The article, “Impact of Changes in Owner Leaving Pattern on Separation-Related Behaviour in Pet Dogs in the UK” investigated whether the prevalence of SRB in dogs changed with changes in dog management during and after COVID lockdowns. The authors found that owners reported that nearly 10% of dogs that did not show SRB behaviors prior to lockdown were reported to show SRB after lockdown, and the greater the change in the dog’s routine, the greater chance they had of showing new SRB. I have minor comments below and a few larger comments:

P1 L29 and P3 L112 the present tense “reduce” sounds strange to me here. I would suggest “reduced” since you are looking at changes that have already occurred.

Thank you, this edit has been applied.

P6 L176 I am assuming you excluded dogs that were not left alone in February (or were there none?)

Yes, this is correct. This is stated in line 232-233 or the original submission, but it seems we omitted it from the Methods section. Thank you for spotting that. Text has been added to lines 198-200 to explain this.

P10 L307-308 Could you make this a positive statement to show highlight the impact of amount of change on SRB: Dogs whose days left alone per week increased the most…If the data support that angle, I think it’s a stronger statement than what is written.

Within the results table (Table 2) the direction of the estimate for this result is negative. Whilst we agree that it would be more impactful worded the other way around, we worry that changing the way it is described won’t match up to the data as it was coded and reported. We haven’t changed this wording for these reasons.

Larger issues: I would like to see the authors address a few different angles in the discussion

1. That dogs showing SRB prior to lockdown were more likely to show it after. Suggests the behavior is fairly robust and dogs having shown it at one point continue to be at risk (without knowing what interventions were taken)

Yes, and no, depending on your perspective. Whilst this was a significant predictor in the modelling, in reality 55% of dogs that were being left again changed from SRB+ to SRB-. So whilst 45% of dogs still showed it, a large proportion did not.

2. Can you address the dogs that improved between Feb and Oct? You report the number of new dogs showing SRB but can you report on dogs that went the other way? What was the actual # and %? This comparison seems essential—if some dogs get worse but some get better, than the argument that changes due to COVID might bring about new SRB becomes weaker. It seems you have compared within dogs that showed SRB in baseline and other models for dogs that did not. Seems a comparison between SRB- (baseline) → SRB + (post lockdown) and SRB + (baseline) → SRB- (post lockdown) dogs is critical and missing.

Thank you for these thoughtful comments, we agree that we were a bit overly focussed on the results that supported the studies hypothesis and neglected to discuss the findings related to the dogs whose SRB appeared to have resolved. The number and percentage are detailed in the results section (lines 282-283 of the original submission and 298-298 in this one), but we failed to discuss these in the Discussion. We ran two models, one focussing on the dogs who started SRB- to see how many changed to SRB+ or remained SRB- and what factors influenced this, and the other focussing on dogs that started SRB+ to see what factors influence whether they changed to SRB- or remained SRB+. These models therefore, cover the comparisons you suggest (unless we’ve misinterpreted your comments). We have now added some discussion of the dogs who began the pandemic SRB+ however, as this was lacking from the first version (see the paragraph beginning at line 524).

3. One of the challenges in this is we don’t know background rates of change for dogs with SRB. That is, would the same % of dogs changed (in either direction) regardless of changes in owner schedules? We might see some dogs become sensitized over time and develop SRB (or something else changes in their life to precipitate it), while others might habituate or their behavior undergo extinction. As such, we can’t say for certain that these changes are due to changes in owner schedule. You note that the pseudo-R2 was small but I think you could go into more details and note the possibility that it was unrelated too. However, your results that the greater the change → the greater the new risk of SRB does lend support to the idea that this change in management might be a factor. I would suggest highlighting and discussing this outcome more.

Thank you for this comment, we have discussed this further in the Discussion now (see lines 517-523)