# S H I N E

# Cat Individuality

Nature refers to the genetic influence on the development of behavioural traits. This is complex and there may be huge variation between breeds (including non-pedigree breeds) and individuals. We commonly associate certain characteristics with a particular cat breed. For example, studies have shown that Abyssinian and Bengal cats are very active breeds and Persians less active.<sup>1</sup> But just as each member of a family is different, each cat is also unique. In fact, there is more significant variation in behaviour and personality traits between individuals of a specific breed than there is between the breeds themselves. This makes it impossible to generalise based on breed alone (including non-pedigree breeds) – every cat is different so you can never predict their personality based on their breed.





#### How genetics contribute

Genetics may play a role in the development and expression of certain traits. For instance, individual differences in friendliness with kittens appear related to differences in the friendliness of their fathers, even when not socialised together.<sup>2,3</sup> Friendliness of the tom, who contributes one half of the genetics to a kitten, may be useful information when adopting a pedigree kitten but less helpful when adopting a rescue cat from a shelter, as kittens are raised alone by the mother (queen) and the nature of the tom is often unknown.

#### **Understanding your cat's unique genetics**

To find out more about your cat's unique genetic make-up, you can have their DNA analysed using a test such as the <u>Wisdom Panel™</u>. Such tests can help provide a deeper understanding of a cat's unique ancestry, physical traits and predisposition to certain genetic disorders. This can help you to tailor your cat's healthcare, nutrition and environment to their individual needs. Find out more at: <u>The power of data: preventing and predicting pets' diseases.</u>

<sup>2</sup>Herron, ME, Horowitz, DF, & Siracusa, C, 2020, Decoding Your Cat: The ultimate experts explain common cat behaviors and reveal how to prevent or change unwanted ones, 1st Edition, Houghton Mifflin Harcourt: New York

<sup>3</sup>McCune, S, 1995, The impact of paternity and early socialisation on the development of cat behaviour to people and novel objects, Applied Animal Behaviour Science, Vol 45(1), pp. 109-124

# The importance of nurture

Nurture refers to the effect of a cat's environment on development of behavioural traits, including how it learns from experience. Studies have shown that early handling performed gently and carefully as a kitten can positively influence a cat's friendliness towards people.<sup>4</sup> Handling a kitten in the presence of her dam (if the dam is comfortable around people) may increase the positive effect of the handling. Environmental enrichment not only shapes behaviour but promotes individuality in behaviour and brain function.<sup>5</sup>



<sup>4</sup>McCune, S, 1995, The impact of paternity and early socialisation on the development of cat behaviour to people and novel objects, Applied Animal Behaviour Science, Vol 45(1), pp. 109-124

<sup>5</sup>Kemperman, G, 2019, Environmental enrichment, new neurons and the neurobiology of individuality. Nature Reviews, 20, 235-245

Exposing cats to as many positive experiences as possible plays a critical role in shaping their future behaviour





## Your cat's upbringing

Kittens should ideally be raised with their mother and littermates as this plays an important role in the development of their social skills and may reduce problem behaviours in later life, such as aggression and anxiety.<sup>6,7</sup> To find out more about how your cat's upbringing can positively shape their future behaviour and emotional wellbeing (See <u>Socialisation and Environment</u>).

<sup>6</sup>Ellis, S, Kitten Socialization, Available at: https://icatcare.org/app/uploads/2020/02/kitten-socialization.pdf, Accessed: 10 January 2022 <sup>7</sup>Evans, R, Lyons, M, Brewer G, et al., 2019, The purrfect match: The influence of personality on owner satisfaction with their domestic cat (Felis silvestris catus), Vol 138, pp: 252-256



### Male vs female

Sex and neuter status are commonly said to affect a pet's individuality, but to what degree? In reality, behaviour of members of the same sex differs sufficiently between individuals to make the impact of male versus female behaviour less significant.<sup>8</sup> However, in colonies entire (unneutered) cats show clear differences between the sexes when it comes to territorial behaviours (such as aggression), social structure and interaction, as well as feeding behaviour.<sup>9</sup>

<sup>8</sup>Barry, KJ, & Crowell-Davis, SL, 1999, Gender differences in the social behavior of the neutered indoor-only domestic cat, Applied Animal Behaviour, Vol 64(3), pp. 193-211 <sup>9</sup>Crowell-Davis, SL, Curtis, TM, & Knowles, RJ, 2004, Social organization in the cat: a modern understanding, Journal of Feline Medicine and Surgery, Vol 6, pp. 19-28







## **Risks of leaving your cat unneutered**

Cats who are not neutered may be more likely to display sexual behaviours e.g. urine spraying, vocalising, aggression and roaming.<sup>10</sup> Preventing some of these behaviours by restricting access outside or limiting interaction with other cats may cause frustration, while allowing others, like fighting to occur. This can be problematic and can negatively impact emotional wellbeing.

Neutering has also been shown to increase longevity<sup>11</sup> and is known to reduce certain health issues, such as cat-bite abscesses and the spread of infectious diseases (see <u>Health</u>).<sup>12</sup> And there are the benefits neutering programmes have for animal welfare by reducing the number of stray cats experiencing poor quality of life on a global scale.

<sup>10</sup>Howe, LM, 2015, Current Perspectives on the optimal age to spay/castrate dogs and cats, Vet Med (Auckl), Vol. 6, 171-180

<sup>11</sup>O'Neill, DG, Church, DB, McGreevy, P, et al., 2015, Longevity and mortality of cats attending primary-care veterinary practices in England, J Feline Med Surg. Vol 17(2), pp: 125-133

<sup>12</sup>Serpell, J, & McCune, S, 2018, WALTHAM<sup>™</sup> pocket book of responsible pet ownership, 1st Edition, Sleek Creative Ltd: Leicestershire, Available at: https://www.waltham.com/sites/g/files/jydpyr1046/files/2020-05/responsible\_pet\_ownership\_book\_waltham.pdf, Accessed 04 January 2022

urg.

#### Your cat's one of a kind

Every cat should be considered a unique individual but certain requirements are common to all domestic cats. These include; the desire for social interaction, appropriate mental stimulation, physical exercise and opportunities to express natural behaviours, and use their full range of feline senses. Providing opportunities to nurture these innate behaviours should be considered the basic foundation for emotional wellbeing. We can then build on these foundations, by understanding our cat's individual needs, personality and preferences.

Learn more about individuality and emotional wellbeing for your pets at **shine.waltham.com** 



