

# Pandemic Puppies: A canine welfare timebomb?

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## Background

- Following the first COVID-19 lockdown in 2020, increasing numbers of the UK public began purchasing puppies, the so-called 'Pandemic Puppy' phenomenon.
- In 2020 the RVC Pandemic Puppies study<sup>1,2</sup> characterised the **pre-, during and post-purchase motivations and behaviour** of owners who purchased a puppy aged <16 weeks during the pandemic, along with puppy and owner demographics, early puppy socialisation experiences, behaviour and health ( $n=5517$ )

**1 in 10** Pandemic Puppy owners had not considered buying a dog before the pandemic

- Compared to owners who purchased puppies pre-pandemic (in 2019), Pandemic Puppy owners showed **reduced adherence to recommended puppy-buying practices** and were significantly **more likely to be first-time dog owners**<sup>2</sup>.
- Pandemic Puppies were significantly more likely to have been purchased with a **passport, without their mother/littermates present** and collected **outside of their breeders' property** than 2019 puppies<sup>1,2</sup>.
- Pandemic Puppies were significantly less likely to have attended **training classes** (either in-person or online) or **experienced visitors in their home** <16 weeks of age than 2019 puppies<sup>2</sup>.



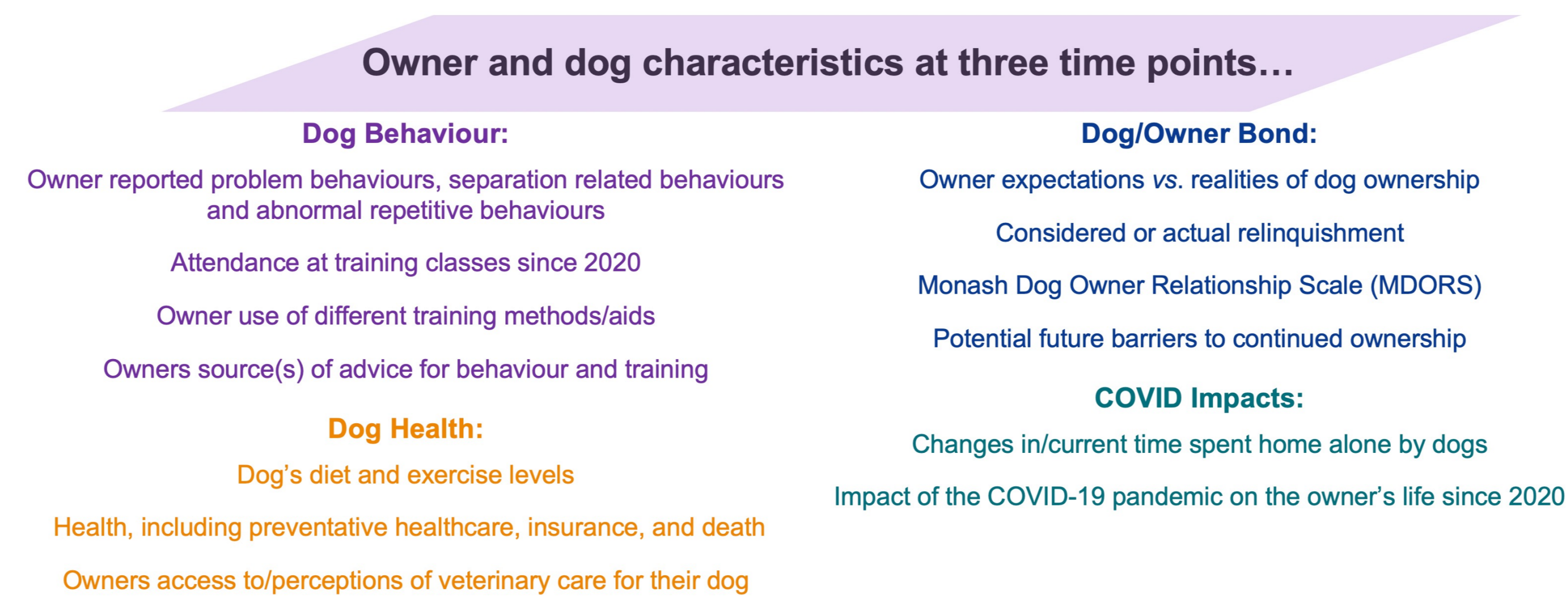
## Study Objectives

- Develop an online platform to longitudinally study the **behaviour, health and management of puppies** bought during the 2020 phase of the COVID-19 pandemic in the UK.
- Quantify changes in health, behaviour and the dog-owner relationship of Pandemic Puppies at **21, 24 and 27 months of age** (see **Figure 1**).
- Identify risk factors for **poor puppy outcomes** including (i) relinquishment, (ii) consideration of relinquishment, (iii) poor health and (iv) behavioural problems over the first two years of ownership, including the influence of:
  - Initial **acquisition practices** (including pre-purchase behaviour and motivations, and purchase behaviour).
  - Puppies **early life experiences** aged <16 weeks.
- Thematically analyse free-text data to explore attitudes towards dog-ownership including expectations vs. realities of ownership.

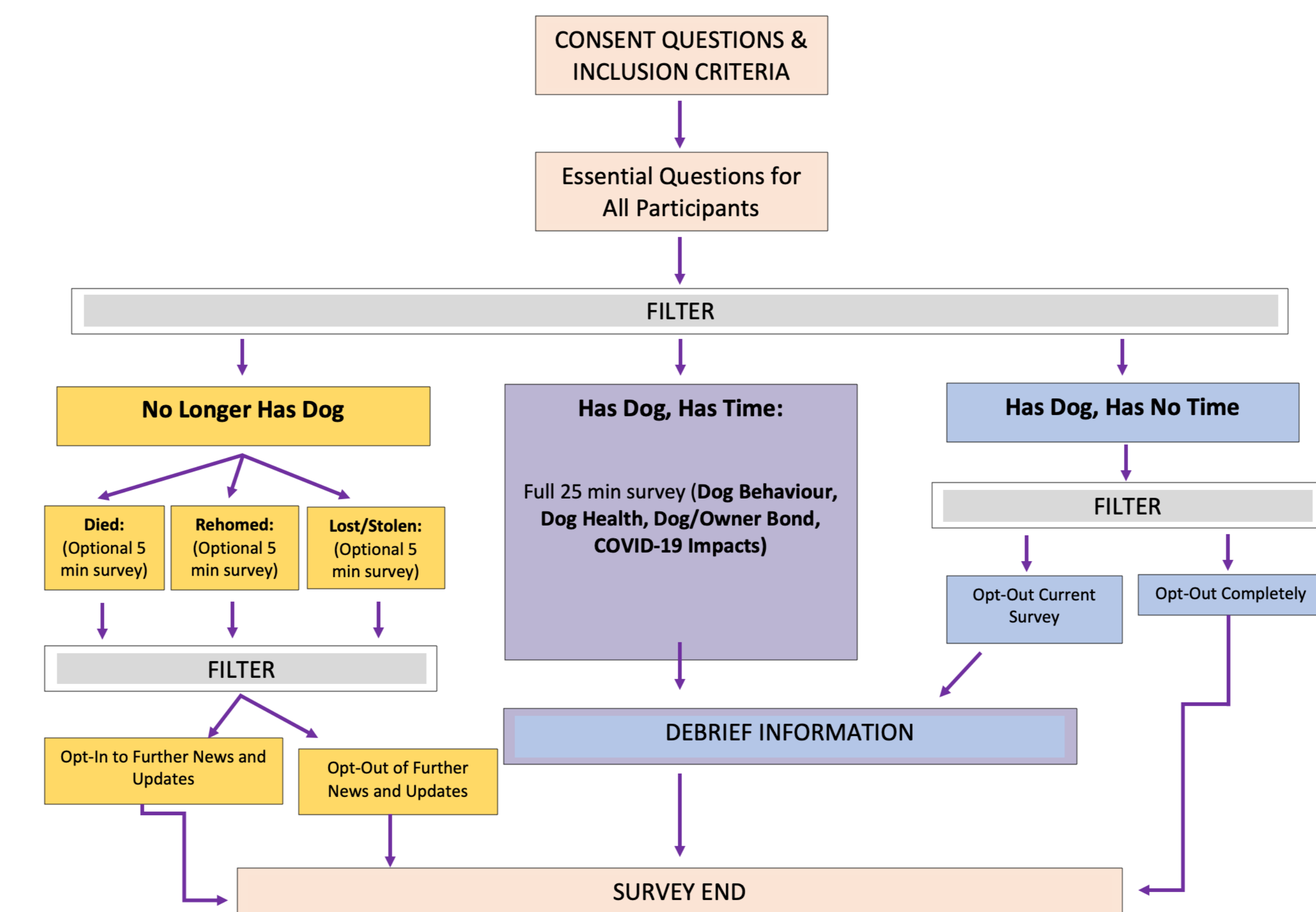
## Methodology

- Study Design:** Longitudinal mixed-methods survey.
- Inclusion criteria and recruitment:**
  - Owners who completed the RVC 2020 Pandemic Puppies survey:
    - (Over 18 years of age; resident in UK; purchased a puppy and brought them home <16 weeks old between March 23<sup>rd</sup> 2020-31<sup>st</sup> December 2020).
  - Gave informed consent to participate in further research and provided a valid email address ( $n=2431$ ).
- Sampling and Survey Design:**
  - Unique survey links emailed to participants (see **Figure 2**), hosted via RedCAP<sup>3,4</sup>, as dogs reach 21 months (638 days), 24 months (730 days), and 27 months (821 days) of age (+/- 14 days).
  - Ethical approval: Granted by the Social Science Research Ethical Review Board at the Royal Veterinary College (URN: SR2020-0259).

**Figure 1.** Areas that the longitudinal survey explores at 21, 24 and 27 months of age.



**Figure 2.** Schematic representation of the survey structure. Extensive use of branching logic and filter questions gives participants a personalised survey experience. Brief options are available for owners who no longer have their dogs, including those that have been rehomed or have died to encourage participation.



## Preliminary Results

- 21 month survey to date:**
  - 542 responses (**response rate 54.3%**).
  - Negative outcomes:**  $n=7$  rehomed;  $n=3$  euthanised;  $n=3$  unassisted deaths.
  - The levels of owner-reported **problem behaviours** in Pandemic Puppies at 21 months of age appear considerably higher than those reported in adolescent-aged UK dogs pre-pandemic (when adolescence-related behavioural challenges may be expected) (see **Table 1**).
  - Pulling on the lead** at 21 months was associated with **training class attendance and type** <16 weeks (online: 42.3%, in person: 72.3%, none: 65.4%;  $X^2=10.18$ ,  $p=0.006$ ).
  - First-time ownership** was associated with an increased likelihood of dogs **not coming back when called** (1<sup>st</sup> time owner: 62.8%, experienced owner: 46.7%;  $p<0.001$ ), **barking or howling** (1<sup>st</sup> time owner: 40.5%, experienced owner: 28.4%;  $p=0.006$ ), and **aggression towards people in your household (including you)** (1<sup>st</sup> time owner: 4.3%, experienced owner: 1.4%;  $p=0.047$ ).

**Table 1.** Owner-reported problem behaviours in Pandemic Puppies at 21 months of age in descending order of prevalence. †Prevalence reported in Lord *et al.* (2020) of 9 month old dogs in the UK in 2019 ( $n=784$ )

Behaviour	%	n	Lord <i>et al.</i> (2020) †
Pulling on their lead	67.3	476	14.9%
Jumping up at people	55.8	473	14.1%
Not coming back when called	52.8	473	13.0%
Barking or howling	33.1	475	12.7%
Chasing (e.g., cats, wildlife, traffic)	31.0	474	Not reported
Clinginess (e.g., following you, sitting close)	30.7	476	Not reported
Barking at other dogs	28.7	474	4.3%
Mouthing	27.5	473	8.3%
Fear of loud sounds (e.g., fireworks, thunderstorms)	21.0	472	Not reported
Mounting/humping other dogs, people or objects	20.8	476	Not reported
Anxiety/fear around unfamiliar people	19.0	478	Not reported
Eating their or other dogs' faeces	16.2	476	Not reported
Anxiety/fear around other dogs	15.0	474	Not reported
Toileting (weeing or pooing) indoors	13.4	477	Not reported
Being destructive	13.3	475	5.4%
Aggression towards other dogs	10.5	475	Not reported
Guarding of food, toys, or other items	10.3	477	4.3%
Aggression towards unfamiliar people	4.6	476	Not reported
Aggression towards people in your household (including you)	2.5	475	Not reported
Anxiety/fear towards people in your household (including you)	2.5	475	Not reported

## Implications

- Identifying the prevalence of known risk-factors for behavioural problems and relinquishment in the adult Pandemic Puppy population can allow dynamic tailoring of owner education and support throughout 2022 and beyond.
- This study also represents an opportunity for building the wider evidence-base on the impact of reduced socialisation experiences and less than ideal puppy-purchasing practices on adult canine behaviour and welfare.

## Acknowledgements

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**For updates check out our webpage!**

[www.rvc.ac.uk/projects/rvc-pandemic-puppies-survey](http://www.rvc.ac.uk/projects/rvc-pandemic-puppies-survey)

## References

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