

Dog behaviour: separating fact from fiction

A talk by

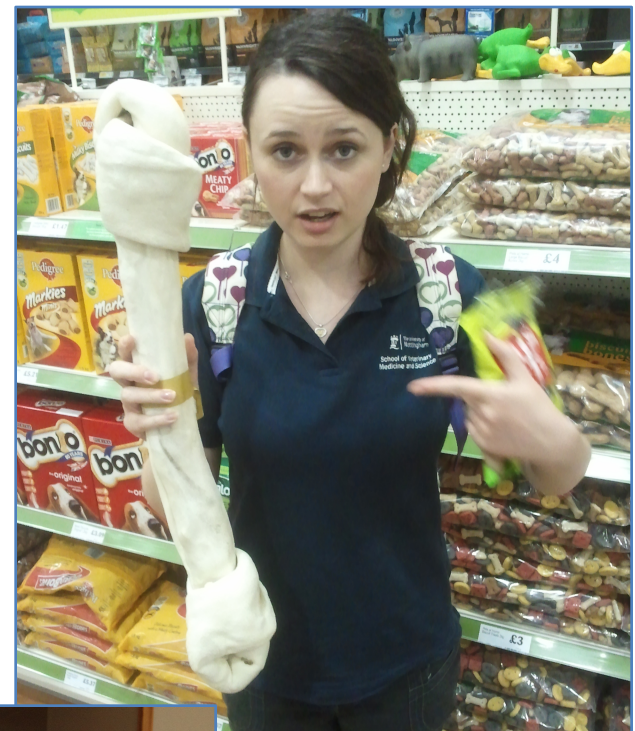
Dr Naomi Harvey

A bit about me...

- Zoologist (biologist but more animal)
- Doctorate in dog behaviour in 2014
- Animal lover
- Refuse to be classed as either a dog or cat person, why can't I be both?

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Overview of talk

Dog behaviour: Separating fact from fiction

- Background – why things aren't so clear
- Debunking the dominance myth – explaining the science and understanding dogs better
- Breed differences in behaviour – fact or fiction?



Outcomes

- Know why the messages out there are so confused
- Understand which advice is out-dated and why
- Be able to better understand your dogs emotions and responses
- Be able to better spot appropriate literature and advice
- Better understanding an interpret breed differences in behaviour of dogs



Background

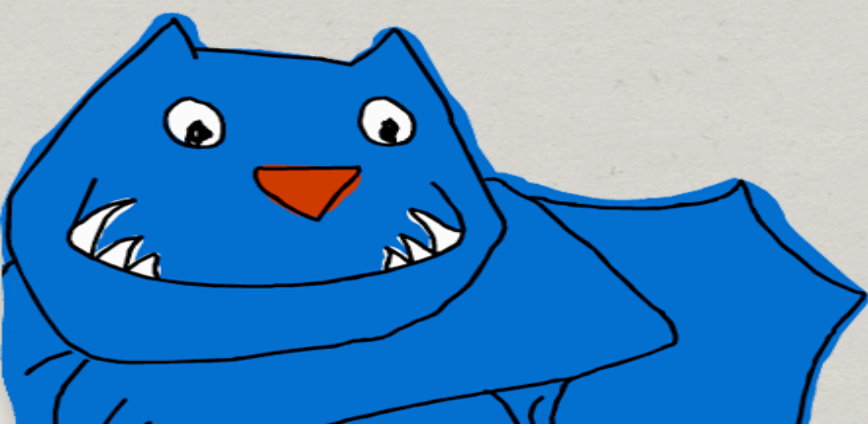
How many of you own dogs?

Dogs are a very 'public' topic, discussed and portrayed in the media frequently

Domesticated for 15,000 years, bred mainly for working roles

Often seen as fashion accessories today, with numerous 'designer' breeds (pugs, French bulldogs, Pomeranians etc.)

Evidence shows that dogs are able to understand us quite well from our facial expressions but we don't intuitively understand them ...



The Blue Dog

All you ever wanted to know about dogs

Is the dog smiling

Meints, K, Racca, A. & Hickey, N. Is the dog smiling? Children from 4-7 years misinterpret dogs' facial expressions.

4-7 year olds, and adults, tested on human and dog facial expressions

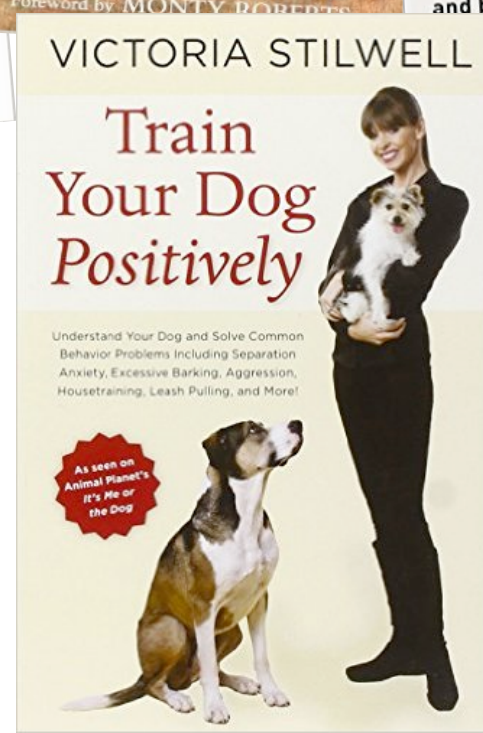
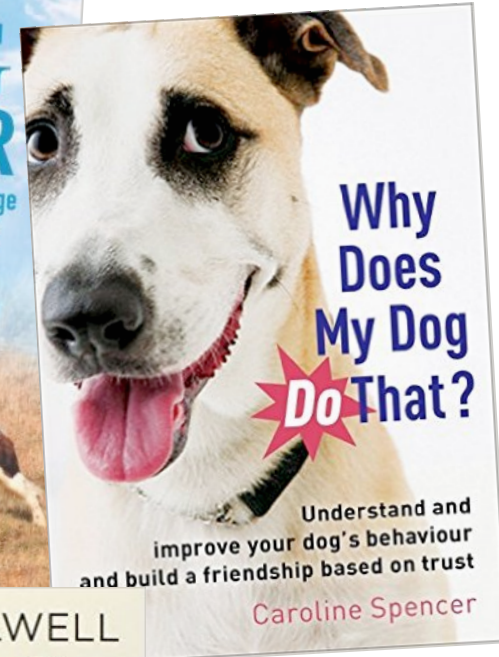
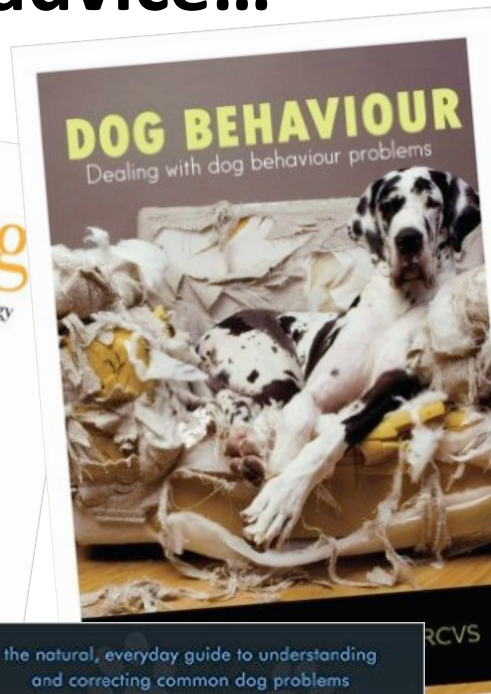
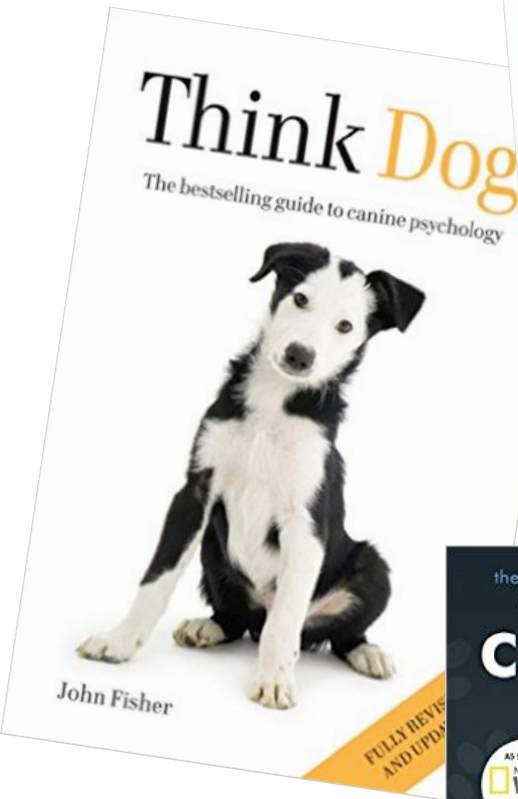
Adults can read both human and dog faces, but children could only read the humans

Up to 67% of children scored snarling dogs as 'happy' and said 'they would approach the dog'

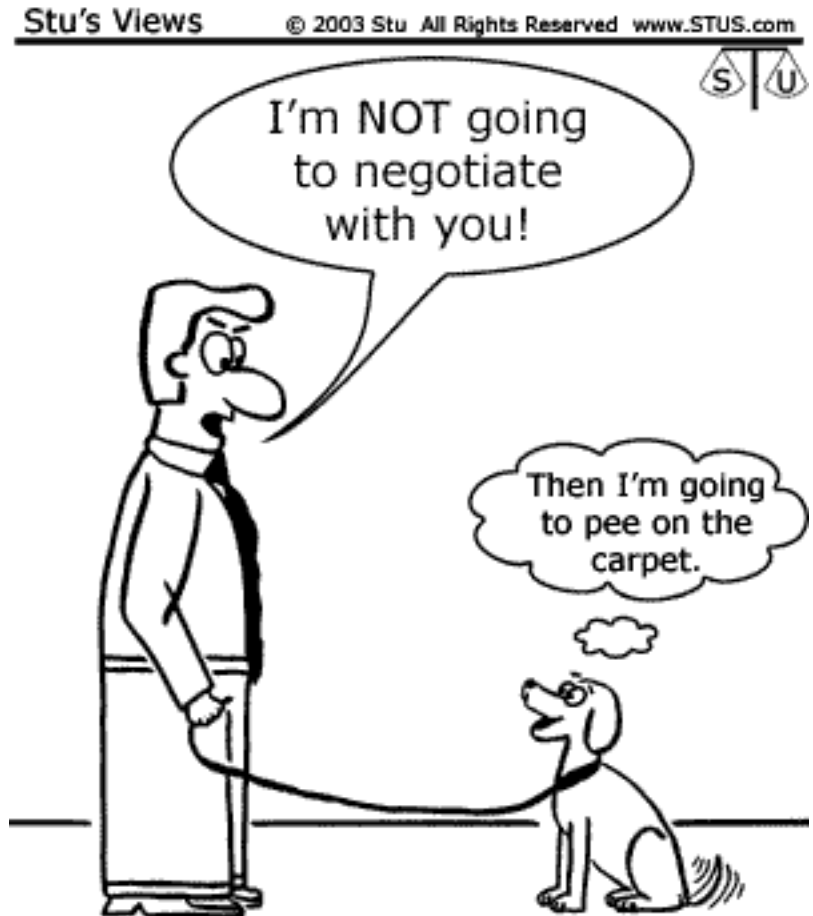
Same results even with videos with dogs growling and barking!



Conflicting advice...



Debunking the dominance myth



What is dominance?



What is dominance?

Dominance hierarchies are simply systems of rank

They exist in any group where individuals voluntarily give way to others

Humans have them everywhere – at work, at home, amongst your friends etc... etc...



Purpose?

They exist to **prevent** aggression amongst social groups via voluntary deference i.e. freely given 'submission' - not forced 'dominance'

Importantly, they are based upon specific situations, and interactions between two individuals ... the 'winner' in one situation, with one individual, may be a 'loser' in another or with another individual

So where did the “alpha wolf” come from?

In 1947 Rudolph Schenkel published “Expressions Studies on Wolves”

Studies were on captive wolf populations; unrelated or fragmented groups missing one or both parents

Zoo enclosures were small and wolves unable to burn off energy through exercise and hunting

Schenkel noted “violent rivalries” between members of the ‘pack’ with two primary wolves, an ‘alpha’ male and female, who “incessantly defended their social position”

And so the myth was born...



The myth

We know that domestic dogs descended from wolves, so Rudolph's work on wolf society quickly became accepted as true for dogs also.

Later reinforced by studies in 1970 - again on captive, artificial wolf populations...hmmm

The message was:

Wolves (and dogs) want to become the 'leader' and will constantly try to be unless you are the 'leader'

Unfortunately, this myth has persisted for decades and has led to many dangerous methods of trying to combat unwanted behaviour, which are erroneously promoted by the media through shows such as Cesar Millan's The Dog Whisperer.

The danger (and error) of such techniques

The fact

Schenkel's original observations were completely invalid

Evidence from wild wolf packs show that real wolf packs do not function via aggression, but are instead families lead by older, experienced parents...not leaders who fought their way there

"Alpha" simply means "parent" – no one "wins" a role as leader they simply are



Dog behaviour

Studies of free ranging feral dogs have shown how different dogs have truly become from wolves (Van Kerkhove, 2004, Pal et al., 2003, 2005)

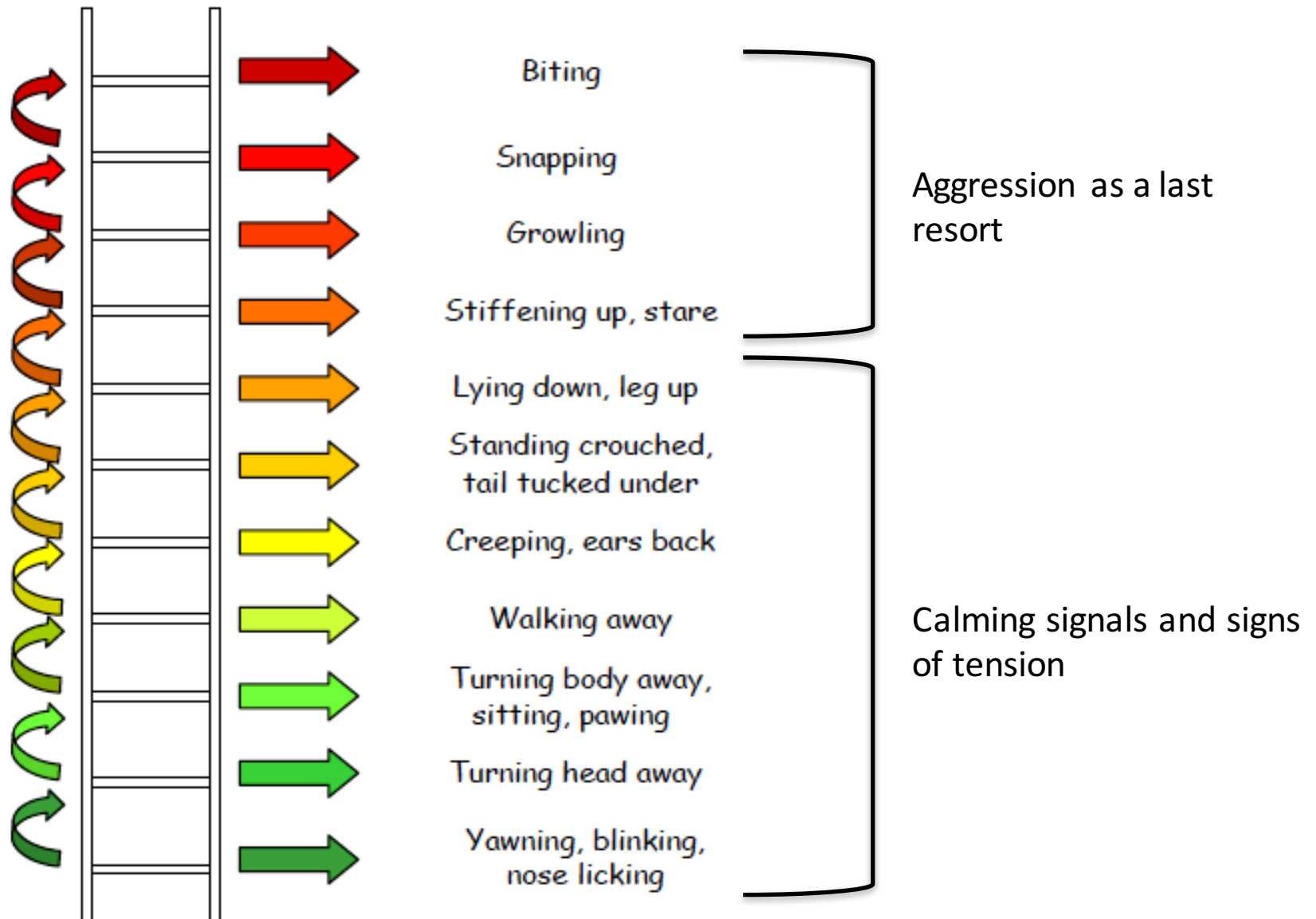
- Dogs don't form family 'packs' but groups with loose associations on communal territories
- These groups rarely showed co-operative behaviour, even when rearing pups, which female dogs do alone
- Very little aggression is shown, unlike wolves no reproductive suppression by females (mothers) of other females (daughters)

Understanding aggression

In animals, aggression has a function which is to say to another “please go away” or “stop doing that”

Calming signals will always be given to try and avoid the need to resort to aggression

The Canine 'Ladder of Aggression'



1. He began with intimidation, frightening and confusing her - he was the aggressor provoking her reaction



Do not attempt the techniques you are about to see without consulting a professional.

2. She tried to calm the situation: lip-licking, turning away, moving slow, lying down and yawning



3. She lies down, he describes her as relaxed, but she is tense, averting her gaze, licking her lips, trying to defuse the situation



4. He's ignoring all her signals, she looks away, widens her eyes and her ears go back, then he touches muzzle and even after her warning snap he leans in towards her again...she bites



Dominance style training

Popular mainstream method until the recent 1990's

Experts agree it is invalid and harmful to the animal

Yet showed a resurgence with the public in 2004 thanks to 'The Dog Whisperer'

Misinformation such as this damages the dog-owner relationship and can lead to fear, anxiety and/or aggressive behaviour

Dogs often can't understand us and become fearful and mistrusting of humans who to them are unpredictable and unfairly aggressive

So what is good advice?

Miscommunication and misinformation is what needs to be combated

Aggression and 'dominance' is never the answer

It's our responsibility to teach our dogs which behaviour is appropriate, constructively and compassionately to help them learn effectively

This is best done through positive reinforcement that enhances the bond between owner and dog

Consistency is key

What to do if your dog has a problem

Be patient – it could be emotional or medical, or both

Re-train if needed

Seek advice from your vet and/or an accredited dog behaviourist
(who uses positive reinforcement techniques)

Don't scold bad behaviour but reward good behaviour

Provide opportunities for good behaviour

Behavior Myth	Why Your Dog Really Does This	How to Change the Behavior
<p>Your dog barks at you to tell you he's in charge.</p>	<ul style="list-style-type: none"> • There are numerous underlying factors that can lead to excessive barking such as boredom, fear, and anxiety. • Owners often inadvertently reinforce barking by giving the dog attention when they are barking, or yelling at the dog, which only strengthens the behavior over time. 	<ul style="list-style-type: none"> • Train the dog to bark and be quiet on command. • Proper daily exercise, interaction with a dog's human family, and interactive toys such as Kongs® can decrease barking if the dog is barking out of boredom. • For fearful and/or anxious dogs, determine what is causing the dog's fears and work to desensitize him to them.
<p>Dogs jump up on people to assert their height and rank over you.</p>	<ul style="list-style-type: none"> • Dogs jump up because they have been inadvertently reinforced to do so by inconsistent dog owners. • Dogs jump up because they want to get closer to our faces to say hello. • Dogs jump up because ... it's fun! 	<ul style="list-style-type: none"> • Teach the dog to sit when visitors enter the house and reward for this behavior. • Teach the dog that he only gets attention, treats, etc. when he has all four paws on the floor. • Make sure everyone who interacts with your dog is on the same page about turning their back on the dog when he jumps up so the behavior is not reinforced in the future.

Further advice: <https://apdt.com/pet-owners/choosing-a-trainer/dominance/>



**Breed differences in dog
behaviour:
Fact or fiction?**

Background

Domestication of dogs and artificial human selection has produced a wide, and obvious, array of physical types.

This obvious visual difference often leads people to assume there must be a similar behavioural one.



Dangerous dogs

Incidents reported in Kent in 2009 by breed



Alsatian	8
Border collie	4
German shepherd	8
Jack Russell terrier	7
Pit bull cross	2
Staffordshire bull terrier	18

Source: Kent Police FOI

Bark but no bite: Dangerous Dogs Act in spotlight as attacks rise

Ministers urged to tackle irresponsible owners through compulsory microchipping and the return of the dog licence



MailOnline

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'It just went mental': Family friend describes horrific moment girl, four, was mauled to death by 'pitbull' from animal charity

25 dangerous dog breeds most likely to turn on their owners ...
www.dognotebook.com/15-dangerous-dog-breeds-most-likely-to-turn-o...

Start telling people their **dogs** are **dangerous** and you're likely to begin an uproar; the fact is, however, **dog** attacks do occur and even against the **dogs'** owners.



The Roanoke Times
News/Media Website · 49,578 Likes · May 27 · Ed

Bonnie Lee writes in her commentary: "Good-hearted young women, take these dogs from shelters at their so 'humane groups' can continue to promote a feel g



Lee: Beware of rescue dogs

ally, in 2014 there were 42 sourced and verifiable human fatalities
ks. So far in 2015 there have been 13 and counting.

VOKE.COM

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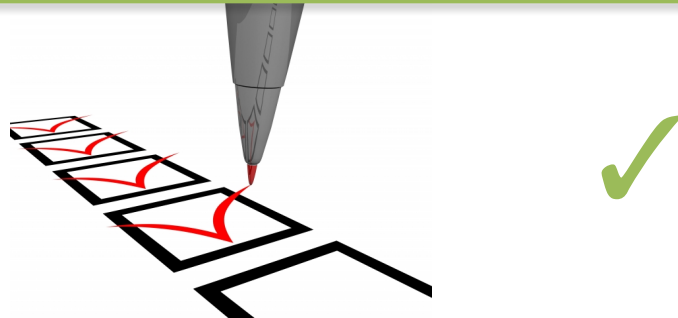
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Evidence?

If breed differences in behaviour do truly exist then evidence of this should be clear in empirical studies of dog behaviour.

Breed differences are often reported in questionnaire based studies (Mehrkam & Wynne 2014).



But are rarely found in experimental tests of dog personality/character.





Springer Spaniel



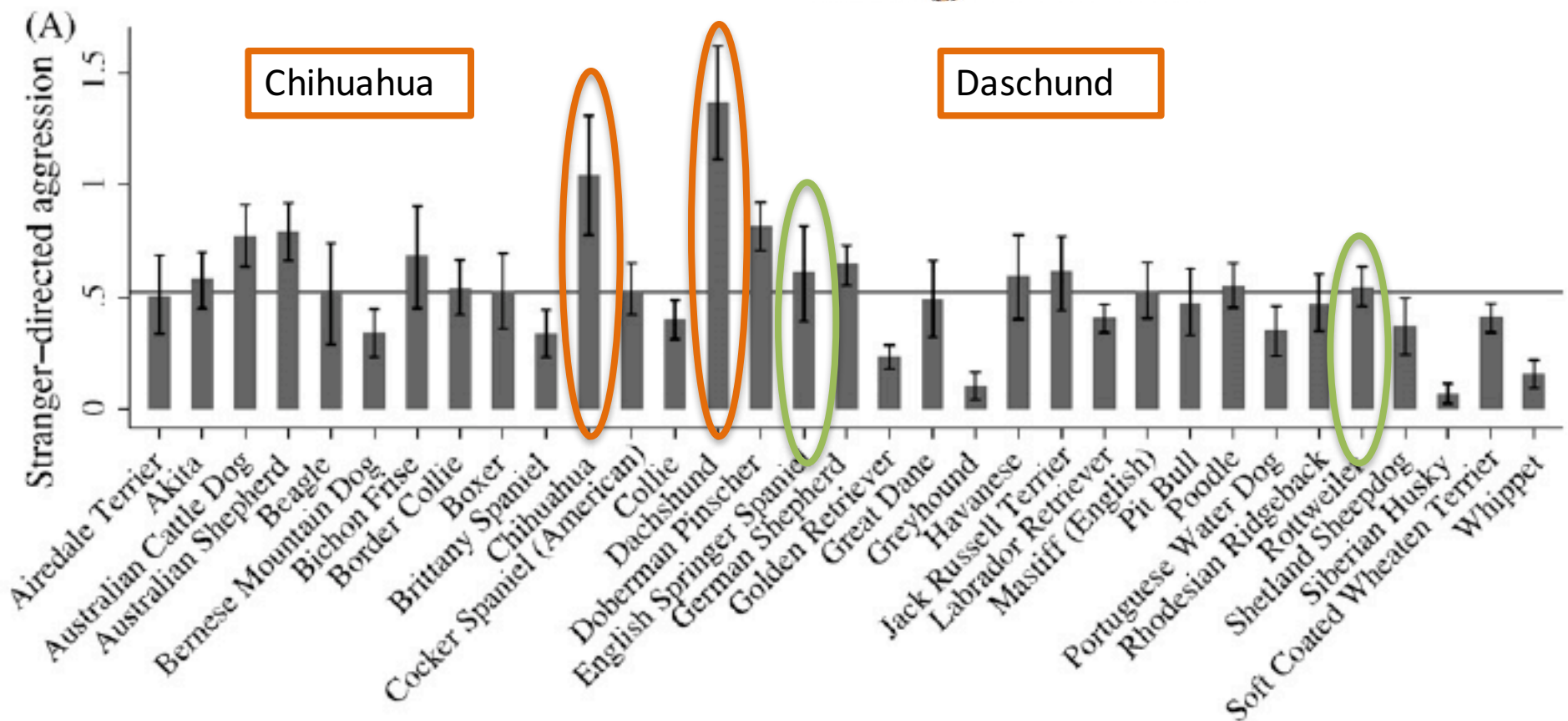
Daschund



Chihuahua



Rottweiler



Phenotype = Genetics X Environment

Studies of heritability of dog behaviour suggest that 0-53% of dog personality trait variation may be heritable (Weiner et al., 2015; Wilsson 2015).

But evidence is strongest in puppies and weakest in adult dogs.

This implies that experience gathered as a dog grows (**nurture**) may play a much larger role in shaping a dog's behaviour than its genes (**nature**).

It would mean that **dog breeds aren't born behaviourally different but become different.**

Do we make dog breeds different?

The biggest differences between individuals (and breeds) would stem from how they are treated...**this in itself may bias certain breeds towards certain behaviour.**

Evidence suggests that owners of dog breeds labelled as 'vicious' are more likely to have a criminal record, exhibit violent behaviour and use drugs than other dog breed owners (Schenk et al., 2012).

Dogs seen as 'status symbols' and breeds chosen according to this.

These dogs can be treated roughly and expected to be intimidating. Popular breeds – pit bulls and mastiffs.

VS.

Dogs seen as 'family members' and breeds chosen according to this.

These dogs are treated as family members and often with care and respect. Popular breeds in UK – Labradors and Spaniels.

The reality of breed differences...

They begin with individual differences

Behaviour is a characteristic of individuals.

There is more evidence for between-dog differences, than between-breed differences in the behaviour and personality of dogs.

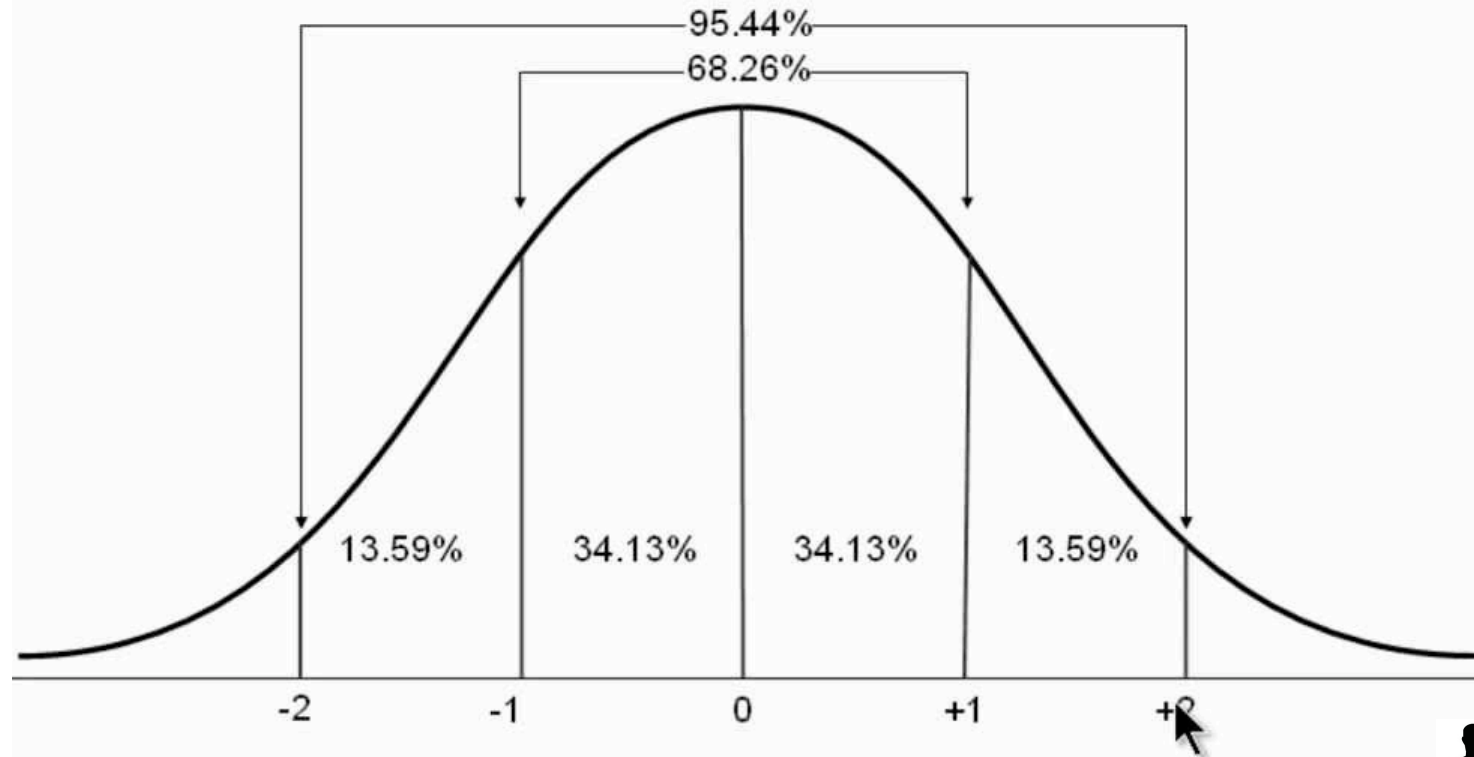
An adults behavioural profile develops from birth through complex interactions between an animals genes and its experience:

Phenotype = Genetics X Environment

Is a **continuous trait**, where individuals differ by small degrees.

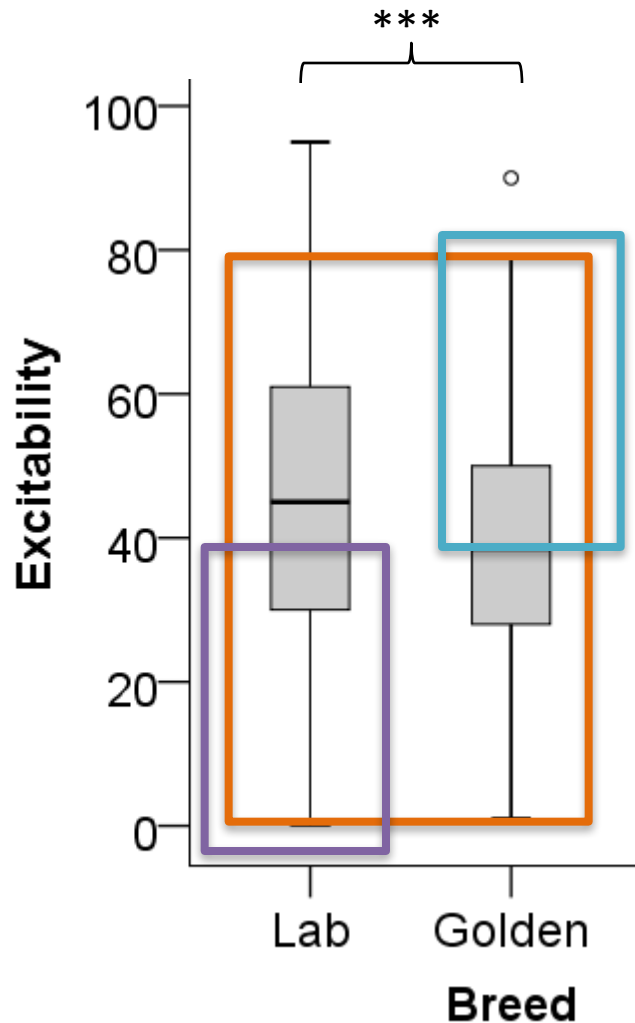


Normal Distribution



A physical trait example: Human height

Real examples



Golden retrievers and Labradors.

A typical example of trait differences between breeds would be:

- Golden retrievers are less excitable than Labradors.

This is a 'true' statement. But what does it mean for a person who picks just one dog?

90% of individuals in both breeds score in the same range as each other.

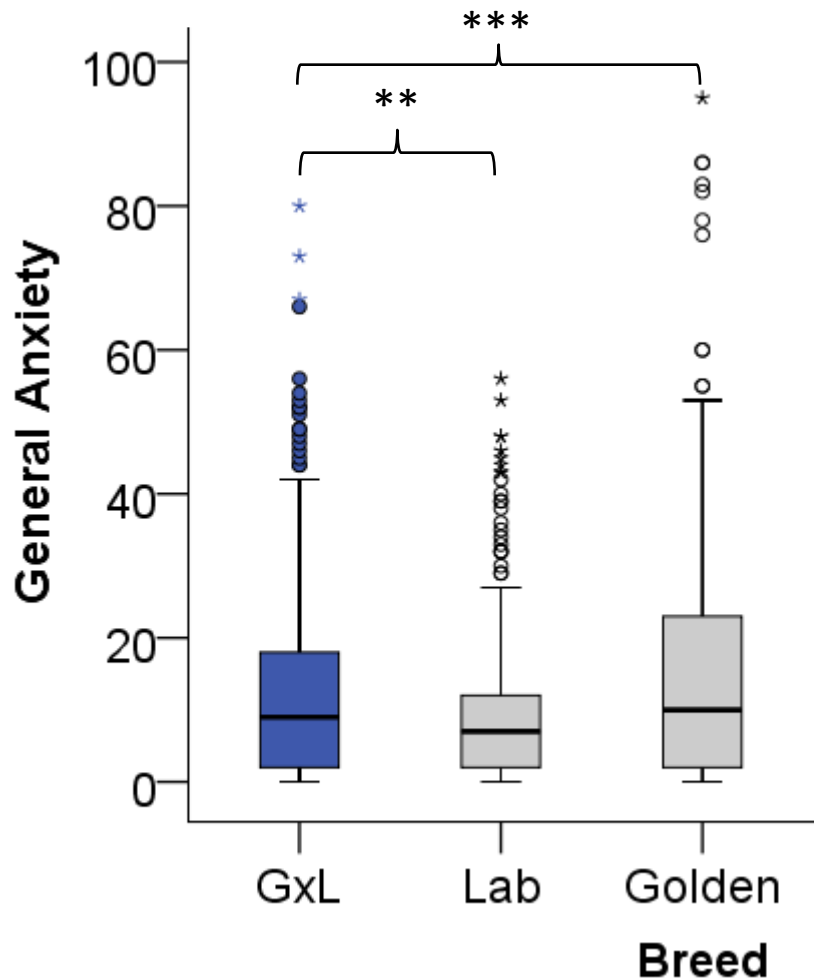
At least half of Golden retrievers will actually be more excitable than a quarter of Labradors.

Another example – Anxiety

Golden retrievers, Labradors, and crosses between the two.

- Labradors are least anxious.
- Golden retrievers are most anxious.
- Crossbreeds are intermediate.

Statistically 'true' statements, but that does not make this true for every dog in each breed.



To conclude

Dogs are not on a quest for world domination!

Many problems arise from miscommunication

Behaviour that is reinforced is strengthened – this is a powerful training technique and can help your dog cope better with the world (but can be done accidentally)

Breed differences in behaviour may exist in populations, but this means very little for an individual dog

Consider the dog in front of you, be patient and seek professional advice where needed



ALL DOGS ARE INDIVIDUALS

why looks don't equal behavior

