

WHAT IS HANDLER BIAS IN SCENT DETECTION WORK?

BACKGROUND

The domestication of dogs started many thousands of years ago. As part of this process, dogs became one of the few animal species that carefully attend to -- and learn about -- human communication. Even dogs as young as 8 weeks can follow our points and our eye gaze. With experience, dogs learn about our subtle behaviours, like if we tensely grip the leash or if we slightly change our walking pace.

In scent detection work, though, dogs need to rely on their own senses and their own decision-making, rather than looking to us for information. After all, they are the ones with the powerful noses.

FINDINGS FROM RESEARCH ON HANDLER BIAS

Research has shown that when a handler has prior knowledge about where the source of an odour might be, they can unintentionally influence their dog's search behaviour through subtle movements as their dog nears the source.

In other studies, handlers were told whether or not an odour was present ... but in reality, there was no odour present. Handlers would limit dogs' search time if they believed that no odour was present and extend the search time if they thought odour was present.



STRATEGIES TO AVOID BIASING YOUR DOG

1

Remove leash tension

2

Keep your feet constantly moving

3

Refrain from looking at or turning your body
toward the scent location

4

Don't tense up in anticipation of a positive
indication

Once your dog has had successful trials indicating on a scent, include trials where there is no scent present; you will encourage searching behaviour in your dog and make sure they are indicating only when the scent is present. Similarly, “blind” trials occur when someone other than the handler hides the target scent and then leaves the area to avoid biasing the dog or the handler.

FURTHER READING

DeChant, M.T. et al. (2020). Effect of handler knowledge of the detection task on canine search behavior and performance. *Frontiers in Veterinary Science*. <https://doi.org/10.3389/fvets.2020.00250>

Lit, L. et al. (2011). Handler beliefs affect scent detection dog outcomes. *Animal Cognition*. <https://doi.org/10.1007/s10071-010-0373-2>

