

Owner Reported Perception of the Efficacy of Equine Calmers Commercially Available in the UK

David J. Marlin

Corresponding author: dm@davidmarlin.co.uk

Department of Physiology, Oklahoma State University, Stillwater, OK USA & David Marlin Consulting Cambridge, UK

Background

Many different equine “calmers” are available. Common ingredients include magnesium, tryptophan, herbs, amino acids, yeast and B Vitamins.

Few calmers have undergone any controlled investigation and many scientists, nutritionists, vets and horse owners believe any apparent effect may be down to the placebo effect.

Hypothesis/Objective

The present investigation was undertaken to determine the opinion of horse owners on the efficacy of different calmers.

We hypothesised that horse owners would rate the calmer they were currently using, higher than calmers they had used previously.

Methods

An online questionnaire was distributed through social media. This was not associated with any specific company or calmer. The survey consisted of 12 questions with a freeform box for comments at the end. The survey was active for 1 month and responses were limited to 1 per IP address.

For each previous calmer used or current calmer being used, owners were asked to rate it on a 5 point Likert-type scale: Very effective; Moderately effective; Slightly effective; No obvious effect; Made condition worse.

Results

1665 valid responses were received. Seventy-seven % of respondents had previously used a calmer and 53% said they were currently using a calmer. Over 70 different calmers were named. Only calmers that received more than 20 ratings were included in further analysis.

For previous calmer, 34 different calmers received more than 20 ratings. The rating for “Very or Moderately effective” ranged from 13% to 64%, whilst the rating for “No effect or Made Condition Worse” ranged from 20% to 60% (Figure 1).

For current calmers, 12 received 20 or more ratings. The rating for “Very or Moderately effective” ranged from 40% to 89%, whilst the rating for “No effect or Made Condition Worse” ranged from 4% to 22% (Figure 2).

When grouped by type (magnesium, B Vitamin, tryptophan, herbal, calcium) there was no significant difference between ratings for different calmer types (overall mean: Very effective 11.4±0.9%; No effect 32.4±1.7%; Made condition worse 5.8±0.8%; P>0.05).

Figure 1: Average rating for PREVIOUS calmer by horse owners

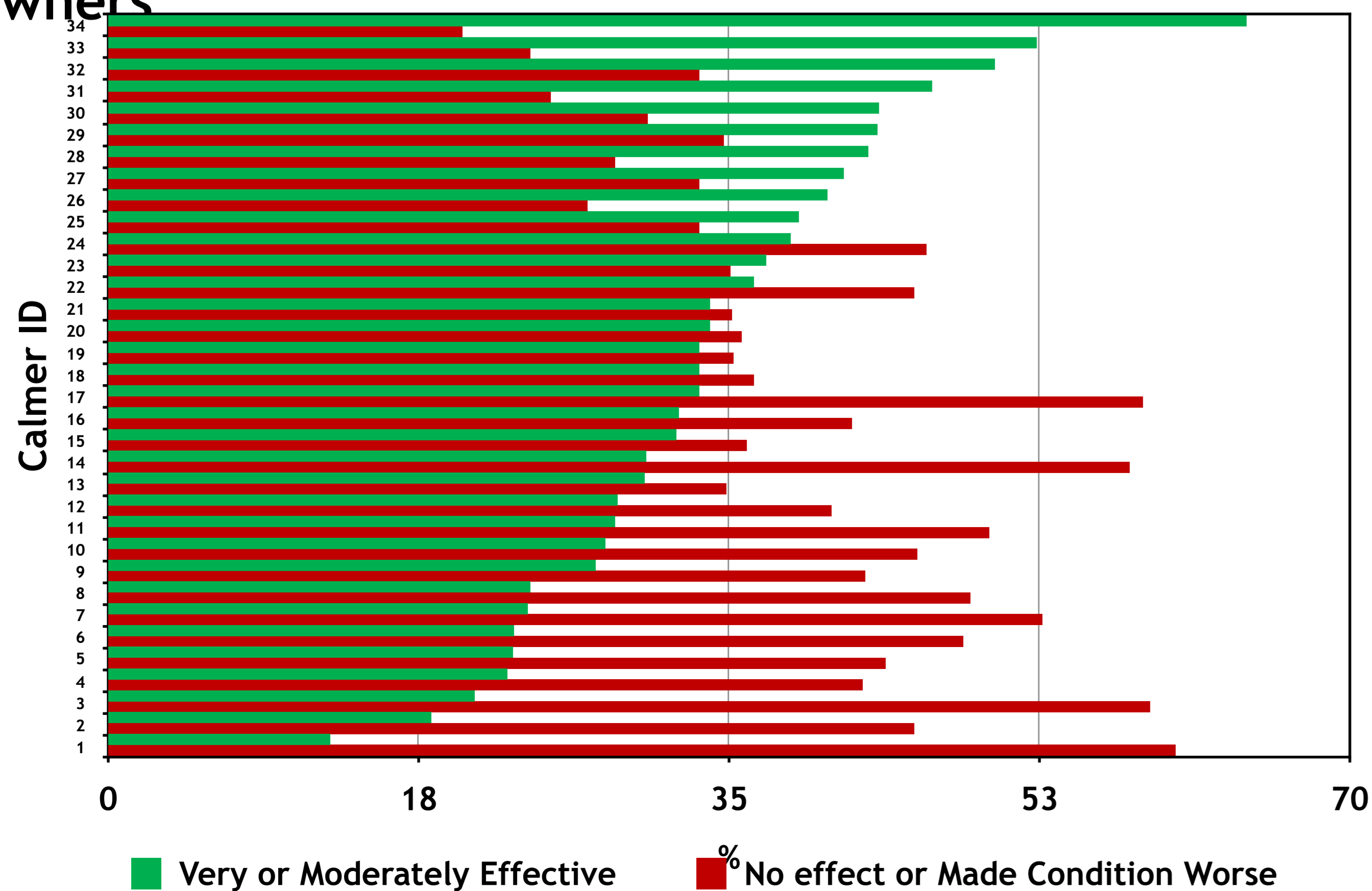


Figure 2: Average rating for of efficacy of CURRENT calmer by horse owners (Calmer ID is the same as in Figure 1)

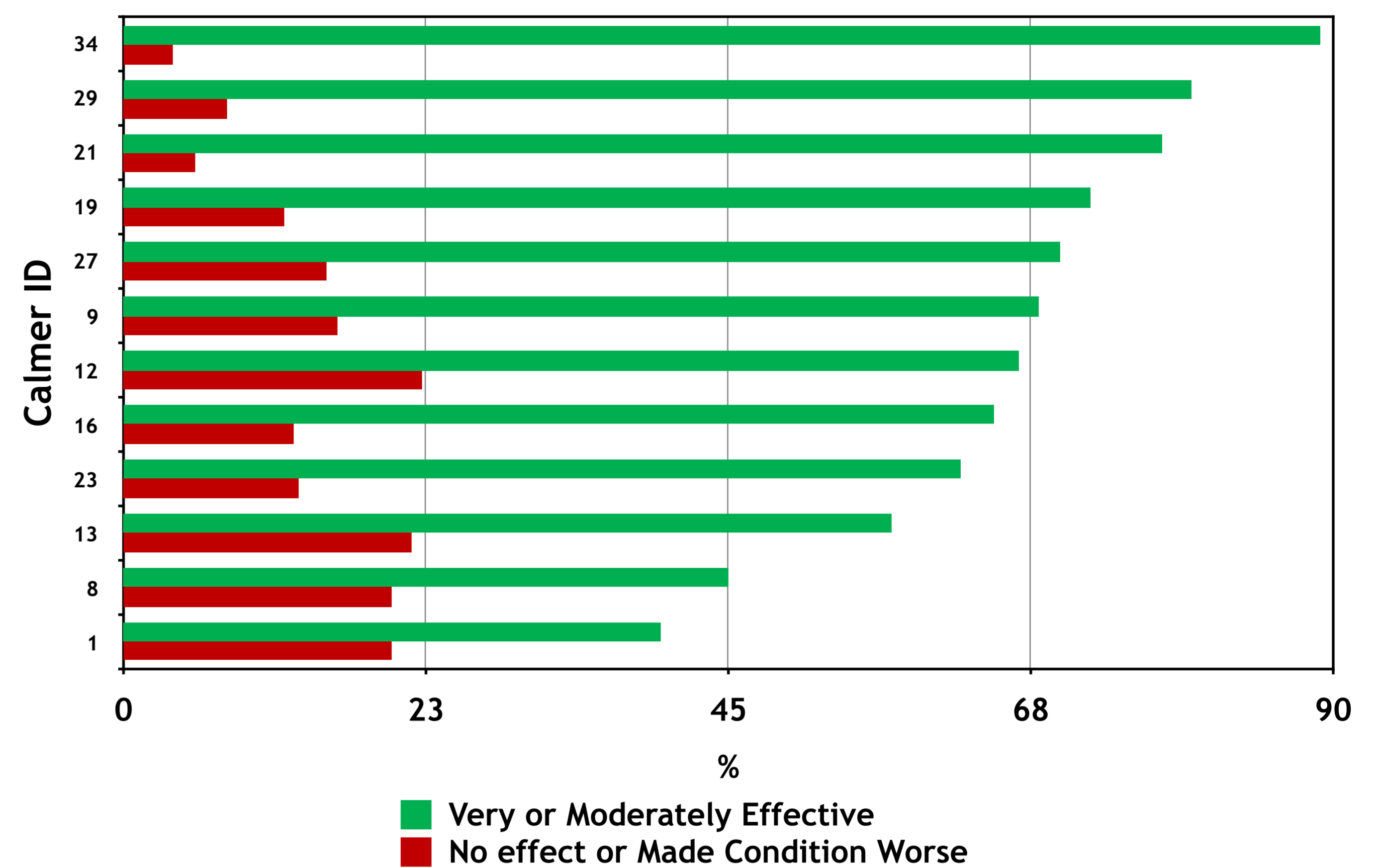


Figure 3: Relationship between CURRENT use rank and PREVIOUS use rank (= linear regression = line of identity)

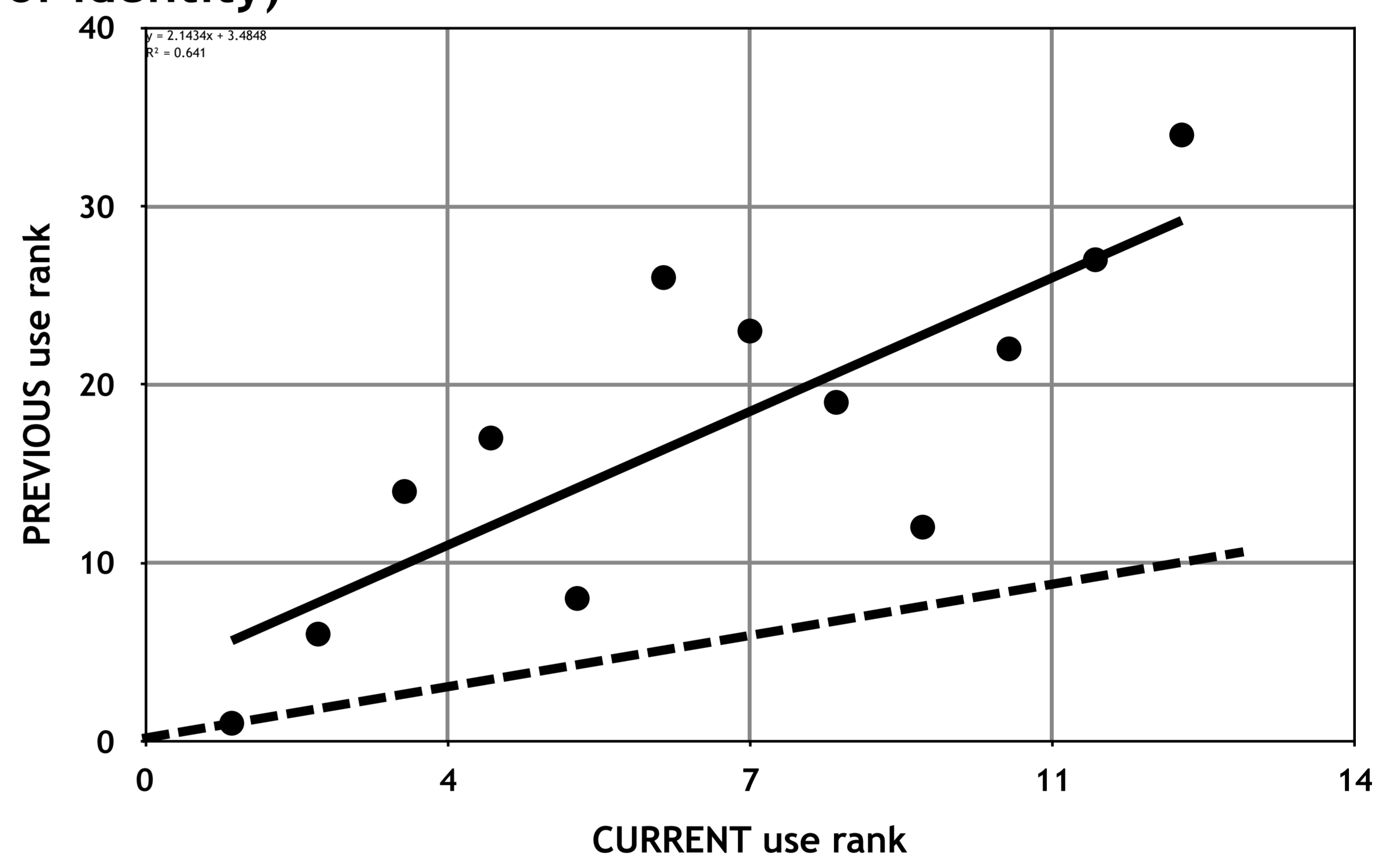
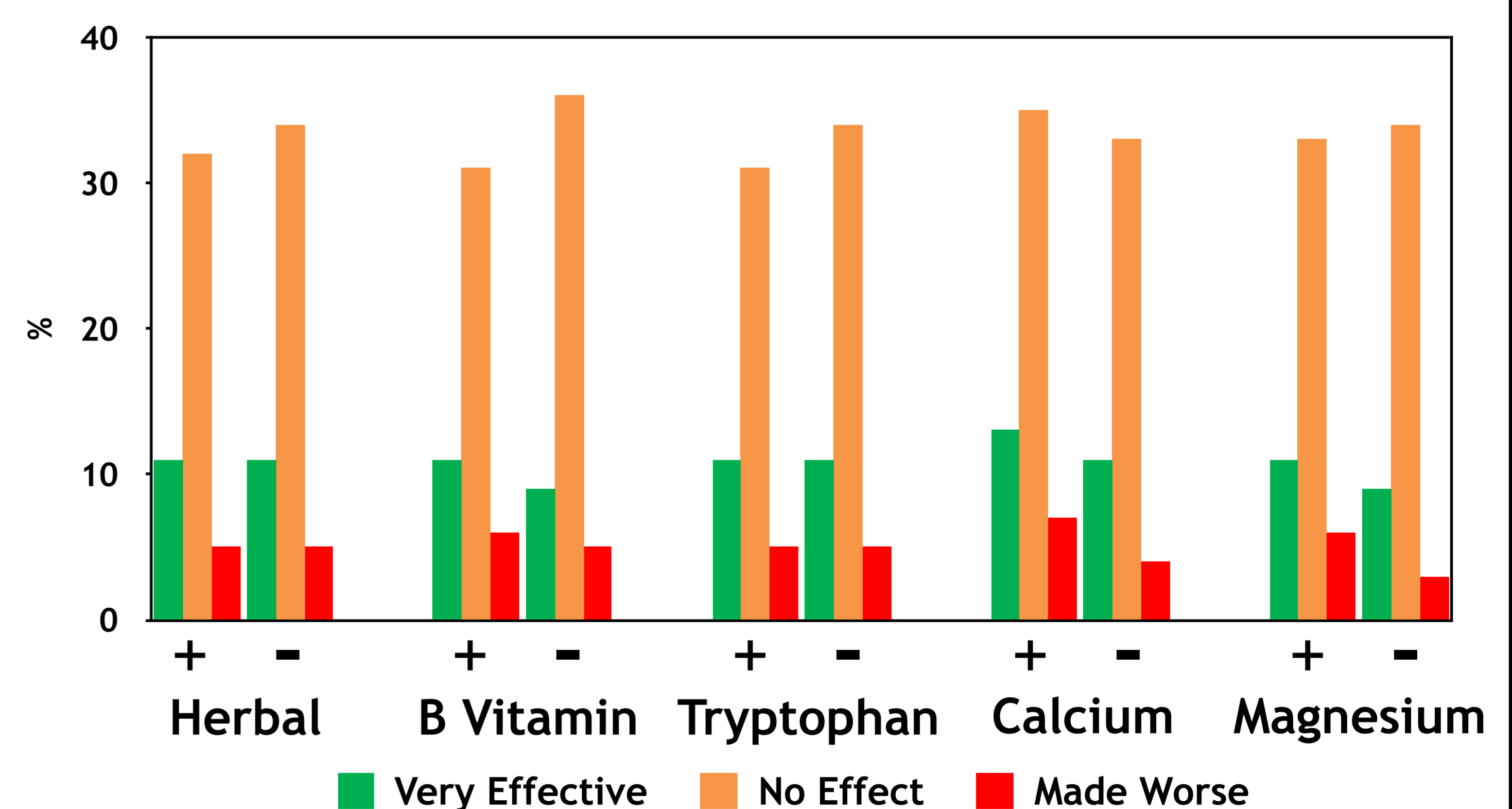


Figure 4: Owner reported efficacy of calmers according to main ingredients



Conclusion

Horse owners rated the calmer they were currently using more highly than calmers they have previously used.

There was a good correlation between rating of previous and currently used calmers.

The low rating and similarity in rating of calmers with different active ingredients suggest a strong placebo effect may be present.