

Perch design preferences of commercial broiler chickens reared in windowed houses

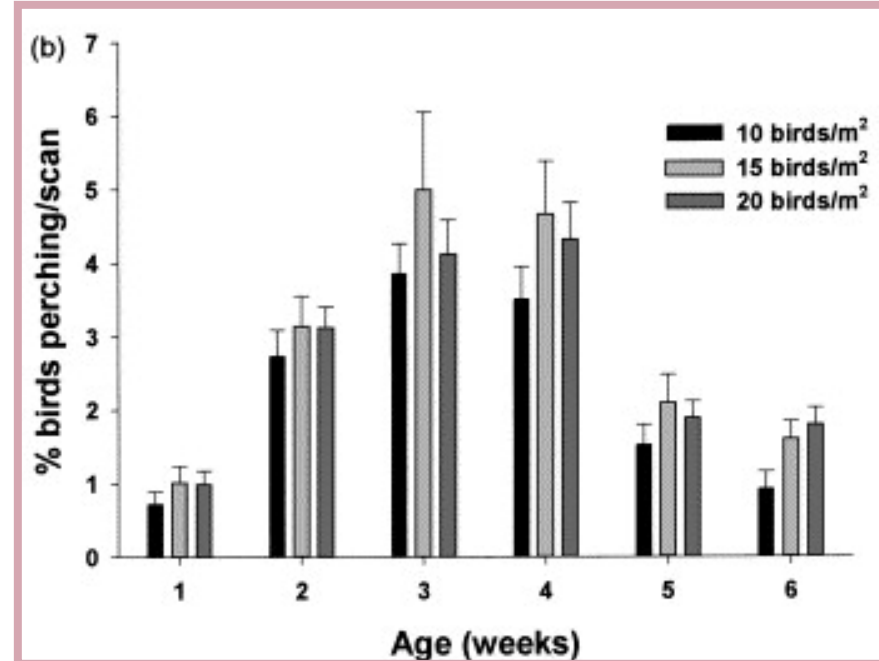
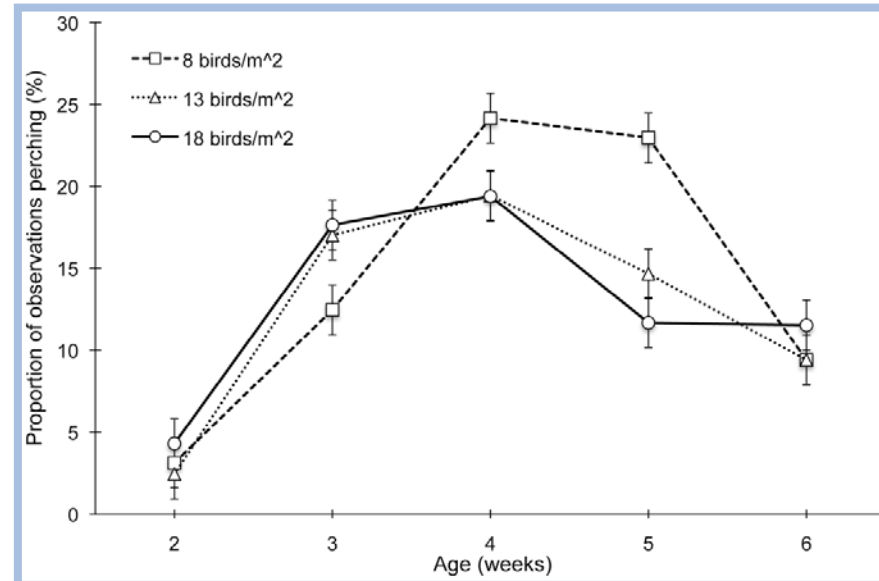


Dr Carley Bailie & Dr Niamh O'Connell
c.bailie@qub.ac.uk & niamh.oconnell@qub.ac.uk

Broiler chicken perching behaviour

Motivation to perch persists in fast growing commercial broiler chickens (eg Ventura *et al.*, 2010; Ventura *et al.*, 2012)

Levels of perching behavior are generally low (eg. Le Van *et al.*, 2000; Su *et al.*, 2000; Pettit Riley and Estevez 2001)



Experimental design and method – perch designs

Step up perch



Swinging bar



Suspended platform

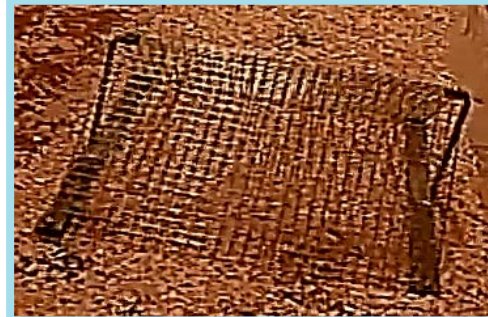


Experimental design and method – perch designs

Flat top ramp



Curved mesh ramp



A frame



Experimental design and method

Farm 1

Timber framed house 1098m²

Initial stocking density:

Cycle 1: 12birds/m²

Cycle 2: 17birds/m²



Farm 2

Steel framed house 1325m²

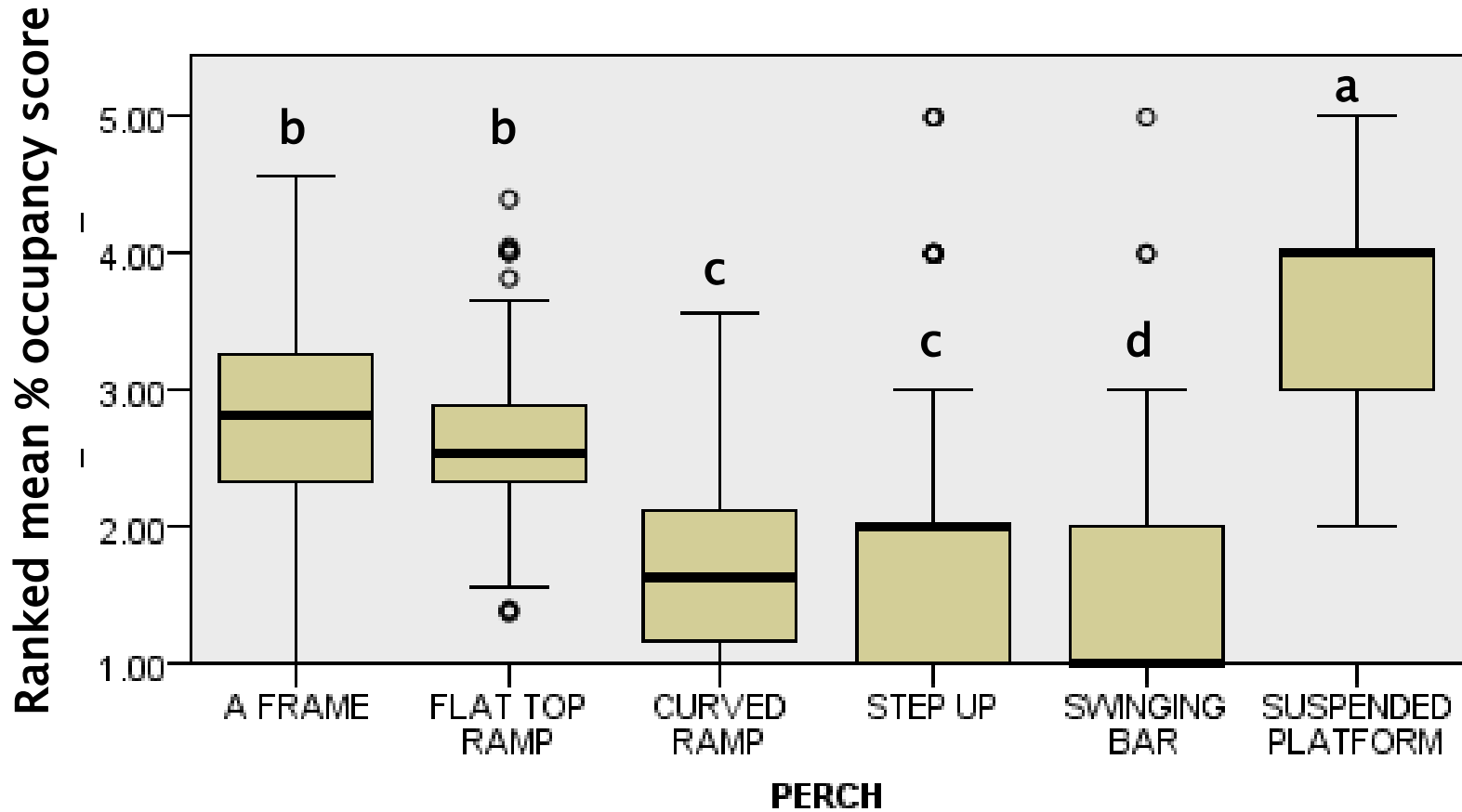
Initial stocking density:

Cycle 1: 12birds/m²

Cycle 2: 17birds/m²



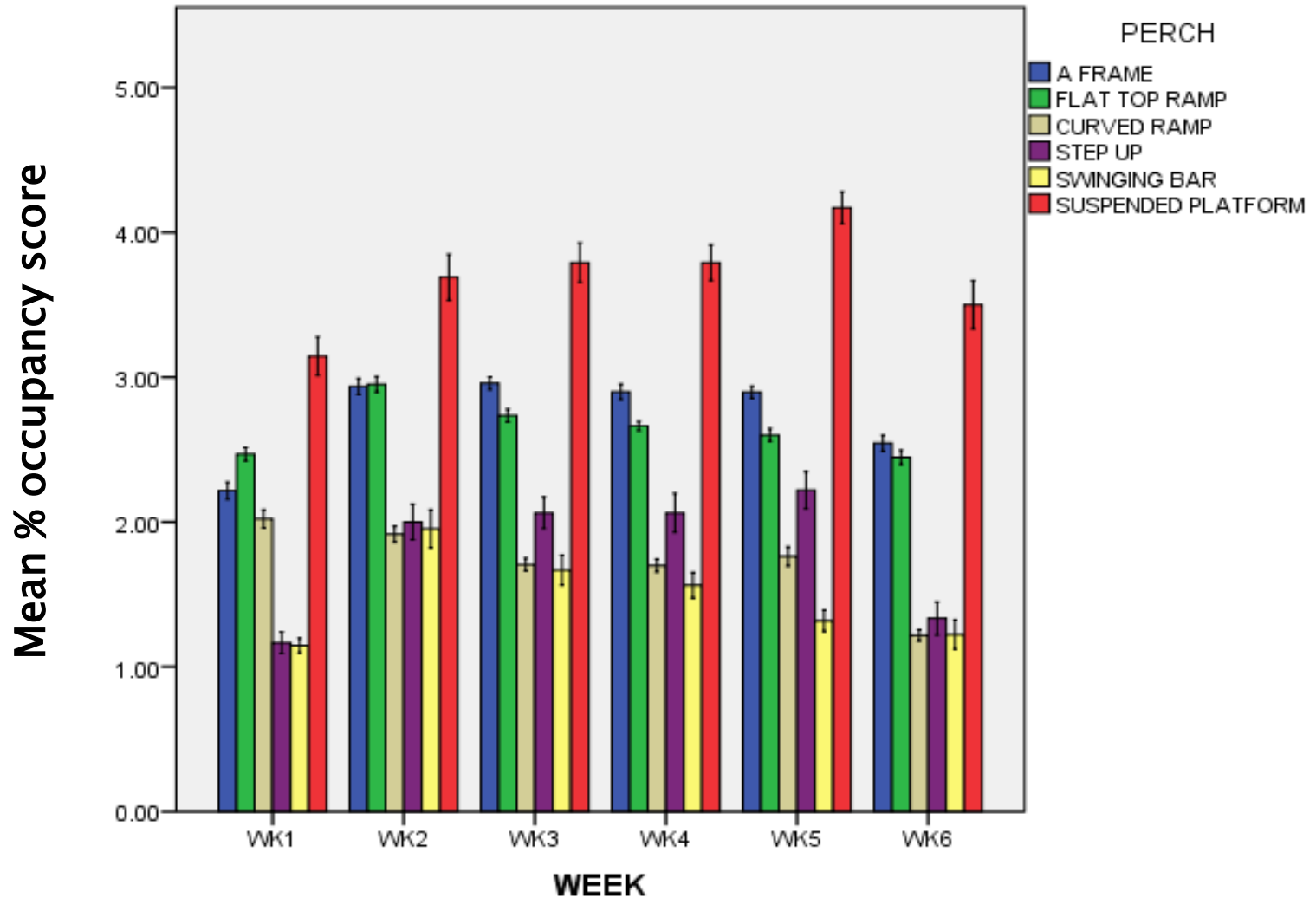
Results – perch occupancy



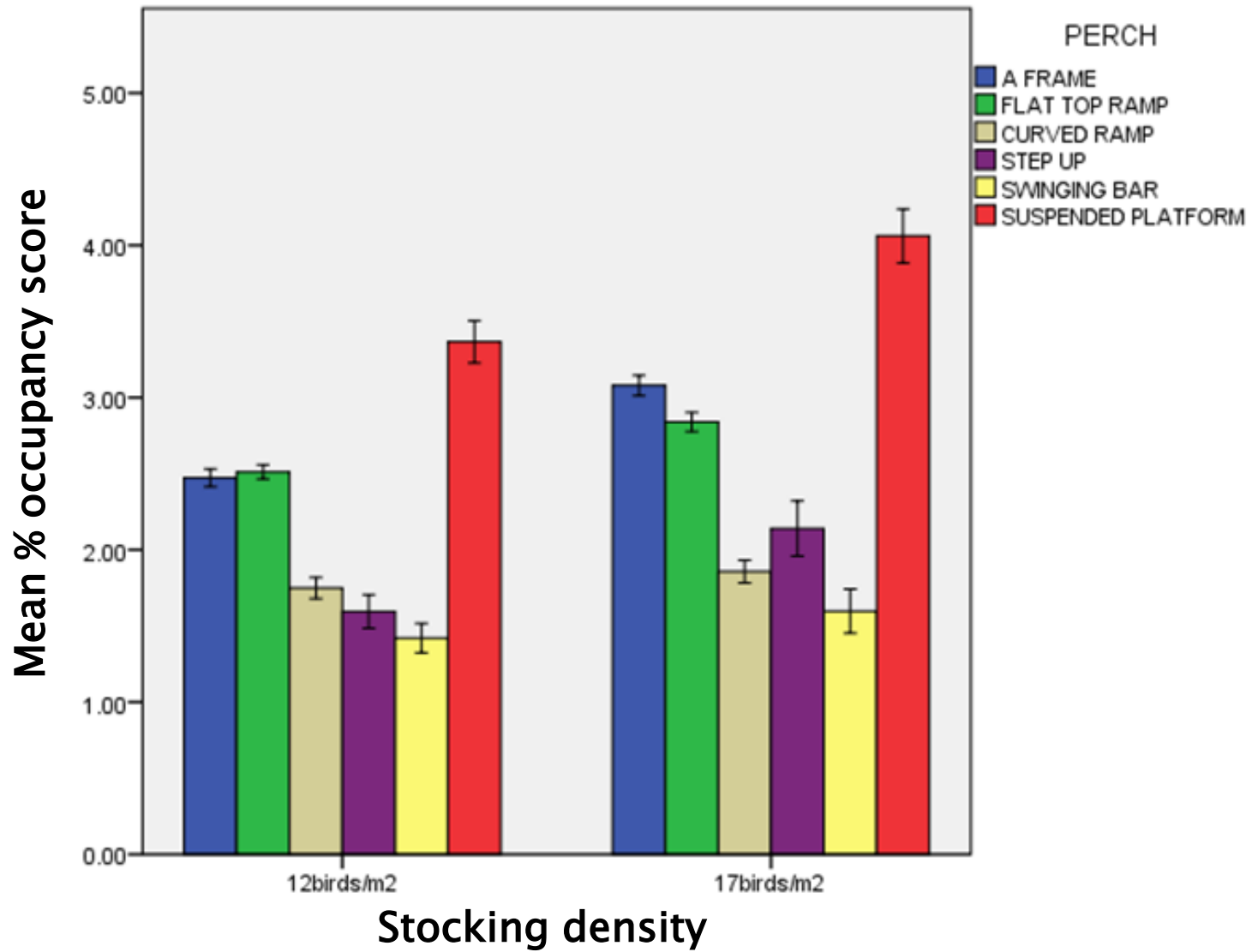
Significant difference in the occupation of different perch designs

$\chi^2(1, n=1470)786.02, p<0.01$

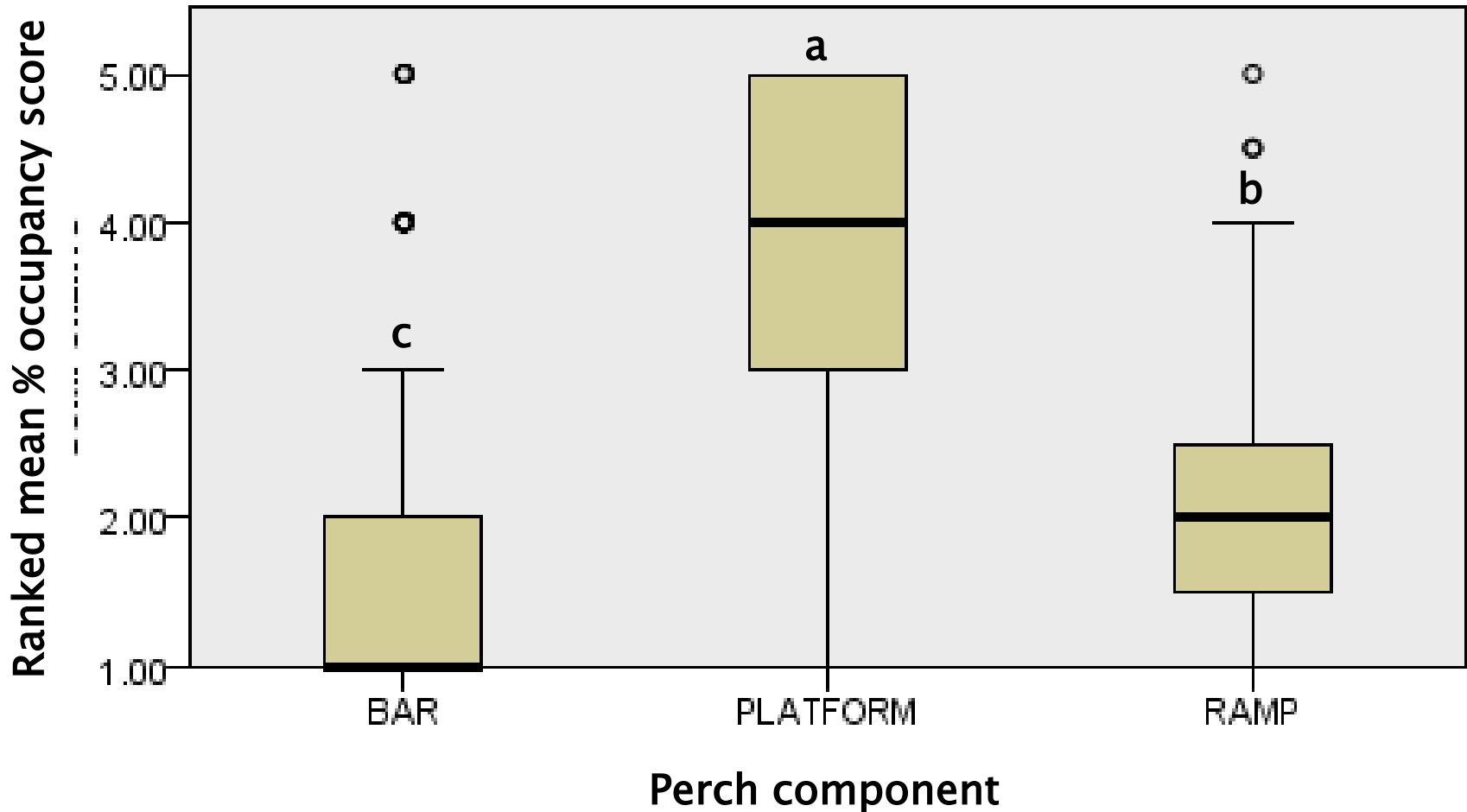
Results – perch occupancy



Results – perch occupancy

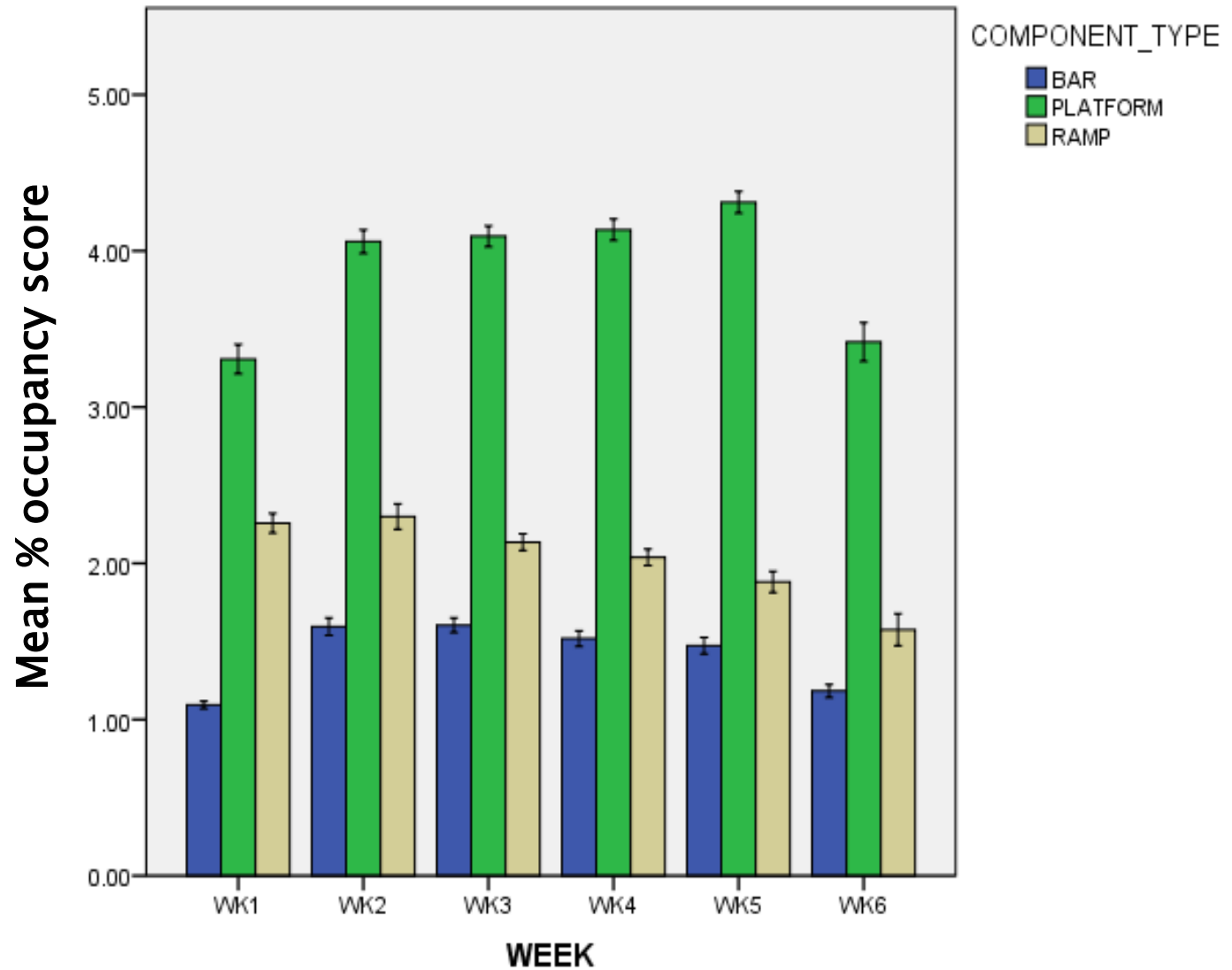


Results – occupation of component parts

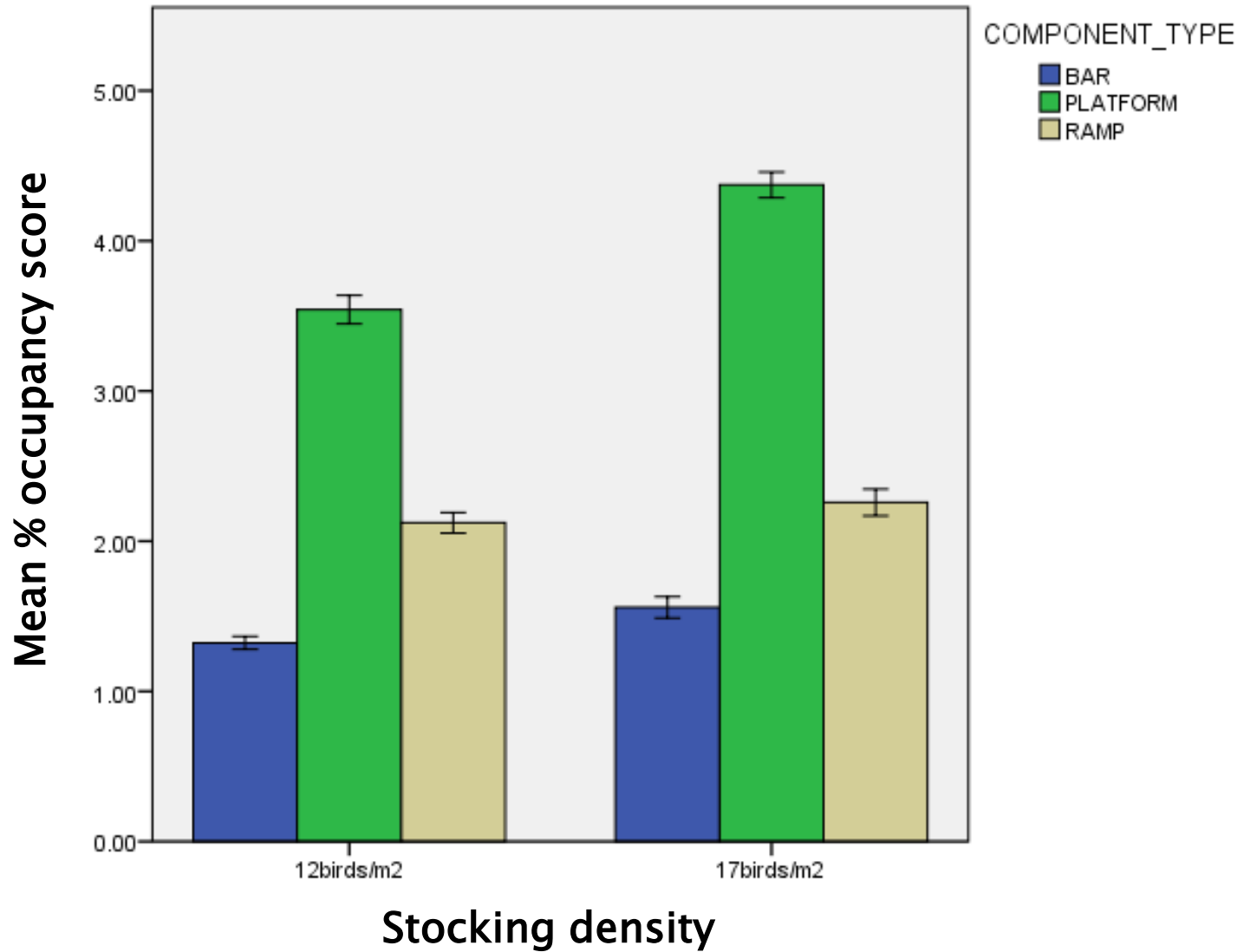


Significant difference in the percentage occupancy of different component parts
 $\chi^2(1, n=2714)1645.59, p<0.01$.

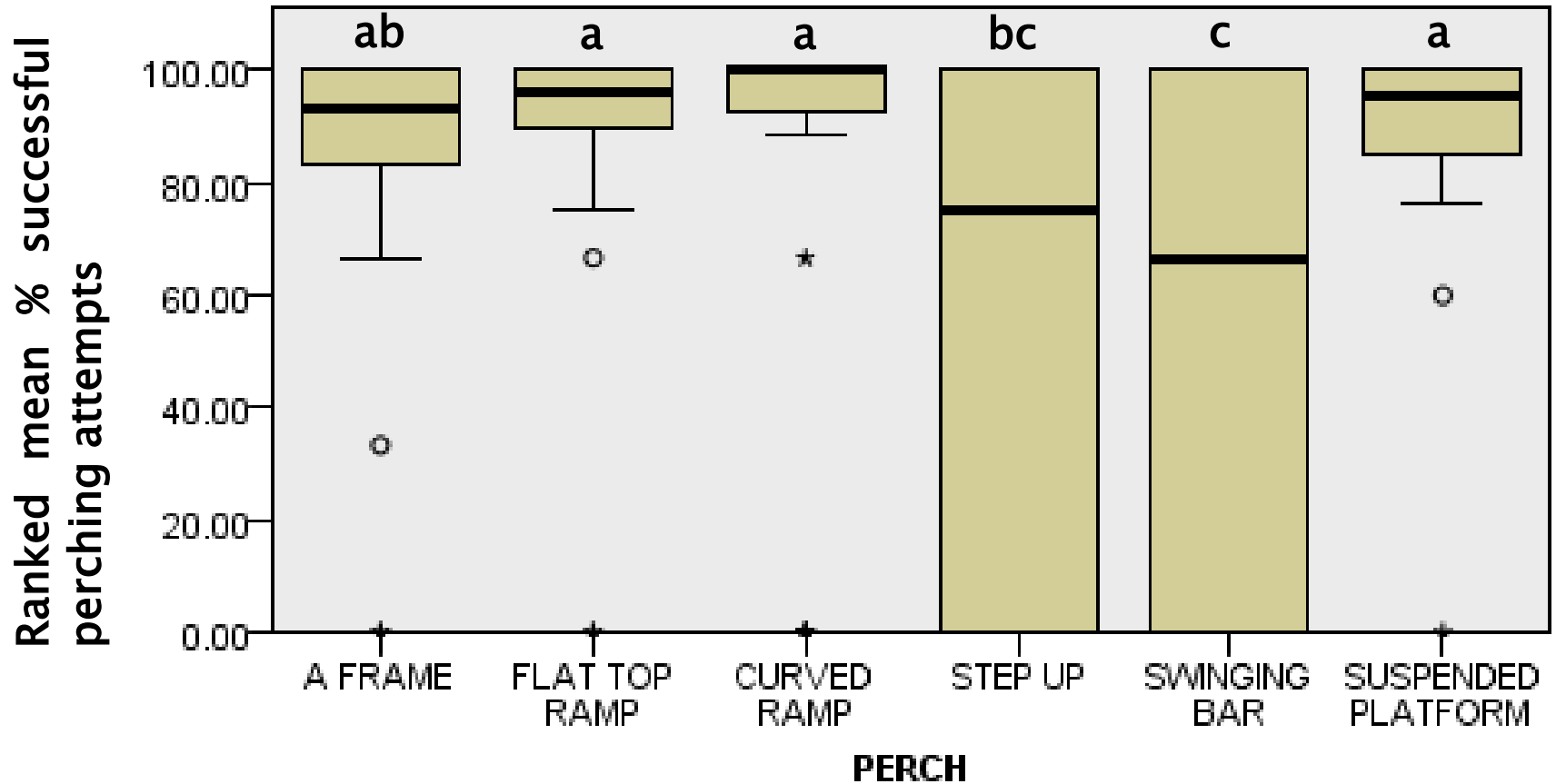
Results – occupation of component parts



Results – occupation of component parts



Results – perching attempts



Significant difference in the proportion of perching attempts that succeeded ($\chi^2(1, n=241)32.93, p<0.01$) for different perch designs

Summary of results

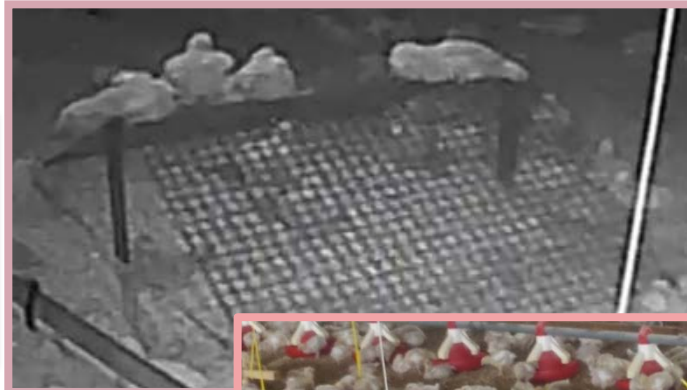
Overall occupation



Component occupation

Component	Degree of occupation
Platform	Highest
Ramp	Intermediate
Bar	Lowest

Successful and failed perching attempts



Conclusions and Implications

Platforms may replace traditional perches



Guidelines for provision based on linear space allowances may become obsolete



Further studies must investigate effects on health and welfare



Thank you for listening!



Questions?