

Psychedelic Medicine for Animals

What's the Potential?

Dr. Casara Andre | Veterinarian

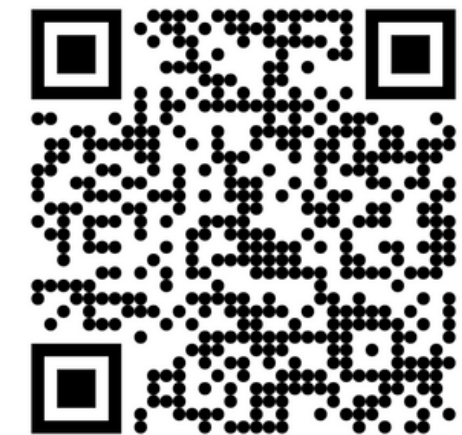


Lecture slides &
references





1. The Problem – Behavioral Disease in Animals
2. Interconnected – Animal, Human, Ecosystem Health
3. Power of Perspective – Zoonosis vs. Zooeyia
4. Critical Learning Periods – Training, Consent, Integration
5. Potential of Psychedelic Medicine in Animal Health



Lecture slides
& references



OVERVIEW



The Problem: Behavioral Disease in Animals

Behavioral disorders (diseases) are *not exclusive* to humans.

Behavioral diseases in animals *directly affect* human health and wellbeing.



Behavioral Disease in Animals

Behavioral disease in animals *directly affects* human health and wellbeing.

- Between 60-70% of households in the U.S. include dog(s) and/or cat(s).
- About 60% U.S. households have multiple pets.



Behavioral Disease in Animals

- *Young* dogs (< 3 years old) are 33% more likely to die due to an unwanted behavior than any other causes of death. (2)
- *Worldwide*, problematic behaviors are a top reason for relinquishment of dogs to shelters. (3)
- *Aggression and destructive behaviors* are the most common problem behavior resulting in relinquishments. (3)

3.

2. Boyd C, Jarvis S, McGreevy PD, et al. Mortality from undesirable behaviours in dogs. *Animal Welfare*. 2018

3. Powdrill-Wells N, Taylor S, Melfi V. Reducing Dog Relinquishment to Rescue Centres. *Animals (Basel)*. 2021.



Risks to public (human) health

Behavioral disease in animals *directly affects* human health and wellbeing.

- Bite risk, aggression to adults and children
- Loss of companionship & emotional support
- Medical service animals (diabetic alert, seizure alert) utilization
- Caregiver fatigue & strained human-animal bonds
- Moral injury & professional grief in veterinary & animal-care professionals



Risks to Animal Health

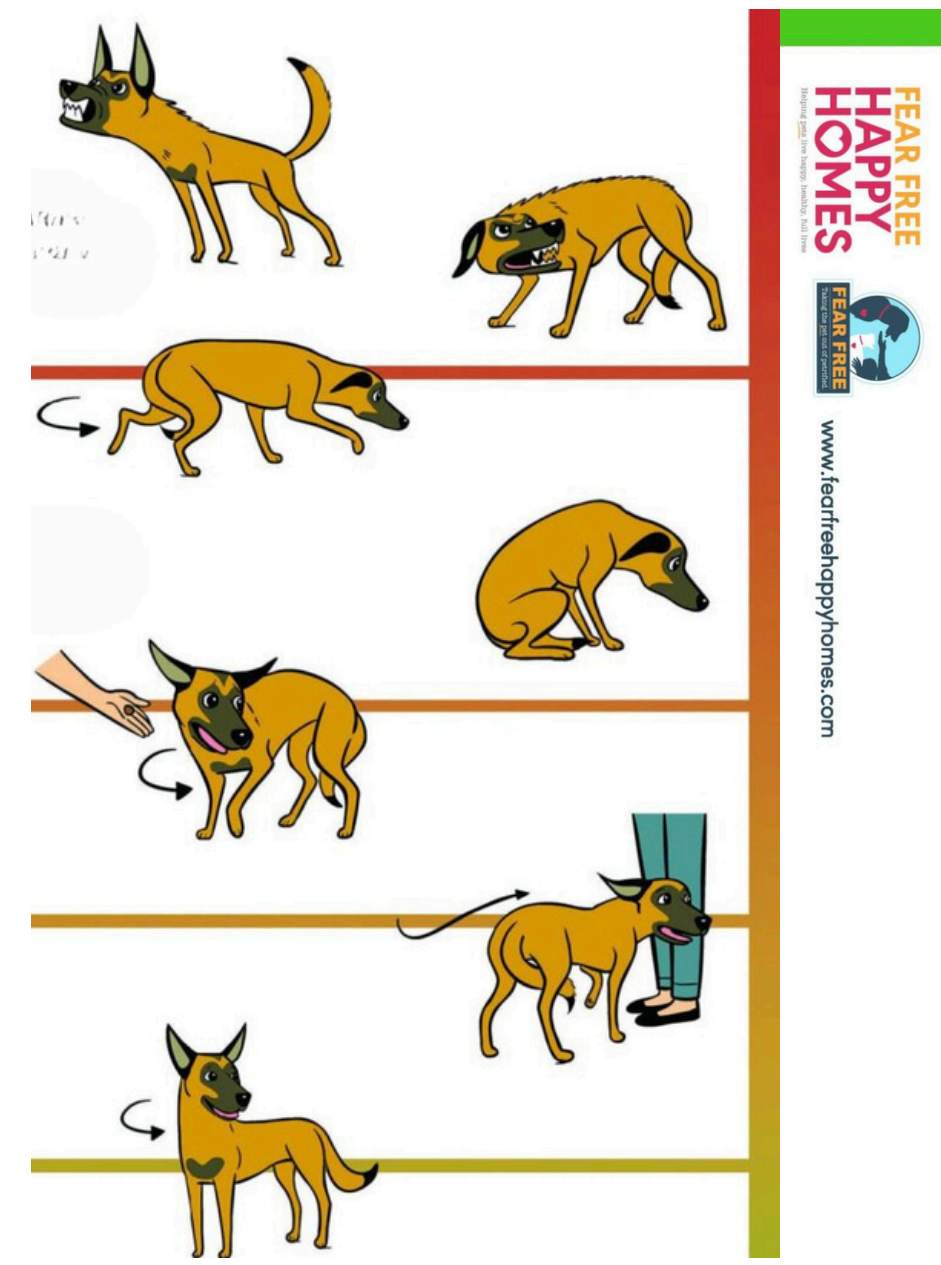
Behavioral disease affects animal quality of life and access to medical care.

- Untreated / unresolved pain, anxiety, stress
- Delayed / incomplete veterinary medical care
- Strained Human-Animal bond (HAB)
 - Risk of euthanasia
 - Risk of rehoming & abandonment



What does *behavioral disease* look like in animals?

- Problematic behaviors - aggressive, destructive, etc.
- Fearful, anxious, aggressive, avoidant behaviors
- Overly reactive and vigilant
- Abnormal sleep patterns
- Impact on other systems-gastrointestinal, immune, skin
- Difficulty forming social bonds





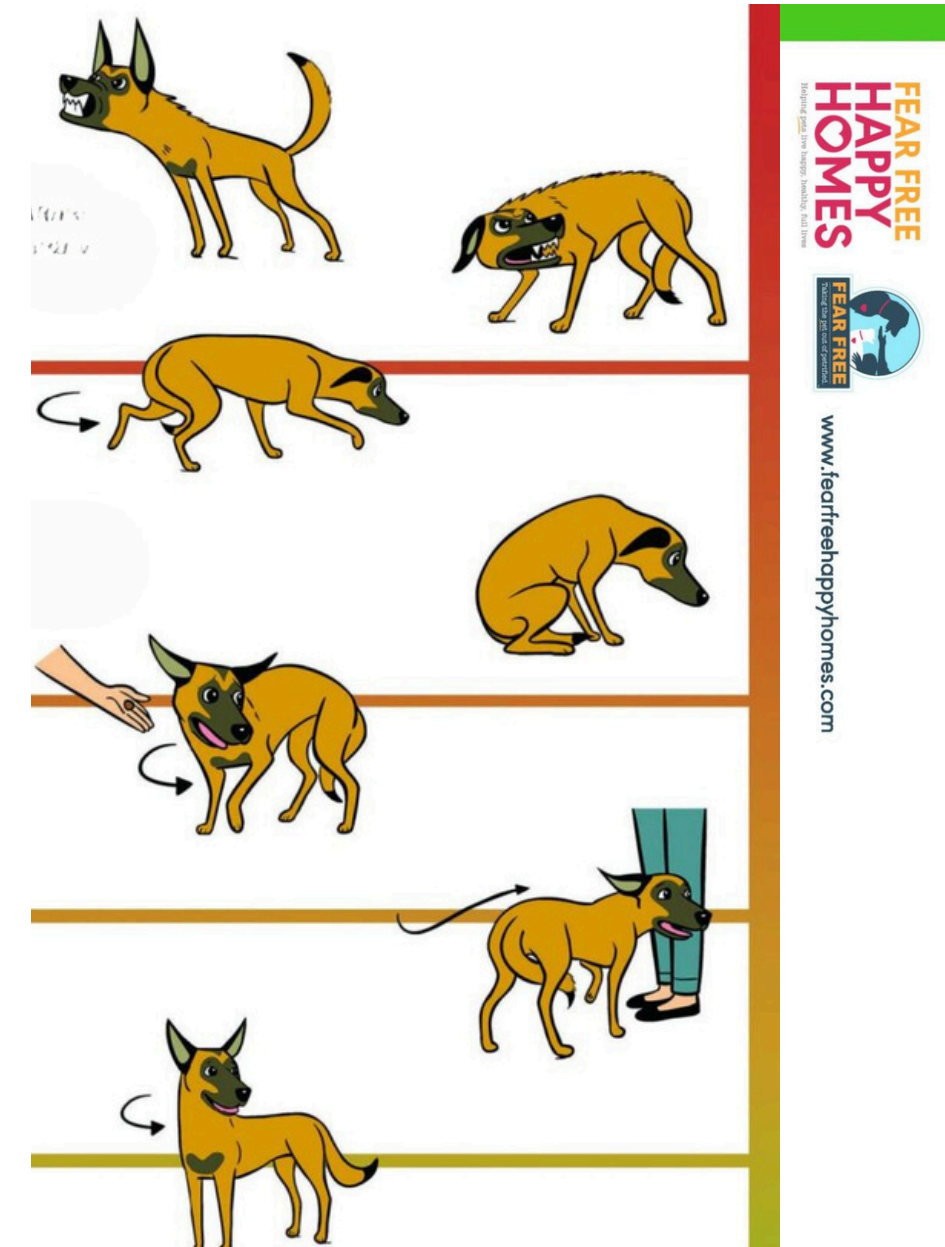
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Observable

Traceable

Able to be clinically modified





Interconnected: Animal - Human - Environmental Health

Human behavioral disease is inseparable from animal behavioral health

- Between 60-70% of households in the U.S. include dog(s) and/or cat(s).
- About 60% U.S. households have multiple pets.

> [J Vet Behav.](#) 2020 Nov-Dec;40:75-91. doi: 10.1016/j.jveb.2020.05.013. Epub 2020 Jun 13.

The effects of the Spanish COVID-19 lockdown on people, their pets, and the human-animal bond

[Jonathan Bowen](#)^{1 2}, [Elena García](#)¹, [Patricia Darder](#)¹, [Juan Argüelles](#)³, [Jaume Fatjó](#)^{1 4}

Affiliations + expand

PMID: 32837452 PMCID: [PMC7292953](#) DOI: [10.1016/j.jveb.2020.05.013](#)



Conclusions

Our study found that pet owners gained substantial support from their pets, and that support was increased when the owner's QoL was more impaired. Support was also associated with increased emotional closeness and interaction with the pet. We also

5. Bowen J, García E, Darder P, Argüelles J, Fatjó J. Effects of COVID-19 lockdown on people, pets, and the human-animal bond. *J Vet Behav.* 2020.

Power of Perspective

- One Health | Animal, Human, Ecosystem
- Zoonosis

- **A zoonosis is any disease or infection that is naturally transmissible from vertebrate animals to humans**
- **There are over 200 known types of zoonoses**
- **Zoonoses comprise a large percentage of new and existing diseases in humans**

Power of Perspective

- One Health | Animal, Human, Ecosystem
- Zoonosis | Disease transferable across species
- Zooeyia “zoo-AH-uh”

- Zooeyia is defined as *"The positive benefits to human health from interacting with animals."*
- From the Greek root words for animal (zoion) and health (Hygeia was the ancient Greek goddess of health, the same source as “hygiene”).
- Zooeyia is the positive inverse of zoonosis (from the same “zoion” and “nosos,” or disease).



Power of Perspective

- One Health | Animal, Human, Ecosystem
- Zoonosis | Disease transferable across species
- Zooeyia | Positive health benefits to humans from interacting with animals



Animals share our spaces.
They *also* share our risks and emotional disease?

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Our study found that pet owners gained substantial support from their pets, and that support was increased when the owner's QoL was more impaired. Support was also associated with increased emotional closeness and interaction with the pet. We also

found interesting associations between behavioral problems, general behavioral changes and aspects of the confinement, but some indication that the increased emotional needs of owners could negatively affect pets that had existing behavioral problems. The findings of the study point to ways in which we may be able to minimize the effects of the confinement period.

However, this study represents a general snapshot of the effects of a particular kind of official confinement in one country. It points

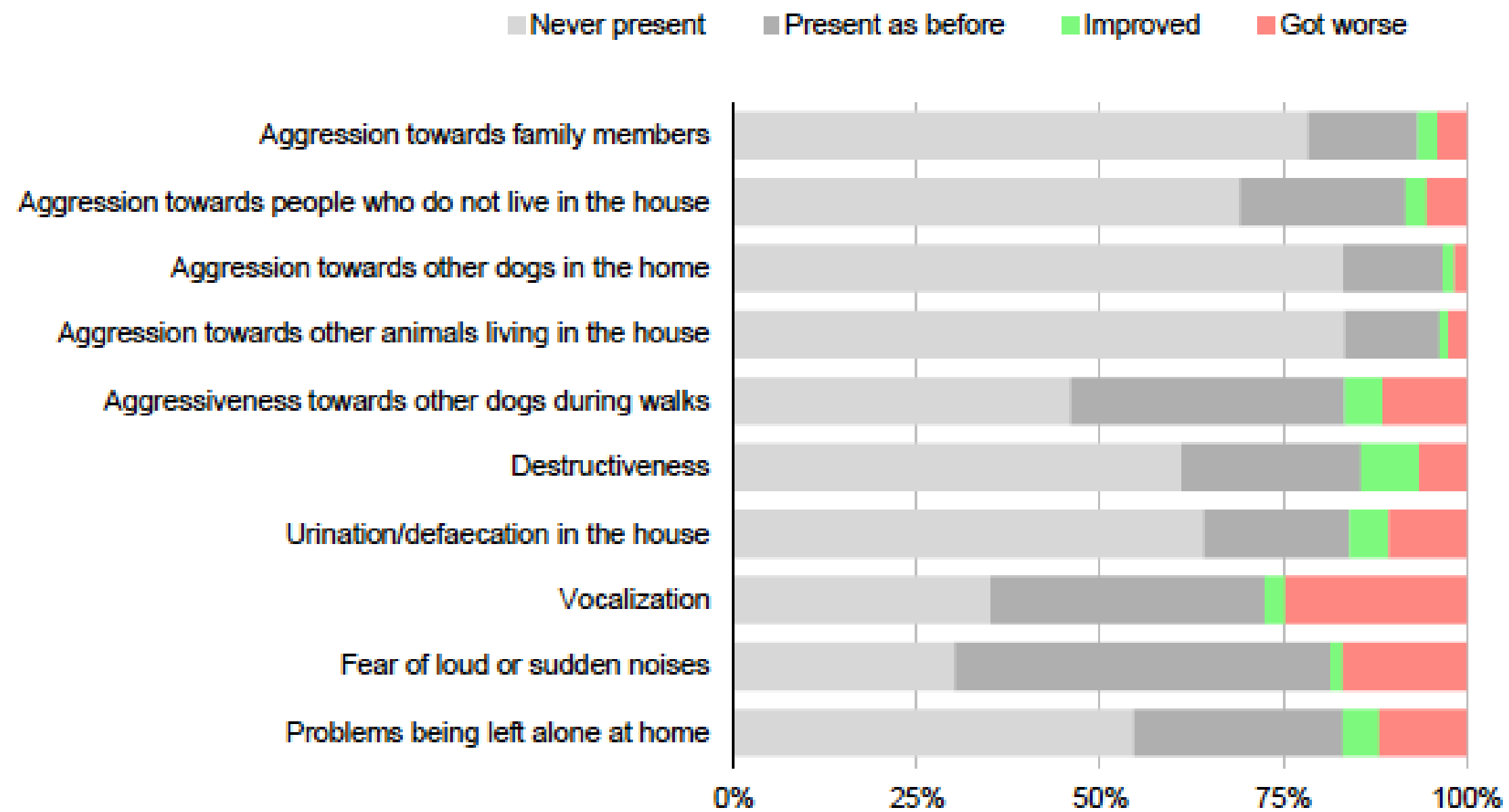
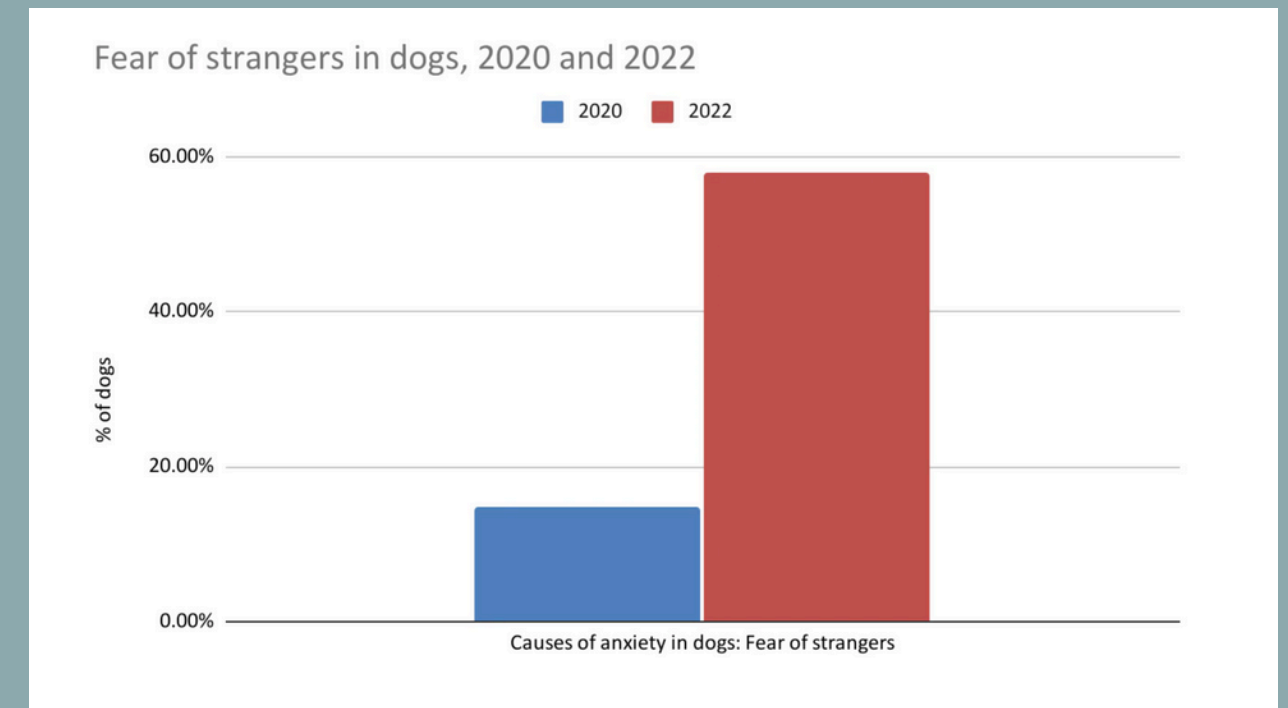
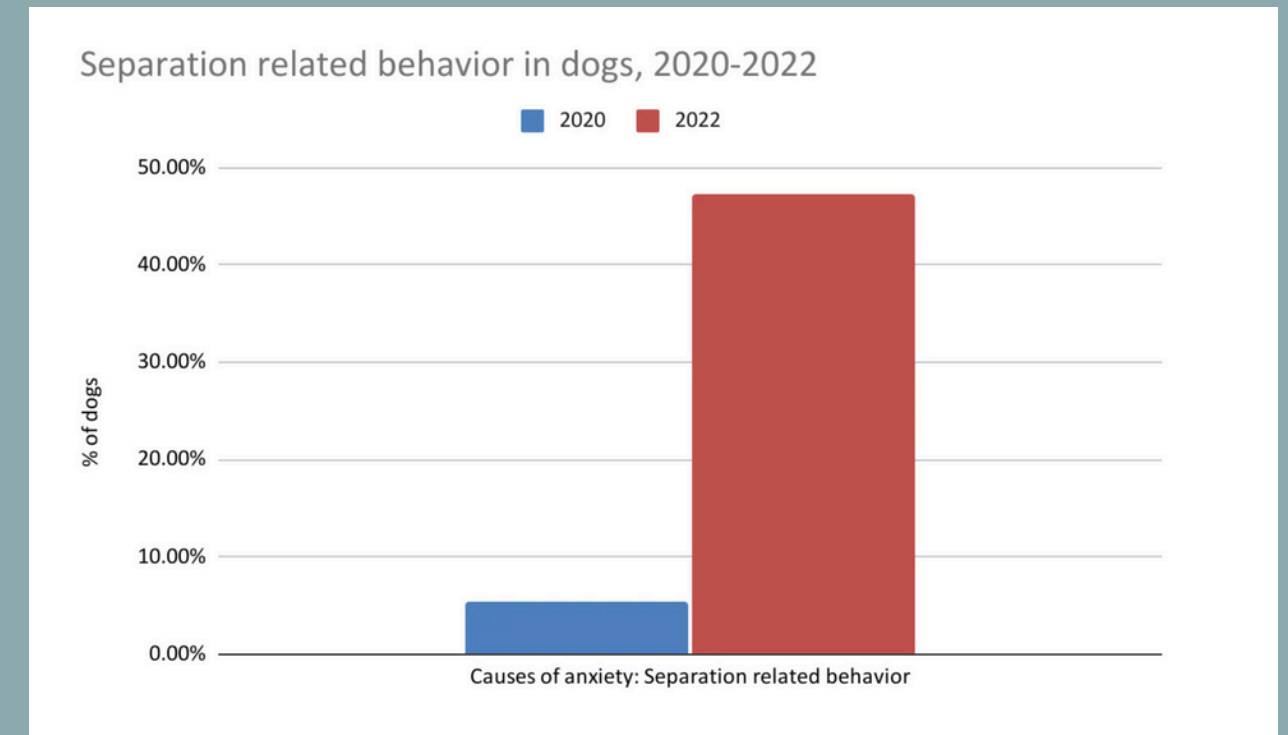
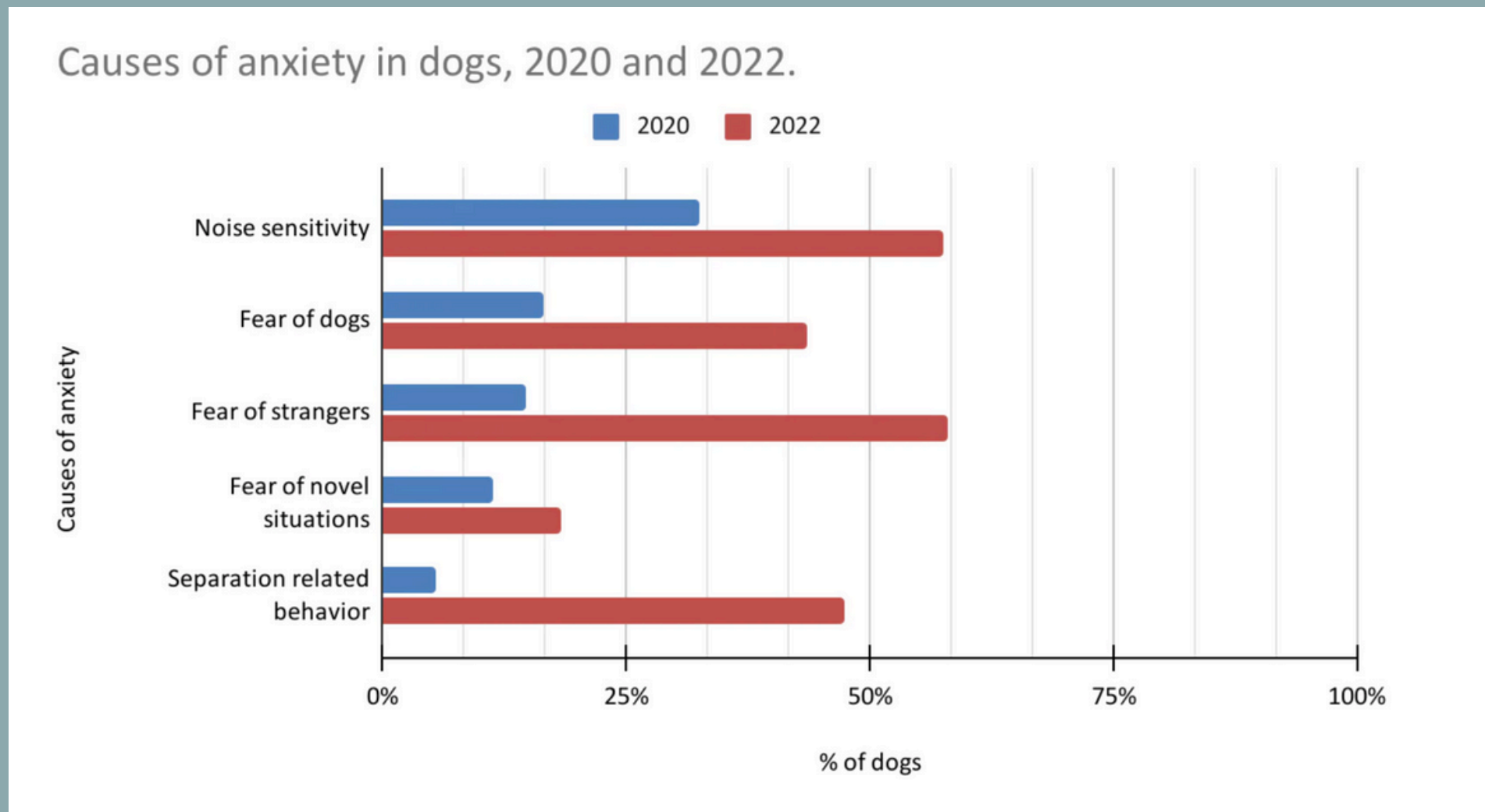


Figure 8. Illustration of the problematic behaviors of dogs and how they changed during the confinement. "Never present" indicates cases for which the behavior was not observed in the animal either before or during the confinement.

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Trends in pet anxiety between 2020 and 2022.

- Anxiety in dogs increasing from 40% to over 700%
- 295% increase of fear of strangers



7 DVM360 Staff. Increased levels of anxiety in pets since the COVID-19 pandemic. 2022.

Critical Learning Periods in Animals

Training, Consent, Integration



Critical Learning Periods in Animals

Training, Consent, Integration

- Open for short, important periods of time
- Critical for survival
- Influence learning and behavior throughout life



Detection & Protection Animals

- Search and rescue teams
- Cadaver search teams
- Military and police teams



Medical & Mobility Service Animals

- Diabetic alert animals
 - Seizure alert animals
 - Mobility support animals
-
- Including emotional support animals

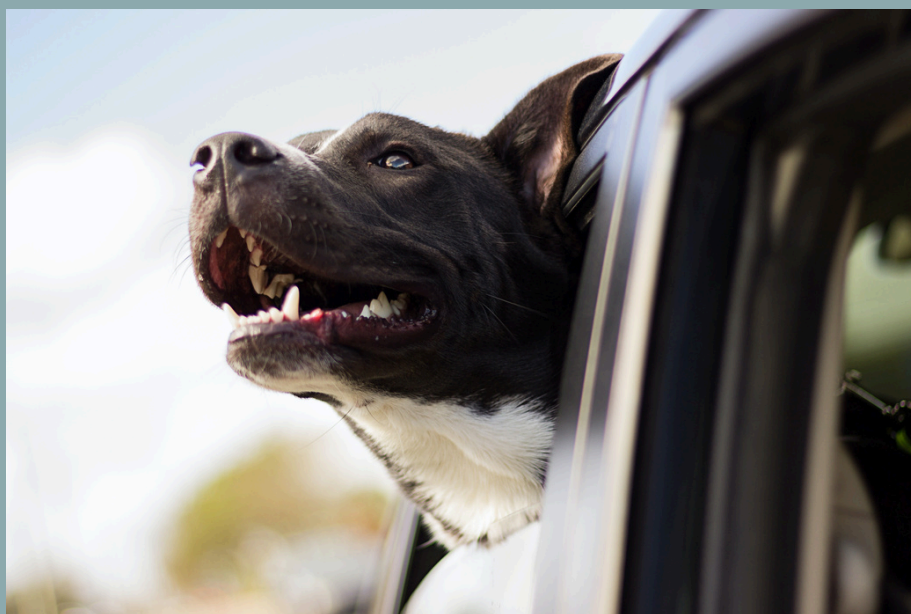
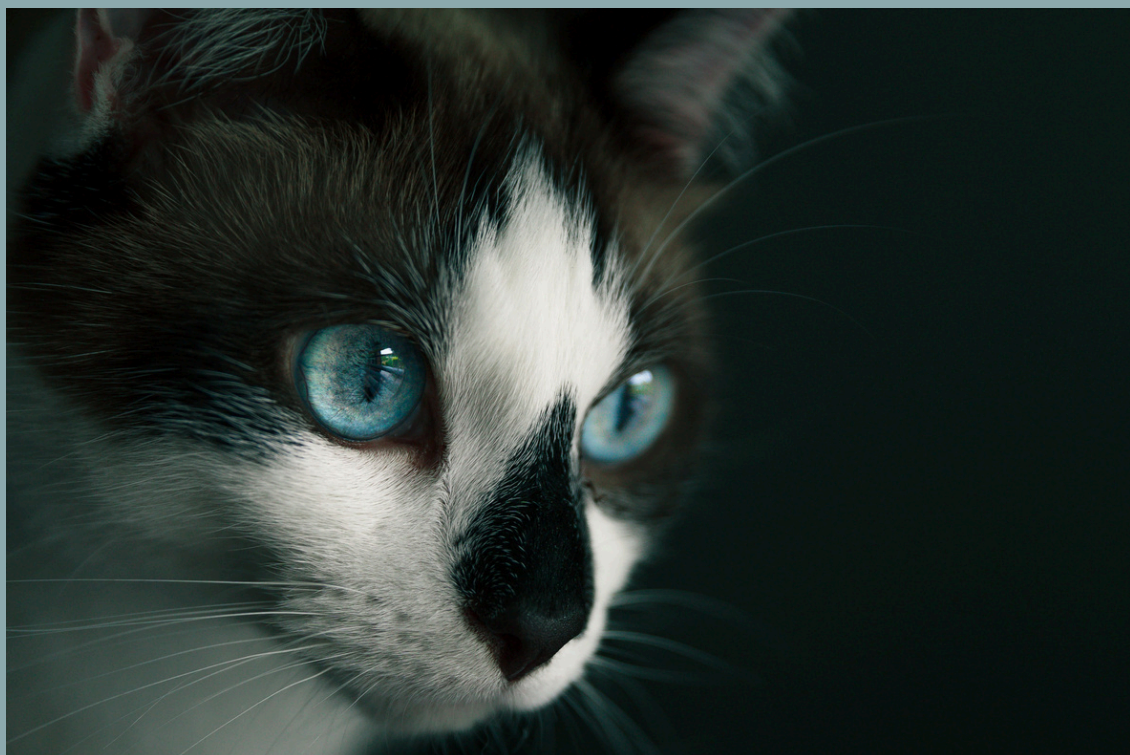


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Training, Consent, Integration

- Open for short, important periods of time
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Critical Learning Periods in Animals

Training, Consent, Integration

- **Safety during development**
- **Prevention / healing of trauma**
- **Consent-focused care**

Critical Learning Periods in Animals

Training, Consent, Integration

Consequences of:

- Missed exposures
- Negative exposures
- Rapidly shifting environments, unnaturally habitats
- Stress / dys-regulation of the family-unit



Puppy mills

Fight rings and physical abuse

Sexual abuse by humans

Victims of disaster, deforestation

Captivity, research, experimentation



Critical Learning Periods in Animals

Training, Consent, Integration

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- **Prevention / healing of trauma**
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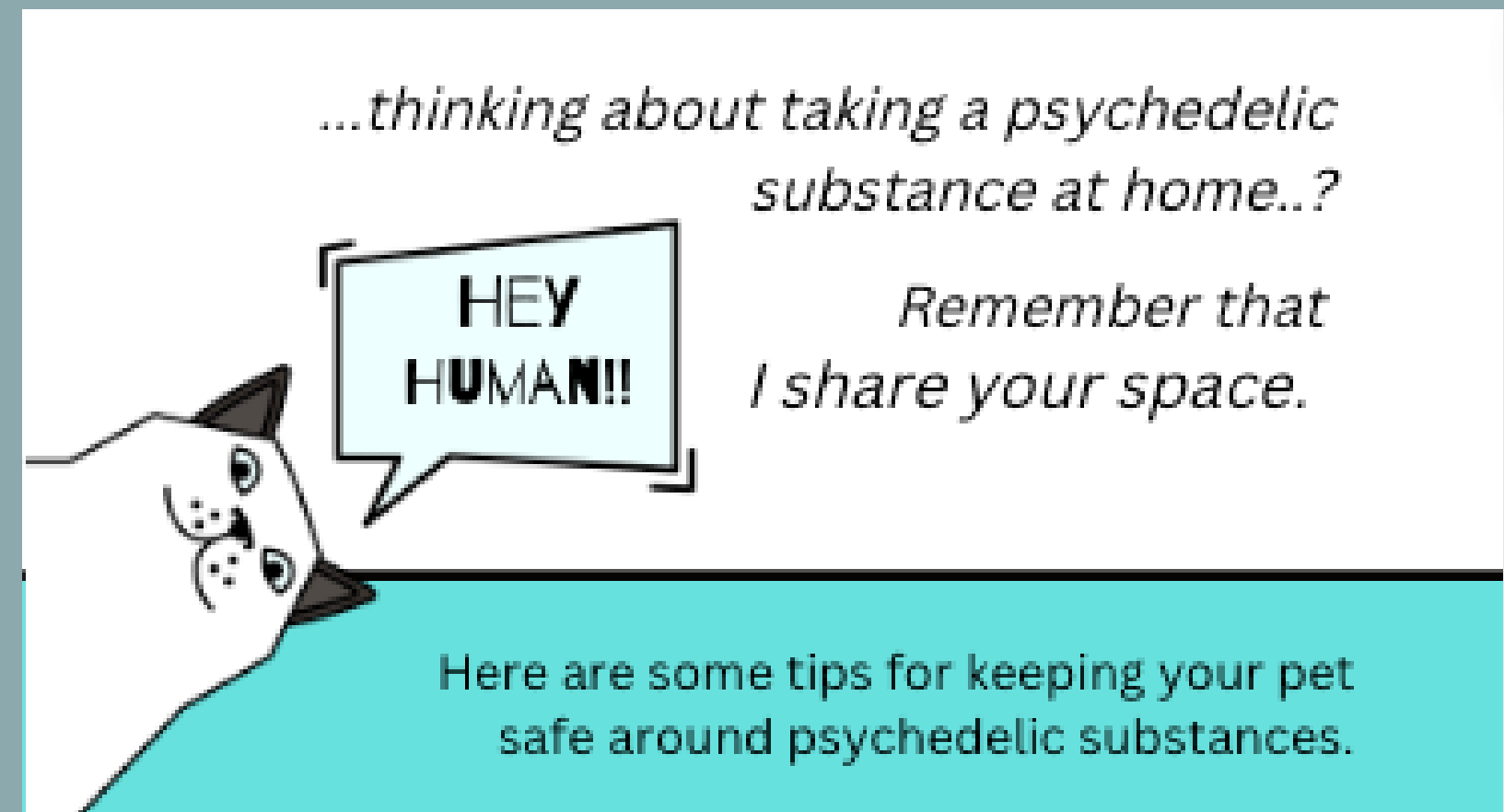
What animals share your space?

How does family-unit health affect animal development?

What is trauma-informed care in animals?

Safety for Animals in Emerging Psychedelic Spaces

- Pre-existing behavioral disease
- The untrained support animal
- Consent in non-verbal beings.
 - Cross-species communication
- Bite risk for guides & facilitators
- Risk & severity of trip / fall trauma
- Accidental ingestions
 - Psychedelic substance or other
 - Chocolate toxicity



Potential of Psychedelic Medicine for Animal Health



Potential of Psychedelic Medicine for Animal Health

- Support of the Canine Veteran
- Canine post-traumatic stress disorder (PTSD)
- Bi-directional healing - bonded human animal pairs
- Amputees & neurologic disease
- Critical period reopening



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Psychedelic medicine for animals

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