

# Dogs, Cats, and Humans: Does 5X the Oxytocin = 5X the Love?

THE BLOG

02/04/2016 04:19 pm ET | **Updated** 1 day ago

- [Marc Bekoff](#) Professor emeritus of Ecology and Evolutionary Biology, University of Colorado

## Do dogs really love us five times more than cats?

A recent essay by Elyse Wanshel called "[Who Loves Their Humans More -- Cats Or Dogs? Here's The Answer](#)" caught my eyes and those of numerous others around the world. How could it not? Dog people and cat people seem always to be talking about how dogs and cats compare with one another -- who's smarter, whose more loyal, who loves us the most -- so Ms. Wanshel's title hit the nail on the head.

So, who's the real winner with respect to loving humans more? And, what can we really conclude by measuring levels of oxytocin, often called the "love hormone"?

Ms. Wanshel writes, "Thanks to a new study done by neuroscientist and professor at Claremont Graduate University, [Dr. Paul Zak](#), which will be featured in the BBC2 documentary show, [Cat v. Dog](#), we have [sic] answer. Canines were proven to love us Homo sapiens five times more than their feline counterparts." We also read a headline in The Telegraph, "[It's finally proven - scientists test whether cats or dogs love us more](#)" and many other popular reports use the words "prove" or "proof." Of course, [this preliminary study attracted global attention](#).

## Concluding that there is proof that dogs love us five times more than cats seemed a bit too fast for me

I wondered about just how robust were the results of this study and did they really "prove" that dogs love humans "five times more than their feline counterparts," so I emailed Dr. Zak about his study. He kindly responded as follows: "It was a mini-study for the BBC. Since N=20 diffs are not stat. sig. Change in OT: dogs: 57.2%, cats: 12.2%, The most we can say is it is an interesting trend." And, when I asked about whether there really is a 1:1 association -- that is, does five times the oxytocin mean five times the love, Dr. Zak responded, "I'm always loathe to make the 1:1 mapping from any neurologic signal to a behavior. I think we can say dogs in our sample are more attached to their humans than were the cats, but variance is high in dogs and cats for many reasons."

## Is the proof only in the oxytocin?

So, just what do we really know? I really appreciated Dr. Zak's rapid responses and agree that there is an interesting trend in his mini-study and that the dogs studied were more attached to their humans than were the cats. I also agree that there is not necessarily a "1:1 mapping from any neurologic signal to a behavior." Clearly, much more research needs to be done on a larger sample of individuals, cats need to be tested in a more familiar environment, and the high variance observed in both species also needs to be factored in. It'll also be interesting to know in what situations cats love us more than dogs and are there gender differences. The list of questions seems endless, for there are numerous variables that need to be factored into comparative studies such as this, and that's what I find to be truly interesting in these sorts of projects.

Clearly, we need to be very cautious in concluding that dogs really love us five times more than do cats. The data do not prove that this is a robust conclusion and it's not at all clear that the proof is only in the oxytocin.

Please stay tuned in for more on this fascinating topic, because there is no doubt that researchers and others will

weigh in in many different ways with a good deal of zeal.

Note: For more on the giant and misleading leap from "trend to proof" please see Dr. Anne Fawcett's "[Who loves you more: your dog or your cat?](#)"

Follow Marc Bekoff on Twitter: [www.twitter.com/Marc Bekoff](http://www.twitter.com/MarcBekoff)

amazon.com.