COVID-19 were a challenging time for veterinary clinics as they worked to develop new, safe protocols. Some veterinary clinics were forced to reduce hours or services and most implemented 'curb-side' care, in which animals were taken inside but guardians had to wait outside for reports and updates. Those whose cats had chronic or life-limiting conditions expressed concerns that they couldn't access the care needed to maintain their cat's quality of life. Due to the hoarding behaviors that emerged at the onset of the pandemic, as well as supply chain shortages, participants also felt increased stress in being able to care for their cat's physical needs.

#### ***Guardian's Worries Should They Contract COVID-19***

Many participants viewed their cats as "family members" and shared that the pandemic raised their awareness about the need to formerly develop a plan for an emergency caretaker should they become ill or not be able to provide for their cat's well-being. These concerns resonated among participants, both young and old. These concerns reflected instrumental care needs such as getting food and changing litter boxes, and also financial worries about paying for someone to care for their cat should they be hospitalized or die. One older participant reflected on this challenging decision-making process:

I fear being in the hospital or at home incapacitated. I can hire a cat sitter but she won't have much time. My main concern is what happens to my cat in the event of my death. I don't yet have someone to adopt her. All my close friends have dogs or don't want pets. I have to reach out to a wider circle. I will be leaving the future owner a bequest in my will to take care of all cat-related expenses for 8 years (she is now 10) (74-year-old woman).

Pandemic-related decreases in social support emerged throughout cat guardian's responses as an additional fear in that their typical cat caretakers may have moved or expressed trepidations in leaving their homes.

#### ***Guardians' Worries That Their Cat May Contract COVID-19***

Throughout the pandemic, public health messaging changed on a regular basis, and knowledge about the means of transmission between humans and animals was uncertain. Early in the pandemic, there were stories from national media outlets about tigers that had contracted coronavirus. Thus, concerns emerged about companion cats contracting the coronavirus. Understandably, participants expressed worries about whether their cats could get COVID-19 and if they could transmit the disease to their guardians:

At first I wasn't worried about my cats getting sick, because articles had debunked the idea that animals were getting COVID. But yesterday the NYT did an article about a tiger at the Bronx zoo who was confirmed to have COVID, and it mentioned the possibility that felines can contract it just from inhaling particles in the air. Now that I read that only felines can get it, I'm somewhat concerned for my cats even though they are all indoors (26-year-old woman).

Responses also highlighted differing concerns between indoor and outdoor cat guardians. Those who cared for feral and outdoor cats expressed grave concerns about their cats and the increased risk they faced for contracting COVID-19, while those who were able to keep their cats indoors felt less apprehension.

Participants shared stories that they had heard through their social networks about cats spreading COVID-19 and guardians "panicking and abandoning cats" (51-year-old woman). Others expressed concerns "that alarmist idiots will initiate a euthanasia program that will result in the murder of my pets" (59-year-old woman). One guardian relayed these fears:

When I hear in the news about how some believe that the virus can be spread by cats I worry that if things go badly, and the virus goes rampant, that our pets might be harmed or even killed by a "mob mentality". I hope that doesn't become an issue because I would be devastated to see my pets hurt (56-year-old woman).

To assuage their fears and understand the true risk for their cats, some guardians became more diligent in keeping their cats indoors and attempted to separate scientific facts from rumors. However, many cat guardians harbored fears of their cats contracting COVID-19:

Both my cats are young, healthy, and insured, but I'm scared what could happen if they get symptomatic COVID. Ethical and practical treatment considerations, outcomes, testing. What if the state recommends cats with COVID be euthanized?" (46-year-old woman).

Mounting uncertainties and constant changing governmental and media messages exacerbated guardians' fears of potential harm that may befall their beloved cats.

### **Psychosocial Benefits to Guardian's Well-Being**

#### ***Cat's Calming Presence***

Amidst the magnitude of daily challenges, loss, and grief resulting from COVID-19, cat companions brightened days with humor, silly antics, and a calming presence. As many participants experienced pandemic-related job loss, the death of their loved ones, and fears about their own health and loss of access to resources, they portrayed common psychological responses such as anxiety, depression, and grief. The loving kindness of cats emerged as a buffer to guardian's emotional distress:

Greatly reduces my stressors, without my boys I doubt I would be managing and might have to seek help for anxiety and depression. Instead, the purrs and petting of my two cats grounds me, makes me feel less lonely, and gives me unconditional love (34-year-old woman).

Caring for a cat's physical and emotional needs provided participants with a sense of purpose and meaning during a time when most individuals felt out of control:

Having a pet to concentrate attention on allows me to remove focus on COVID ... over which I have minimal to no control. They also provide a responsibility outside of myself that provides motivation for getting through challenging times (60-year-old woman).

Cat companions' antics and love helped participants to be more mindful of living in the present moment: "My cats remind me to focus on what is in front of me attentively and not get anxious about things that have not happened. Watching them reminds me [to] relax" (50-year-old woman). Respondents expressed how their cats' calming presence also nurtured similar feelings within themselves: "There is nothing to compare with a lap full of warm purring fluff to increase comfort" (73-year-old woman). Cat companions engaged their guardians' many strengths, nurtured a sense of hope, and offered a calming presence. One cat guardian proclaimed, "He follows me around. Sleeps at my feet wherever I am. He is more affectionate" (61-year-old man).

### ***Cat Fosters Guardian's Gratitude***

Themes of gratitude resonated throughout participants' responses and reflected the ways in which their cats added love and companionship during the isolating and emotionally dark days of the pandemic. Positive valences centered on ways that cats lightened, brightened, and comforted their guardians' lives:

It's made me so grateful to have my cats. I have my husband but I can't imagine how much lonelier it would be without the cats and I'm just so happy now more than ever to have them in my life. They are amazing little emotion readers and have been there for me when they know I'm feeling sad or stressed. Having a pet, especially in this time and especially ones that I have such a strong emotional bond with, is making this tough time a lot easier to get through (27-year-old woman).

Cats also alleviated anxiety through their comfort and intuitive insight into when their family members needed extra attention. They brought levity to online work and education tasks when they pranced in front of computer monitors or meowed loudly. Participants expressed gratitude for their "furry friends" and felt that they provided a grounding presence amidst the layers of stress that inundated their daily lives.

The enhanced bonds developed during the pandemic resulted in many guardians expressing a profound reliance on their cats. Without their cats, guardians feared they would be lost and emotionally empty. Notable was the loyalty guardians expressed towards their cats and how they would often prioritize their cats' needs over their own. Cats were often described as essential family members or like children: "I love my cat dearly and would do anything for him. I see him as another child and will go above and beyond for him just like I would do for my child" (41-year-old woman). Many participants had long histories of living with cats and acknowledged that they could not imagine ever living without a cat in their lives, especially during the challenging times of the pandemic.

### **Discussion**

Findings from this study highlight the beneficial relationship between humans and their companion cats and the unique ways in which the COVID-19 pandemic heightened relational bonds. Prior to this study, sparse research focused on the advantages of having a companion cat, including mental, physical, and social well-being (Animal Medicines Australia, 2019; Bair-Brake, 2020; da Silva Garcia & Martins, 2016; PDSA, 2020; Vitale et al., 2019). This study extends previous knowledge of the beneficial roles of companion cats by revealing unique insight into how cats can buffer humans' experiences during a pandemic. COVID-19-related distress resulted in the United States' population experiencing a doubling in the self-reported rates of poor mental health days (Swaziek & Wozniak, 2020). Echoing findings by Young et al. (2020), this study

reveals how cats nurtured their guardians by providing love, a calming presence, and companionship. Participants shared how their cat's jovial spirits and cuddly nature brought humor and a sense of connection when they, as humans, struggled with pandemic-related anxiety, fear, and depression. Waking each day to care for their companion cat's physical, emotional, and social needs provided participants a sense of purpose, meaning, and daily structure. As many individuals transitioned to working from home, this often equated to more quality time to cuddle, play, and nurture the bond with their cat. The results of this study suggest many guardians and their cats also enjoyed a greater sense of attunement. Specifically, cats were described as being better able to read their guardian's need for a comforting lap snuggle, and were a playful distraction from work and the emotional weight of the world.

Although cat companions appear to have acted as a buffer for pandemic-related distress for the majority of participants, a few stress-related themes emerged. More time spent at home opened opportunities for cats' frisky behaviors to interrupt their guardian's concentration, work-related Zoom meetings, and even sleep. Applebaum et al. (2020) also described how cat's stubborn behaviors and loud crying created tension at home during the pandemic. Additionally, hoarding behaviors at the start of the pandemic resulted in decreased access to specialty foods and necessities such as litter and therefore increased stress for cat guardians. Furthering research by Shoesmith et al. (2021), our study revealed how public health precautions altered traditional access to veterinary services, leaving guardians fearful should their cat need emergency care or treatment for chronic health conditions. Two additional areas of concern were the risks for their cat's well-being if they (the cat guardian) should become ill and fear their cat may become exposed to COVID-19. Respondents who had chronic health conditions, were older, or who lived alone, expressed concerns about who might care for their cats should they, as guardians, become ill with COVID-19 (Applebaum et al., 2021). Mostly unique to those whose cats lived outdoors, was an elevated level of concern for their cat's safety and fears that pandemic-inspired mob mentalities may place their cats at risk for being stolen and even killed.

Several research studies that incorporate experiences of many types of pet owners portray similarities and differences based on the species' personalities, and physical and social needs. A study by the same authors (Bussolari et al., 2021) exploring the relationships between companion dogs and their guardians' during COVID-19 found that dog guardians proclaimed the pandemic solidified their companion dog's place as a family member in their household and verified their feelings that they could not live without the love and comfort shared by their dog. These results mirror those of other studies of household pets that proclaim dogs, cats, horses, and even fish, provide a comforting presence during the pandemic (Applebaum, 2021; Ratschen et al., 2020; Shoesmith et al., 2021; Young et al., 2020). Among the differences in guardian's experiences with their companion animals were those of dog guardians' necessity to attend to their dogs' demand for toileting, exercise and social activity. Since many communities encountered closures to dog day care facilities or dog parks, guardians held sole responsibility for their canine companions' exercise; thus, increasing guardians' physical activity (Applebaum et al., 2021; Holland et al., 2021). Expressions of frustration with animal behaviors appeared more commonly in dog guardians' responses and centered on barking, rowdy play, and destructive chewing (Holland et al., 2021). Our study extended the findings of Applebaum et al. (2020) by portraying guardians' frustrations with their cats' behaviors, and how they were more likely to joke about how their cats were annoyed by their humans always being at home, thus, disturbing their naps and quite solitude. Interestingly, cat guardians more frequently described their relationship with their companion animals as bringing unconditional love, which was not mentioned in the COVID-19 dog sample (Bussolari et al., 2021); thus, elaborating on findings by Young et al. (2020).

While this cat study offers many strengths, a few limitations bear mentioning. The study incorporated an online survey format; thus, creating potential for selection bias and favoring the voices of those who had access to the internet or a smart phone (Greenacre, 2016). Respondents may represent a sample of individuals who have stronger attachments to their cats. The majority of respondents were women living in the United States and they may have different bonding relationships with cats than do men. The sample was likely not representative of all cat owners and probably suffers from the same bias in terms of race and socioeconomic status as much of previous HAI literature. Additionally, few respondent households included children which may have influenced cat guardians relationships with their cats in that they had more time and resources to share with their cat. This study occurred in the early months of the pandemic, when levels of uncertainty and anxiety may have been higher than later stages in the pandemic when scientists better understood the mechanism of COVID-19's transmission. Given the longstanding presence of COVID-19 and its many deadly mutations, future research could incorporate a longitudinal design to capture the nuances in psychosocial functioning and changes in human-cat bond over time. Studies may also benefit from addressing whether the companion cat lived primarily indoors or outdoors.

As the impact of COVID-19 on our health, work, and well-being may prove longstanding, cat guardians felt comfort in knowing that cats would be there to offer unconditional love and comfort. Participants described how cats' often non-fussed personalities remained a constant during days that felt out of control. Guardians resoundingly shared how their cats rose to the occasion to support them as they endeavored to adapt to the immense grief, loss, and trauma that they associated with the pandemic. Results from this study have many practical implications, notably that people who feel socially isolated or disenfranchised from their social support network, cats can provide a sense of connection to the world, especially during time of crises. While dogs typically hold the roles as trauma responders, findings from this study highlight the role of future research in exploring the potential for cats to serve as emotional and social supports to survivors of other types of traumatic events such as natural disasters, interpersonal trauma, or future pandemics. As cat guardians return to work outside of the home or to hybrid models, it will be important to monitor the impact of these changes on their cat's well-being.

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