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Puppy dog eyes win human hearts

Puppy-dog eyes really do tug at our heart strings, according to new research by the University of Portsmouth in conjunction with the Waltham Centre for Pet Nutrition.

Researchers have found that dogs which raise their inner brows so their eyes appear larger are chosen from re-homing centres by prospective owners more quickly than other dogs, suggesting they have evolved to influence the human preference towards childlike faces.

The research, published in Plos One, is the first to show that childlike facial expressions play a key role in how we choose a pet dog.

Dr Bridget Waller and Dr Juliane Kaminski, both from the Department of Psychology, discovered humans' preference for puppy dog eyes by using a newly developed tool for the analysis of facial expressions in dogs, called DogFACS. DogFACS technology counted the number of times dogs raised their inner brows and widened their eyes as a prospective owner approached. Dogs that produced more of these movements attracted an owner more quickly than those which did not. Previous studies have repeatedly shown that humans find large eyes appealing, not just in human infants but also in animals.

Dr Waller, an expert in the evolution of social communication at the University of Portsmouth, said: "The results of this research suggest that wolves which produced childlike expressions may have been more tolerated by humans, and so modern dogs have inherited these features.

"Our study suggests that dogs' facial movements have evolved in response to a human preference for childlike characteristics. In other words, we might have automatically opted for dogs which produced facial movements that enhanced their baby-like faces. Raised inner brows are also closely associated with sadness in humans and so another possibility is that humans are responding to a perceived sadness in the dog."

Co-author Dr Kaminski is an expert in dog cognition and is the lead scientist behind Britain's first Dog Cognition Centre for studying dogs' ability to understand humans and the world around them.

She said: "Little is known about the early domestication of wolves and it is likely to have been a complex evolutionary process. It is clear that specific physical features were actively selected for as wolves were domesticated to become dogs, but other features may have also been selected for unconsciously.

"The results suggest dogs have evolved childlike facial features which make them more attractive to humans. It is highly likely that these facial expressions do not make a dog a better pet than one which doesn't widen its eyes, but this superficial trait is still preferred over other traits, such as tail wagging."

The study was supported by funding from the Waltham Centre for Pet Nutrition. Dr Sandra McCune, scientific leader, human-animal interaction at Waltham, said: "The research contributes to a growing body of work that is building a clearer picture of the evolution of the bond between humans and dogs."

Dogs have departed from wolves in both their behaviour and physical traits, and in many ways, dogs resemble wolf puppies more than wolf adults. Previous research assumed this was an accidental by-product of humans actively selecting against aggression. This new research supports the idea that childlike facial expressions in domestic dogs have arisen as a result of indirect selection by humans.

The research team studied every muscle movement made by 27 dogs in re-homing shelters when a person came and stood in front of their pen. The study focussed on dogs aged seven months to eight years old and all were Staffordshire Bull Terriers and Mastiffs needing a new home. Those who actively raised their inner brows, making their eyes appear larger, were re-homed faster than those who didn't.

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CAPTION:

Puppy dog eyes pull at our heartstrings

For further information, or to speak to an expert from the WALTHAM® Centre for Pet Nutrition or the University of Portsmouth please contact: marspressoffice@freuds.com / 020 3003 6632