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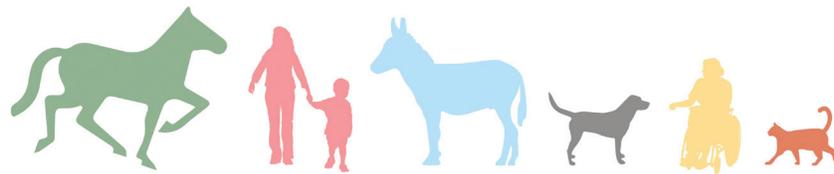
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If the World Was Ending: Companion Animals and Their Guardians in COVID-19 Times

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Keywords: COVID-19, human-animal attachment, companion animal relationships, emergency lockdown

Abstract: This research aimed to quantitatively explore various elements related to people living with companion animals during the COVID-19 emergency lockdown in Puerto Rico. Among the variables studied are guardians' gender, age, animal species, time spent per day with the companion animal, perceived benefits, and attachment level between the person and their companion animal. Matters related to emergency preparedness plans regarding companion animals, changes in the human-animal interactions, and perceived companion animals' changes during the lockdown were analyzed. Researchers used an online questionnaire for data collection. The sample consisted of participants over 21 years old ($n = 3,663$) living on the Island during the emergency COVID-19 closure. The results showed statistically significant evidence that, on average, women had higher attachment levels than men and perceived higher benefits from their companion animals during the lockdown. Additionally, findings suggest a moderately significant positive correlation between human-companion animal attachment and guardians' perceived benefits. Some of the perceived benefits during lockdown and confinement included companionship and unconditional support, a sense of security, relaxation, and the elimination of boredom. Interestingly, the majority reported considering companion animals in their family emergency plans, including having someone who could take care of their companion animals if needed. These and other results are presented, discussed, and contrasted with recent related research, highlighting the similarities and differences in current data, limitations, and future directions. In conclusion, overall, the pandemic allowed more opportunities for positive interaction between people and their companion animals and helped guardians cope better in this novel and vulnerable situation.

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Introduction

In late December 2019, an outbreak of a novel coronavirus started, which quickly spread from the city of Wuhan throughout China and to other countries (Wu et al., 2020). The cause of COVID-19 is an infection with a coronavirus (called SARS-CoV-2), and its transmission is from person to person through respiratory droplets (Centers for Disease Control [CDC], 2020). On March 12, 2020, the World Health Organization (WHO) director-general described the COVID-19 global outbreak as a pandemic having almost 125,000 cases reported from 118 countries and territories (WHO, 2020). The governor of Puerto Rico (where this study was conducted), Wanda Vázquez Garced, declared a state of emergency due to the growing threat.

Her first executive order regarding COVID-19 required government and business closures and a curfew that allowed people to go out from 5:00 a.m. to 9:00 p.m. for essential issues (getting supplies and doing critical work) (Executive Order No. OE-2020-023). As the pandemic continued to spread, the measures were extended with a stay-at-home order, reducing the time allowed outside by two hours (only until 7:00 p.m.), and only on specific days depending on car license plate numbers, with few exceptions (Executive Order No. OE-2020-029). The government maintained these measures until May 25, when a gradual business reopening started (Executive Order No. OE-2020-038). What initially seemed to be a two-week measure quickly turned into months.

Under these conditions, many people were home as much as 24/7, meaning a drastic change for some. It is therefore essential to consider the impact on health (physiological and psychological) and social interactions, especially given a life-threatening element. Osofsky et al. (2020) highlighted that to maintain a healthy mental state and well-being, daily routines are fundamental.

Brooks et al. (2020) found that quarantines, which are similar to lockdowns, enforce social distancing or confinement and have added stressors such as frustration and boredom resulting from not keeping to usual routines and the lack of physical and

social contact with others. Grey et al. (2020) stated that antipandemic measures disrupt social interconnectedness and provoke other health risks. Likewise, Morgan et al. (2020) asserted that extended social isolation may significantly decrease quality of life and well-being, and cause elevated levels of stress, also among noninfected populations. Moreover, Tull et al. (2020) established a link between orders to stay at home and anxiety, loneliness, and financial worry. Furthermore, they highlighted the importance of social connection and the need for mental health care through telepsychology, which is the provision of behavioral and/or mental health care services using technological modalities in lieu of, or in addition to, traditional face-to-face methods (American Psychological Association [APA], 2014).

Puerto Rico's health services, except for emergencies, were affected by these decisions, and therefore faced a challenge. Telehealth, barely under development, was not an option when the lockdown started. It took weeks to become available and required authorizations from the Government Health Department.

A documented factor that helps people cope during distressing times is social support (Cohen & Wills, 1985; Ozbay et al., 2007; Saltzman et al., 2020), one that is accessible to an individual through social ties to other individuals, groups, and the larger community (Lin et al., 1979). Considering that the antipandemic measures directly impact social connection and interaction, it is reasonable to ask whether companion animals can play a supportive role for their guardians in the face of a pandemic, as they have been shown to do in other stressful situations in the scientific literature. Nieforth and O'Haire (2020) emphasized through a myriad of references the role of social support that companion animals have and highlighted its association with reducing the appearance of possible post-traumatic stress symptoms. Meehan et al. (2017) found that people perceived their companion animals as social support sources, placing them on par with family, friends, and essential people in their lives. As people socially distance from each other, companion animals become core support systems for physical and emotional well-being (Vincent et al., 2020).

When thinking about human–companion animal relationships, we can speak of bonds or attachments. More recently, human attachment theories have been applied to explain and investigate the relationships between humans and nonhuman animals (Segarra-González, 2011). When describing attachments or other affectional bonds, Ainsworth (1989) referred to a need to maintain proximity, distress upon inexplicable separation, pleasure or joy upon reunion, and grief in the loss of an attachment figure. By comparison, it is reasonable to consider most human–companion animal relationships as attachments. Two main aspects that make these relationships generally positive are the nonjudgmental affection that animals provide and their childlike qualities, including dependence (Gunter, 1999). Beetz and Bales (2016) argue that since attachment and social support theories consider stress and anxiety regulation as central, there are advantages to the human-animal interaction. Some of these been: a secure human-companion animal attachment is possible even when past experiences with other humans were not; physical contact that is less restricted than in some human relationships; and caregiving opportunities that can bring satisfaction and stress reduction for both (Beetz & Bales, 2016).

Likewise, research has shown that companion animals provide other benefits for their guardians. Some researchers focus on cardiovascular health (Krittanawong et al., 2020; Xu et al., 2020), cognitive and social aspects in adolescents (Purewal et al., 2017), emotional and social aspects in children (Christian et al., 2020), psycho-emotional benefits in adults (Hugues et al., 2014), protective factors in people with mental health problems (Brooks et al., 2018; Brooks et al., 2019; Brooks et al., 2016), and social support and activities of daily living (ADL) in older adults (Raina et al., 1999). Furthermore, Janssens et al. (2020) found that a companion animal's presence seems to buffer against negative feelings, and that interacting with them generates positive affect.

Thus, considering that Puerto Rico has an estimated population of 3,193,694 (U.S. Census Bureau,

2019) and the Puerto Rico Act 154 (2008) states that two-thirds of households have at least one companion animal, it seems reasonable to ask how these particular people have dealt with the COVID-19 lockdown. Moreover, previous studies on the Island showed that most guardians have described their companion animals as family members and identified them as a source of companionship and unconditional support (Aragunde-Kohl, 2016; Ipsos-Asi, 2010; Meléndez-Samó, 2014b; Meléndez-Samó & Segarra-González, 2018; Segarra-González, 2011).

Therefore, it is worthwhile exploring guardians' experiences and perceptions of the COVID-19 lockdown and how it has affected their companion animals. Besides investigating these questions, the following hypotheses have guided this study:

1. Demographic variables like participants' gender and companion animal species will relate to the level of attachment. Also, other demographic variables, such as age, were analyzed.
2. The participants' amount of time spent per day with their companion animals during the emergency lockdown will be related to the reported attachment level.
3. Participants with higher companion animal attachment levels will report more perceived benefits from them during the COVID-19 lockdown.

Methods

Participants

This research was conducted with the voluntary participation of 3,663 companion animal guardians living in Puerto Rico, aged between 21 and 83 years (42 ± 12), mostly females (93%), who primarily did not live with children (73.5%), and who, for the most part, lived in the northern region of the Island (44.1%). (See Table 1.) In terms of participants' job situation during the lockdown, 35.5% used to work outside the home and now were teleworking. (See Table 2.) The participants were recruited via social media networks and email.

Table 1 Descriptive Statistics for Demographic Variables

Demographic Variables		N	%
Adults per household	1	729	19.9
	2	1,843	50.3
	3	652	17.8
	4	342	9.3
	5	63	1.7
	6	19	0.5
	10+	15	0.4
Children per household (under 20)	0	2,690	73.5
	1	614	16.8
	2	299	8.2
	3	43	1.2
	4+	16	0.4
Number of companion animals per household	1	1,155	31.5
	2	903	24.7
	3	520	14.2
	4	361	9.9
	5	216	5.9
	6+	508	13.8
Companion animal species	Dog	3,302	90.1
	Cat	1,201	32.8
	Bird	283	7.7
	Fish	98	2.7
	Rabbit	79	2.2
	Turtle	57	2.2
	Horse	41	1.1
	Guinea pig	38	1.0
	Hamster	33	0.9
	Other	116	3.2

Instruments and Procedure

1. To measure attachment to companion animals, the Owner-Pet Relationship Scale (OPR) (Winefield et al., 2008) was used in the adapted Spanish version for Puerto Rico: Escala de Relación del Dueño y su Mascota (ERDM) by Segarra-González (2011). The OPR Scale measures the guardian’s companion animal attachment based on Bowlby’s attachment theory (Winefield et al., 2008). It contains 15 items rated on a scale from 1 to 4, except

Table 2 Work Status during COVID-19 Lockdown

Job Situation during the Lockdown	N	%
Unemployed since before the lockdown	794	21.7
Used to work from home and continue to work from home	243	6.6
Used to work outside the home and continue to work outside the home	514	14.0
Used to work outside the home and currently unemployed	813	22.2
Used to work outside the home and now working remotely from home	1,299	35.5

item 3, which has a true/not true option, where true has a score of 4 and not true has a score of 1. Participants who have more than one companion animal had to choose whom they feel the closest to when answering. For the current study, the ERDM Scale’s Cronbach’s alpha index reflected a value of $\alpha = 0.80$, which yields a reasonable reliability for this sample size according to Ponterotto & Ruckdeschel (2007).

2. Companion animal guardians’ demographic information was collected: age, gender, region of residence, number of adults or children in the household, work status during lockdown, number of current companion animals and their species, and whether they had an emergency plan that included companion animals.
3. Companion animal-related experiences during COVID-19 lockdown: The authors developed questions about preparedness steps taken regarding companion animals, absence or presence of economic hardships that impacted companion animal caregiving, amount of time spent together, veterinary emergencies and how they dealt with them.
4. Perception of impact in their companion animals during COVID-19 lockdown: The authors developed questions addressing changes in routines together and perceived emotions in companion animals.

- Guardians' perceived benefits or grievances from their companion animals through the COVID-19 lockdown: The authors developed questions regarding stress/worries, perceived relaxedness, overcoming boredom, well-being, and sense of security.

The authors used an online survey for companion animal caregivers to collect information about their experiences during the COVID-19 lockdown in Puerto Rico. Participants read and signed electronically an informed consent form before completing the study measures. The Albizu University's Institutional Review Board (IRB) granted ethical approval to conduct the study. The survey launching was in April 2020 via social media and email using SurveyMonkey software (SurveyMonkey, Inc., San Mateo, California). Data was organized with Microsoft Excel (Microsoft Office 365) and analyzed with SPSS 26 (Armonk, New York). Nonparametric tests were performed after checking for the normality of the distribution of the sample data.

Results

Companion Animal Attachment

When answering items on the ERDM Scale, most participants chose their dog (81.4%) as the animal to whom they felt the closest, even when living with other species. The average sample score was 51.02 out of a total of 60 points, which represents a high companion animal attachment level. For companion animal attachment level and guardians' gender, the results indicate that on average, female guardians scored higher (Mann-Whitney U , $z = -4.304$, $p < 0.01$). Likewise, female guardians perceived higher benefits from their companion animals (Mann-Whitney U , $z = -3.730$, $p < 0.01$).

Spearman correlation analyses were performed between the time spent with companion animals during the day and attachment levels. The results indicate a weak positive correlation between both ($r = 0.334$, $p < 0.01$). Concerning the number of people in the household and companion animal attachment level,

the results suggest a low-intensity negative correlation between the two ($r = -0.054$, $p < 0.01$), meaning that attachment levels may not be associated with the number of people in the household.

Regarding attachment level and guardians' perceived benefits from companion animals during the lockdown, the results suggest a moderately significant positive correlation ($r = 0.458$, $p < 0.01$). Those perceived benefits included companionship and unconditional support, a sense of security, relaxation, and the elimination of boredom.

When considering guardians' age and companion animal attachment levels, the results indicate a statistically significant weak negative correlation between both ($r = -0.104$, $p < 0.01$). Concerning animal species, guardians' attachment levels, and perceived benefits during the lockdown, the segmented analysis suggests that the attachment levels and the perceived benefits are higher among people who chose their cat when answering items on the ERDM Scale ($r = 0.526$, $p = 0.01$). The second strongest correlation occurs between people who chose their dog ($r = 0.442$, $p = 0.01$).

Preparedness Plans and Actions Related to Companion Animals for the COVID-19 Lockdown

When it comes to family emergency preparedness plans, 91% reported having included companion animals in their plans. Regarding the lockdown preparations, 93.1% bought companion animal food in advance, 57% bought medications or supplements, 38.4% arranged grooming services, 22.4% did a preventive veterinary visit, and 76.4% looked for information about veterinary clinics that would be open during the lockdown. Furthermore, when asked about what they would do if they ran out of supplies for their companion animal during the lockdown, 97% reported that they would decide to go out to buy them. It is essential to acknowledge that when the survey was open, going out for supplies could mean long lines and waiting times, plus shorter store schedules because of the lockdown. Even though some stores had online ordering and

deliveries, these options were not available in all towns, and waiting times for deliveries were long. Besides, when exploring possible economic hardships that could impact guardians caring for their companion animals during the lockdown, 90.1% stated that they did not have financial problems, and 70.2% reported having savings specifically for their companion animals. Additionally, 14% of participants reported having a companion animal-related emergency during the lockdown, and 87% of those indicated that they handled the emergency as they did before the lockdown, such as finding the veterinary services needed.

Another aspect addressed was if participants worried about what would happen to their companion animals if they got sick with COVID-19. The majority responded being concerned about it (81.2%). However, 89.7% shared that they have people who could take care of their companion animals if necessary, showing that their companion animals' needs and well-being are essential.

Changes in Human-Animal Interactions during the Lockdown

Regarding changes in time spent together, most participants agreed that during lockdown this time increased (71%). Some of them reported spending more than 12 hours together (26.4%). Concerning changes in companion animal-related activities, 66% responded that they had to be creative to entertain them, 32.8% said that they had taught them new tricks, and 53.4% that they had read more information about them.

Perceived Changes in Companion Animals, and Benefits/Grievances Drawn from Their Interactions

When addressing perceived changes in their companion animals, 83.7% reported that their companion animals were happier for having them at home all the time. Nevertheless, 7.1% stated that the animals seemed anxious about it. When exploring the impact that companion animals had on them during

this time, 61% said they make guardians commit to the animals' well-being as well as their own.

Likewise, 70% reported that their companion animals make them feel safe, 77% noted that they helped them feel relaxed, 72% stated the animals took away feelings of boredom, and 85% expressed that the animals gave them unconditional love and support. Despite these reported benefits, 4% affirmed that their companion animals added stress and concerns, and 1% noted that they were time-consuming and complicated their routines.

As a closing question, guardians were asked, after the lockdown experience, if they saw themselves having companion animals in the future. The vast majority responded affirmatively (94.2%). However, in an open and voluntary comment section, some who answered no to this question stated that it would be unlikely for them to have companion animals in the future because of their age, not because of the present pandemic experience.

Discussion

This study's main goal was to explore companion animal guardians' experiences during the COVID-19 lockdown in Puerto Rico. In general, our results show that for people living with companion animals, preparedness for the lockdown, including for their companion animals, was necessary. They also had high levels of companion animal attachment. Besides, having their companion animals helped them in dealing with the stay-at-home order. In terms of their companion animals' lockdown impact, most perceived that their companion animals seemed happier to have them at home. Analyzing and contrasting this study's results with other recent research on COVID-19 and companion animal guardians shows an interesting trend in similar results.

Companion Animal Attachment

When addressing companion animal attachment, Bussolari et al. (2021), Kogan et al. (2020), and Bowen et al. (2020) highlight how people feel more attached

to their companion animals than before COVID-19. The ERDM Scale scores for this study showed that participants had high levels of companion animal attachment. Nevertheless, there are no previous scores from before the lockdown with which to make a comparison. Considering that 71% of our respondents spent more time with their companion animals than they did before the pandemic, it is interesting how this could relate to the reported attachment levels. This result is similar to the study by Kogan et al. (2020), who reported a 72% increase in time spent with dogs. The pandemic has also increased creativity in guardians living on the Island through the need to entertain their companion animals (66%), leading some of them to teach the animals new tricks (33%). More than half were even motivated to learn more about their companion animals by searching for information and reading about their specific species.

Perceived Benefits from Companion Animals during COVID-19 Lockdown

About 70% of participants find that their companion animals help them to feel safe, relaxed, and not bored. In turn, 85% highlight how the animals help them commit not only to their own well-being but also to their companion animal's well-being. Since animals depend on their guardians, Hoy-Gerlach et al. (2020) state that there is a possibility, in a confinement situation, that companion animals can motivate their caregivers to have better self-care and care for their companion animals. Similarly, Meléndez-Samó (2014b) established that commitment and responsibility are essential constituents of the human-animal bond. According to her research, the narrative "they depend on me" was consistently expressed by all the participants, and in this dynamic, the relationship strengthens and, in turn, the perceived benefits increase.

Kogan et al. (2020) found that people understood that their dogs had helped them reduce feelings of anxiety, depression, isolation, loneliness, or feeling overwhelmed during the pandemic. Other results showed that companion animals promote maintaining a routine for the participants, help them deal with un-

certainty and be compassionate toward themselves, and give meaning to their lives (Kogan et al., 2020). Likewise, Bowen et al. (2020) highlight that 47% of people indicated that their companion animals had helped them more than before. In Puerto Rico, research has shown the importance of companion animals in people's lives, especially highlighting their role as companions, givers of unconditional support, and above all, family members (Aragunde-Kohl, 2016; Meléndez-Samó, 2014b, Meléndez-Samó & Segarra-González, 2018, Segarra-González, 2011). Hunjan & Reddy (2020) argue that companion animals could be beneficial during these pandemic times because animals' nonjudgmental and loving approach induces feelings of trust, calmness, and well-being.

In general, most participants mentioned that their companion animals showed them unconditional love and support during this lockdown. This finding is similar to the results of Bowen et al. (2020), suggesting that "the relationship that people have with their dogs and cats is helping to compensate for the dramatic reduction in their social and physical interactions with people" (p. 90). They even add that those who reported perceiving more help from their companion animals and greater emotional closeness are those whose quality of life has been most affected by the confinement. Given this fact, it is inevitable to remember the psychological impact that confinement for quarantine can have on some people, including developing acute post-traumatic stress syndrome (Brooks et al., 2020). Therefore, recognizing social support as one of the mechanisms for coping with challenging life events, it is worthwhile to analyze how living with a companion animal can be associated with the prevention of mental health disorders. Hunjan & Reddy (2020) add that companion animals help individuals stay healthy and happy in these uncertain times while providing an additional source of respite from their daily stressors.

Companion animals as a source for social and psychological support are well established in the literature as a protective factor that leads to a better quality of life and well-being (Allen et al., 2002; McConnell & Brown, 2011). Consequently, in an event such as a pandemic with the need to isolate oneself,

it is inevitable to establish how social support plays a crucial role in our well-being (Saltzman et al., 2020). When combining the results of this research with the literature cited, it is essential to consider, in times of social isolation, the predominance of the positive effects of interaction with a companion animal on its guardian. However, it is important to address the point that this is not a universal remedy and that it can vary in positive or negative ways depending on the unique circumstances of each person or family (Lora et al., 2020). Likewise, there is a need to look at the other side of the bond and to understand the impact that the guardians have on their companion animals, having been at home now all the time.

In this study, 83.7% of people responded that they perceived their companion animals to be happier for having them in the house all the time. Nevertheless, 7.1% perceived that their animals were anxious about this fact. When comparing these results with the cited research in Kogan et al. (2020), the perception that companion animals have benefited to some extent from confinement in terms of interaction with their guardians is repeated. Ratschen et al. (2020) also reported only 5.2% of animals caused family problems. However, Bowen et al. (2020) found that 37% of dogs showed greater difficulty adapting to confinement while cats were less affected, highlighting differences between species. These researchers emphasize how more than just emerging problematic behaviors, existing behaviors also are likely to worsen. In the same way, they emphasize that stress, not only related to COVID-19 but also directed to other matters of health, work, or finances, among other causes, can increase in this challenging time, which can directly affect companion animals. Hence, given these findings, it is advisable to carry out more studies that objectively involve the impact of lockdowns on companion animals.

Regarding the economy and access to companion animal-related resources, most participants showed greater concern for access to services (e.g., veterinarians, food, grooming) than for the economic aspect. In other words, although finances could be affected by a possible break in or loss of employment, for companion animal guardians in Puerto

Rico, this was not a current concern. Applebaum et al. (2020), Bowen et al. (2020), Kogan et al. (2020), and Ratschen et al. (2020) report similar results. It is essential to consider that at the time of conducting this research, only 4 to 8 weeks had elapsed, so a direct effect on the economy might not yet have been observed. It would be important to contrast these results months later to evaluate this concern's continuity versus possible economic hardships and its impact on the human-animal bond, particularly with recent natural disasters in Puerto Rico, which caused high rates of abandonment and of surrendering animals to shelters due to economic problems and loss of homes (Segarra-González et al., 2019).

It is also important to consider, as other authors have discussed, the significant increases in adoptions due to confinement because of COVID-19, without ignoring the element of the possible burden and perceived costs that this entails (Lora et al., 2020; Vincent et al., 2020).

Emergency Planning for the COVID-19 Lockdown, Including Companion Animals

When exploring guardians having an emergency plan that includes their companion animals, if they become infected with this virus, almost all our participants said they were concerned about the possibility of getting sick. Additionally, they stated that they had named a support person who could take care of their companion animals in their emergency plan. This data should be carefully analyzed since it would be necessary to question whether it is the guardian's perception of that support person's availability or if, indeed, they had established a plan that included confirmation of that duty from that resource.

It is important to highlight that Puerto Rico has been impacted by significant natural disasters (Hurricanes Irma and María in 2017 and a 6.1 earthquake in January 2020). Thus, there has been an increase in promoting the inclusion of companion animals in emergency planning. Therefore, more people in Puerto Rico may be considering them in emergency preparedness. Kogan et al. (2020) reported that just over half (59.4%) of their participants had

an emergency plan. Other research reported relatively low percentages of people who were concerned about what would happen to their companion animals if they got sick and had no one to care for them (Applebaum et al., 2020 [9%]; Ratschen et al., 2020 [22%]). A key factor to consider is that although most people are concerned about being infected with the virus, Bowen et al. (2020) comment that this concern comes from preexisting health problems, which cause an increase in stress levels that can, in turn, impact their companion animals. This observation leads us to discuss the impact that this pandemic has had on the guardian–companion animal interaction and on each of them individually.

According to this study's findings, there were no substantial changes observed in the interaction between guardians and their companion animals that negatively impacted the relationship. Only 4% answered that their companion animals added stress and worries, and 1% stated that they were time-consuming during the lockdown. These data are similar to those found by Applebaum et al. (2020), who elaborate that 11% of people felt negatively impacted and that only 3% saw the companion animal as a burden. Bowen et al. (2020) also reported 5.8% (dog guardians) and 1.6% (cat guardians) regard the relationship getting worse in some way. However, they did highlight that the confinement negatively affected the lifestyle of 49% of the people. Kogan et al. (2020), in the same way, mention that for a small number of people, the relationship became tense (2.2%) or had gone through both a strengthening or a difficult phase (15%). In contrast, more than half of the participants felt that the dog-guardian relationship had strengthened. Overall, it seems to be an interesting consensus that the pandemic has allowed more positive interaction opportunities between people and their companion animals.

Companion Animal Guardian's Gender

This research also confirms females as the majority of participants as in many investigations on human-animal interactions. When considering this study with other research on COVID-19 and companion

animal guardians with large samples (Applebaum et al., 2020; Bowen et al., 2020; Kogan et al. 2020; Ratschen et al., 2020), the average percentage of participation of females is 87.6%. Smith (2008) noted the extensive participation of females over males in online questionnaires. Díaz-Videla and Olarte (2018) found that although males and females interact similarly with animals, females show greater emotional closeness. Additionally, they stated that “there are marked gender differences in other behaviors linked to animals” (Díaz-Videla & Olarte, 2018, p. 121). This study contributes to and confirms these possible gender differences. However, it is important to consider other factors associated with online questionnaire accessibility and social network use.

Strengths and Limitations

This study was done throughout the fourth and eighth weeks of the COVID-19 lockdown in Puerto Rico. For health and safety purposes, an online survey was a no-risk means of reaching a larger sample. It allowed the opportunity to collect data during the event, rather than asking respondents to recall it. Since it was anonymous, people could feel free to express feelings or attitudes without fearing individual judgment. However, this study was quantitative, cross-sectional, and only included self-reported measures. Therefore, it is subject to biases. Since there was no compensation for study participation, it may have been the companion animal enthusiasts or the highly committed guardians who responded. Additionally, females who live in households with other adults and had dogs as companion animals were overly represented in this study.

Directions for Future Research

This study covered topics worthy of further exploration, one being the role that companion animals play in their guardians' lives, particularly during difficult times, as a social support source. It is important to know mediating factors such as previous relationship dynamics and history of preexisting behavior issues to see if that could determine the perceived benefits/

grievances drawn from companion animals. Another factor is the gender demographic variable. Blazina & Kogan (2019) report that males endorsing traditional forms of masculine gender underreport or mask their affectionate behaviors toward animal companions and report more difficulty placing into words the bond they have with their dogs. Thus, it is important to have diverse gender representation, to understand better similarities or differences in their experiences. Since it has been more than a year now, more research is needed to address possible changes in circumstances such as economy, job status, and human–companion animal interactions.

Conclusions

For people living with companion animals, especially women with dogs, during the COVID-19 lockdown in Puerto Rico, that interaction has positively impacted their lives. Many felt highly attached to their companion animals. This finding is important because it highlights how companion animals helped their guardians to feel/cope better in uncertain times. It also increases awareness about the vital role that companion animals can play when other protective factors are limited. These results also raise the importance of considering companion animals during decision making in emergency planning by families and authorities.

Acknowledgments

We want to thank the participants who, even though they were dealing with a novel and uncertain time, took the time to voluntarily share their experiences in this research. Also, we want to acknowledge our wonderful nonhuman animal companions who have inspired us to keep researching the human-animal bond.

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