

Polly C Compston¹, Christopher R Phillips¹, Richard J Payne¹ & J Richard Newton²

¹RosSDales Equine Hospital, Newmarket, UK; ²Animal Health Trust, Kentford, UK | Contact polly.compston@rossdales.com

SUMMARY

- Racing performance in thoroughbreds represents an important epidemiological outcome measure used to assess the effects of different husbandry and veterinary exposures.
- Official Ratings are used as a performance measure in the British racing industry; however their production is not transparent. There is no universally-accepted measure consistently referenced throughout the veterinary literature.
- We developed an easily calculable and transparent index that correlates over time with Official Ratings.

INTRODUCTION

- Thoroughbred racehorses are a uniform cohort of animals that are often investigated
- Current measures of performance have several disadvantages (Box 1)
- A simple performance index that could be applied across time and different racing industries would be a valuable contribution to veterinary research

METHOD

- Race-start data for 2000, 2005 and 2010 were purchased from the BHA
- Correlation coefficients for each year were calculated between ORs and
 - (i) the new performance index (Box 2)
 - (ii) log₁₀ (race winnings + 1)
 - (iii) the point system index (Box 1)
- Data were analysed both at race start level and using mean values per horse

Figure 1: Correlation with OR over time based on data from each start

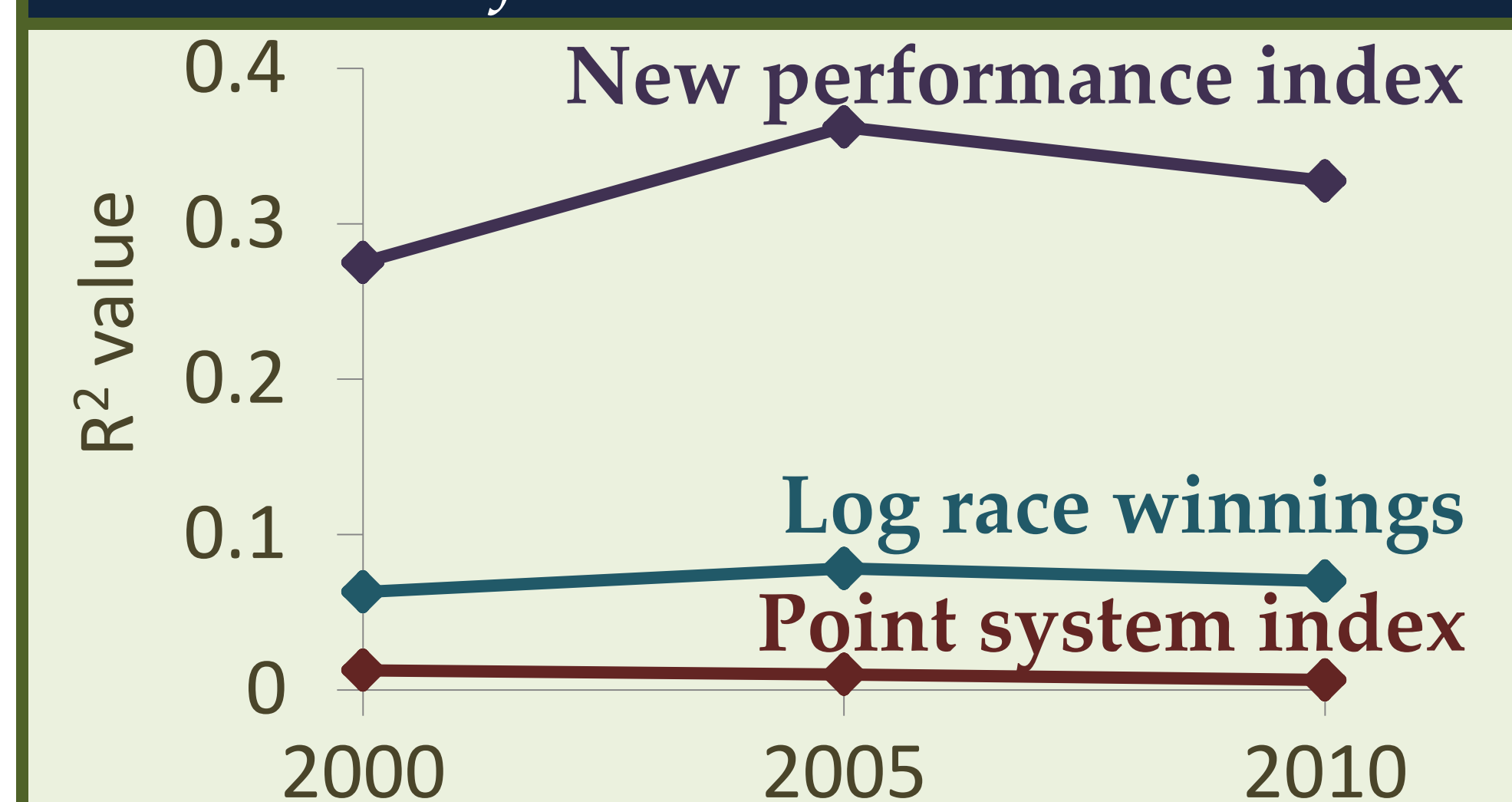
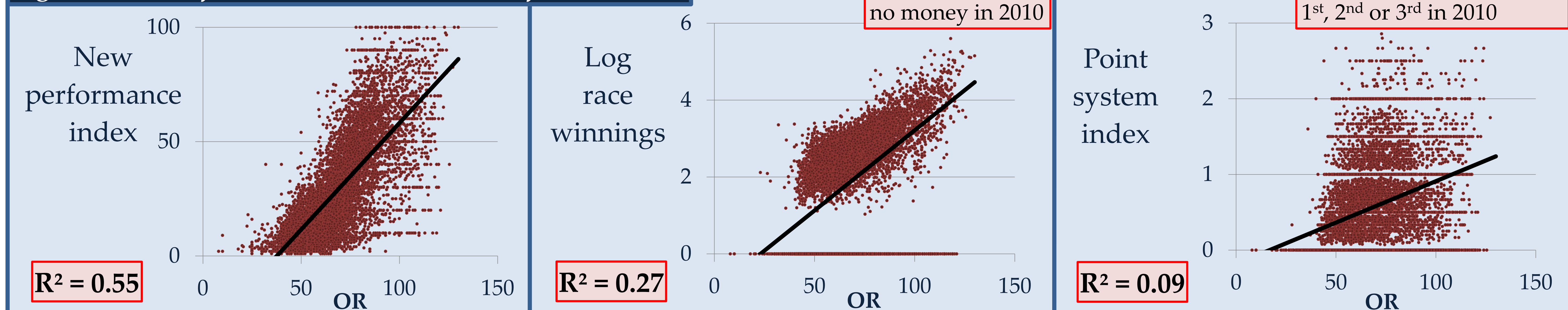


Figure 2: Values for 2010 based on mean data for each horse



DISCUSSION

- Using purse and percentage of field beaten allows easy calculation of performance for every horse in every race
- This new performance index correlates better with Official Ratings than other performance measures used previously in the veterinary literature
- Our validation shows that it can be applied as a performance measure across time periods
- It is a quantitative and transparent value that can be used across racing jurisdictions



ACKNOWLEDGEMENTS

Polly Compston is the Resident in Clinical Research at RosSDales Equine Hospital, supported by the Margaret Giffen Trust

REFERENCE

1.Newton *et al.* (2005) *EVJ* 37 402

PRINTED BY:

www.SCIENCEPOSTERS.co.uk