

# Comparison of stress levels between cats hospitalised in conventional cages and cats hospitalised in cat-friendly cages

Carla Pratdesaba Escrig - Final Degree Project  
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**UAB**  
Universitat Autònoma  
de Barcelona

## INTRODUCTION

Reducing stress in hospitalised cats is essential to avoid a compromised patient care and animal discomfort (Stoneburner et al., 2021). Taking into account that stressors have an additive effect (Amat et al., 2016), an overview of reducing stress in different hospitalisation aspects is needed. Among all this factors, an essential one is the cage, which is the place where the cat will be most of the hospitalisation time.

## AIM

The aim of this study was to see if cat-friendly cages have a positive influence in reducing cat's stress levels. In order to do so, this study compares the behavioural stress levels between cats hospitalised in conventional cages and cats hospitalised in cat-friendly cages.

## MATERIAL AND METHODS



**Figure 1:** Cat-friendly cages from CFB used in this study.



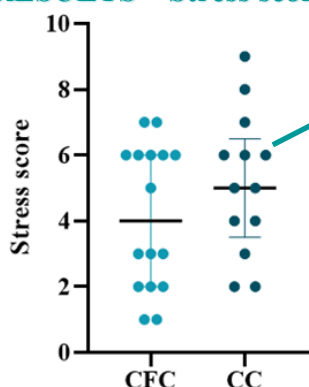
**Figure 2:** Conventional cages from FHCV used in this study.

For this study, 16 cats were hospitalised in cat-friendly cages (CFC) (Figure 1) and 13 cats in conventional cages (CC) (Figure 2).

The behavioural stress assessment tool was created by the author; it was based in 12 stress behaviours rated as present (1 point) or absent (0 points) ranked during a two-minute observation (see Figure 4 for stress behaviours) of cats hospitalised for more than 12 hours.

\*CFB = Clínica Felina de Barcelona; FHCV = Fundació Hospital Clínic Veterinari

## RESULTS—Stress scores



**CFC Stress score mean:  $4.1 \pm 2.2$**   
**CC Stress score mean:  $5.2 \pm 2.2$**

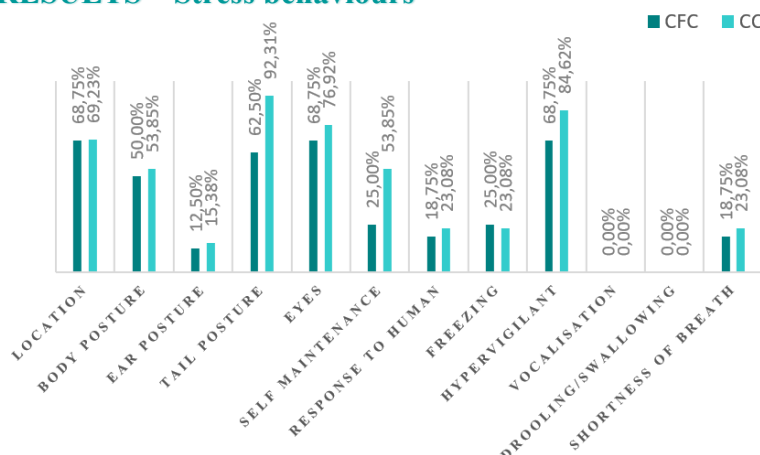
**P-value = 0.30**  
No significant difference

**Table 1:** Cats were classified in three categories (Low stress, moderate stress and severe stress) depending on the stress score obtained. In this table there are the percentages of cat-friendly cage cats and conventional cage cats classified in each category. A Fisher's exact test was performed and it was concluded that no category is significantly different among groups.

Stress score	CFC	CC	p-value	Significance
	Percentage	Percentage		
Low stress (<4)	50,00%	23,08%	0,249	ns
Moderate stress (4-7)	50,00%	61,54%	0,7107	ns
Severe stress (>7)	0,00%	15,38%	0,1921	ns

**Figure 3:** Stress scores of cat-friendly cage group (CFC) and conventional cage group (CC).

## RESULTS—Stress behaviours



**Figure 4:** Percentage of the number of times each stress behaviour was observed among groups. Non of them was significantly different among groups (P-values >0.05).

## CONCLUSIONS

Accordingly to this study, a cat-friendly cage has no significant positive effect on reducing stress in hospitalised cats when compared to a conventional cage. However, there is a tendency to reduce stress and further studies with a larger sample should be performed to verify if this tendency is real. Furthermore, it seems like providing a proper hospitalisation room it has a major importance than the cage itself and it should be considered altogether.

**REFERENCES:** Amat, M., Camps, T., & Manteca, X. (2016). Stress in owned cats: behavioural changes and welfare implications. In *Journal of Feline Medicine and Surgery*, 18(8), 577–586. <https://doi.org/10.1177/1098612X15590867>. Stoneburner, R. M., Naughton, B., Sherman, B., & Mathews, K. G. (2021). Evaluation of a stimulus attenuation strategy to reduce stress in hospitalized cats. *Journal of Veterinary Behavior*, 41, 33–38. <https://doi.org/10.1016/j.jveb.2020.07.008>