MO

DOGNITION REPORT - MAY 21, 2025

Dognition®

A SMOOTH OPERATOR, THE CHARMER RELIES ON HIS SECRET WEAPON - YOU.

Mo can work a problem out on his own as well as anybody, but he prefers to rely on his secret weapon - you. As a Charmer, Mo has exceptional social skills, which means he can read your body language like a book. He is not above using this information to get his own way. Mo is no fool when it comes to independent problem solving, and his scores reflect a keen understanding of the physical world. However, Mo's real genius is that he sees you as an ally and partner, and he will usually turn to you for help before trying to figure out a problem on his own.

THE DOGNITION PROFILE

Usually, when you get test results, you see a score that means you either passed or failed. To compare your results to someone else, you see who got the higher score. This is why your dog didn't take a test. Instead, you played a series of games together - and when you play a game there is more than one way to win. Success often comes from playing to your strengths.

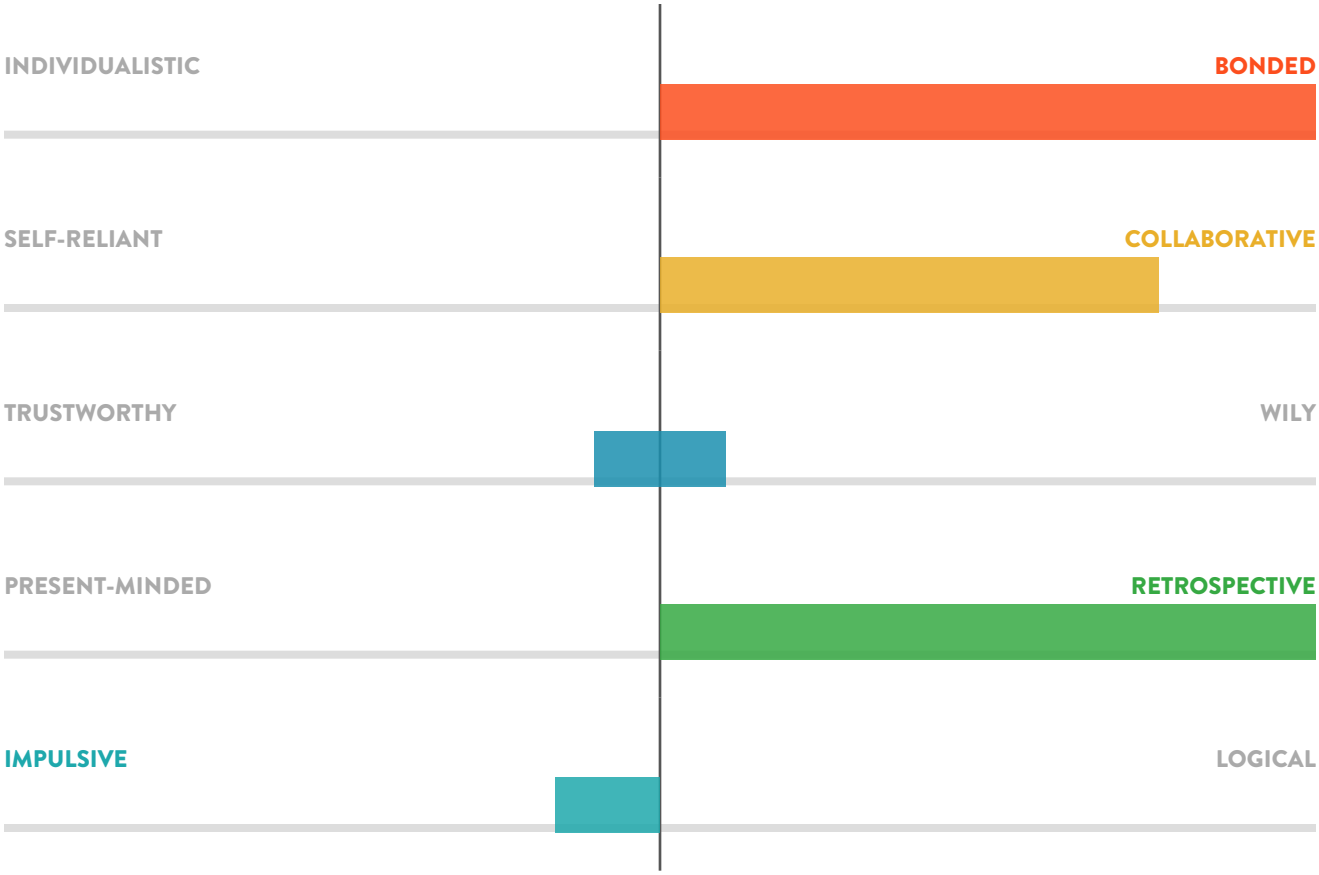
There has recently been a revolution in how we think about intelligence. The Dognition Profile is based on this cutting-edge field called cognitive science. Cognition is the study of how the mind works and draws on many scientific disciplines, from psychology to computer science to neuroscience.

By studying animals, cognitive scientists have made three important discoveries:

> Animals use many types of cognition to survive (learning skills from others, remembering the location of food, inferring the solution to a new problem or deceiving others during competition).
>
> Different animals rely on different cognitive strategies. Asking if a crow is more intelligent than a dolphin is like asking whether a hammer is a better tool than a saw. Each animal has strategies to solve a unique set of problems.
>
> Just because an animal tends to use a certain strategy to solve specific problems doesn't mean he or she will always apply that strategy to all types of problems. Animals rely on a toolbox of strategies that depend on a variety of factors. Dognition gives you insight to the most significant tools that your dog will use on a daily basis to interact with you and the world.

Based on these findings, the Dognition Profile looks at five cognitive dimensions. Rather than counting correct and incorrect answers, the Dognition Profile identifies your dog's cognitive style, and the strategies he relies on to solve a variety of problems. Using this revolutionary new science, the Dognition Profile will give you an unprecedented window into the workings of Mo's mind and reveal his particular genius.

COGNITIVE DIMENSION RESULTS



EMPATHY - Reading and responding to the emotions of others

COMMUNICATION - Using information from others to learn about the environment

CUNNING - Using information from others to avoid detection

MEMORY - Storing past experiences to make future choices

REASONING - Inferring the solution to new problems

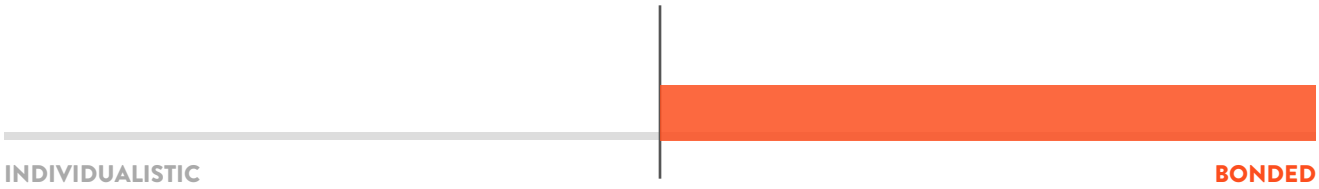
EMPATHY

Mo's empathy scores were off the charts. Empathy is the ability to feel what someone else is feeling. Humans are extremely empathetic; it is one of our best qualities. Empathy is not something we are taught; it is present even in young children, growing and strengthening as we get older.

Researchers have recently suggested that other animals also have empathy, or at least a basic form of empathy. If this is true, dogs are an ideal place to look. Humans and dogs go back thousands of years - enough time for the bond between us to develop into something special.

This is even more special because initial results suggest that small dogs like Mo tend to be more individualistic than large dogs. By being more on the bonded end of the scale, Mo certainly stands out from the small dog crowd. If most dogs are bonded to their owners, Mo absolutely adores you.

FIG.1



Playing and interacting with your dog like you did in the Dognition games increases your oxytocin, the hormone responsible for feelings of pleasure, bonding, and affection.

YAWN GAME

It is quite impressive that, during a limited amount of time, Mo yawned when you yawned. Humans laugh when we see someone laughing, and we cry when we see someone in distress. Our ability to "catch" the emotions of others is called emotional contagion. A common form of emotional contagion is yawning. If you see, hear or even think about someone yawning, you will probably feel an irresistible urge to yawn. Contagious yawning is related to empathy scores in adults.

If Mo could take a human empathy test, he would probably score quite high! So far, only a few species besides humans have been shown to contagiously yawn. Although dogs may yawn when they are stressed, they also yawn socially. Contagious yawning has been seen in dogs, but not all dogs yawn. It looks like Mo is one of the empathetic ones.

Recent studies have shown that dogs only catch yawns from humans, not other dogs.

EYE CONTACT GAME

In this game, you timed how long Mo held your eye contact. Before babies can hug or speak, they use eye gaze to bond with their mothers. Research with dogs has shown that a similar phenomenon may happen with owners and dogs. Owners whose dogs stared at them for longer had significant increases in the hormone oxytocin. Oxytocin, also known as the "hug hormone," is related to feelings of bonding, pleasure and affection.

Judging by the extraordinary length of time Mo spent gazing soulfully into your eyes, you probably often find him staring at you for no reason. You might wonder if Mo is trying to tell you something, like he is hungry, needs to go to the bathroom or has an opinion on what to do over the weekend. But Mo may not want or need anything - he may be just hugging you with his eyes.

Dogs can even be better than aspirin. Children in a hospital reported that their pain was four times less when they played with a dog than when they spent the same time relaxing.

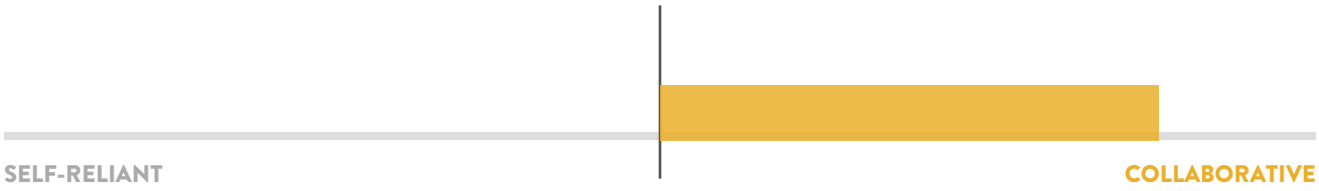
COMMUNICATION

Mo's performance was highly collaborative. You probably notice that Mo can read you like a book. Maybe he seems to know where you are going before you do. Maybe he can tell where to find a lost ball just by you glancing in the right direction. However his talent expresses itself, you can be sure that Mo pays close attention to your gestures and what you are trying to communicate.

Mo is remarkably like a human infant, who start reading communicative gestures at around nine months old. This ability is the foundation for all forms of culture and communication, including language.

Communication is the basis of many relationships, including our relationship with dogs. Mo's behavior in the Communication games demonstrated exactly why the dog and human relationship is so special.

FIG.2



ARM POINTING

You probably don't take much notice when Mo effortlessly uses your pointing gesture in all sorts of situations, from finding a toy to figuring out which direction to go next. But this is a remarkable skill. Mo did so well in this game that his skills are similar to those of a human infant. At around nine months old, infants begin paying attention to what people are trying to communicate when they point. Infants also begin pointing things out to people. Whether infants point to their favorite toy or watch you point to a bird, they are beginning to build core communication skills. Just like an infant, Mo relies on your communicative gestures to solve all sorts of problems he probably could not solve alone.

Did you know that, on average, dogs can start following a human point as young as 6 weeks old?

FOOT POINTING

You probably don't usually point things out with your foot, so this was one way to see if Mo could read a gesture he has seen infrequently or not at all. If Mo is good at solving a problem but can't solve a new version of it, then he probably learned to solve the original problem through lots of practice. For example, perhaps in the previous game he was just following the motion of your hand without understanding your communicative intentions. If Mo can also solve the new problem, then he probably understands enough to spontaneously solve a range of related problems.

Not only could Mo follow your point, he also responded to a more unusual gesture - when you pointed with your foot. This suggests that Mo has a flexible understanding of the communicative nature of human gestures - a talent you can be proud of, since this is also what children do.

Many dogs tend to ignore unintentional cues from humans. The most effective way to communicate is to call the dog's name, make eye contact, then point and look in the direction of the object.

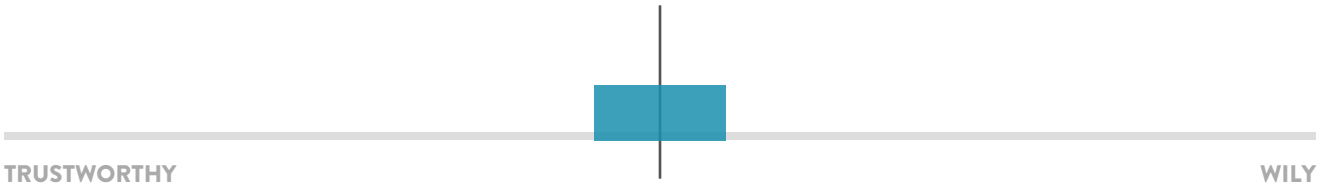
CUNNING

Mo scores as trustworthy in this game since he does not use your social information when deciding whether to take advantage of you. When you put the treat down in front of Mo and said 'No,' you then presented him with different attentional states. In the first condition, you were watching Mo directly. In the second condition you covered your eyes, and in the final condition you turned your back.

A wily dog would have waited until you could not see before they took the treat. In contrast, Mo was more likely to take the treat when you were looking at him than if you had your back turned. This may seem a little audacious, but, in fact, it actually makes him trustworthy because he does not use your social information to deceive you.

This is especially impressive because in the Communication dimension, Mo showed he can easily and flexibly read your gestures. But when given the chance, he won't use this knowledge against you.

FIG.3



When it comes to begging, dogs prefer to be sure you're paying attention. In one study, dogs preferred to beg from a person who was looking at them rather than someone wearing dark sunglasses.

MEMORY

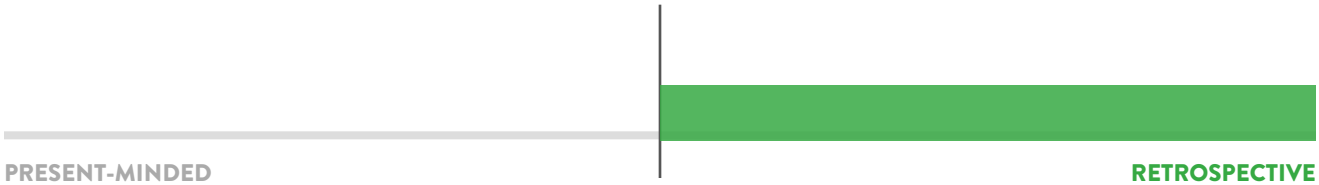
Mo has an amazing working memory, which is a type of memory that allows your dog to keep information in mind for a few minutes and mentally manipulate it. This may sound simple, but working memory is crucial for any kind of problem-solving. In humans, working memory has been found to correlate with skills in learning, math, reading, and language. Researchers have even found some evidence that in children, working memory is more predictive of academic success than IQ.

In these memory games, Mo had to understand that the treat continued to exist, even though it had disappeared from view. In the wild, this ability is essential. Animals have to keep track of mates, predators, and prey that might disappear momentarily behind a bush or a rock.

If Mo is an avid fetch player, you've probably noticed that no stick or ball escapes for long. Mo skillfully searching for an object that has briefly disappeared is a perfect example of him using his working memory to solve a problem.

For Mo, out of sight is definitely not out of mind.

FIG.4



Most dogs can remember their mothers even if they haven't seen them for two years. However, they can't remember their brothers and sisters after a similar separation.

MEMORY VERSUS POINTING

In this game, Mo saw you put the treat under one cup, but point to the other cup. Mo preferred to rely on the information in his working memory rather than what you pointed to. Even though you gave Mo misleading information, he remembered where the treat was and chose to ignore you. This shows an independent thinker; you should be aware that in other situations Mo might not listen to you if he thinks you are wrong.

Despite being genetically similar, dogs and wolves make opposite choices in this game. This difference may be behind why we love dogs so much.

MEMORY VERSUS SMELL

Since dogs have such a keen sense of smell, you may have been surprised that after you switched the cups, Mo used his memory over his sense of smell. He went to where he remembered seeing the treat hidden, rather than sniffing out where the treat was.

Because a dog's nose can sniff everything from narcotics to cancer, whenever we run a study where we hide a treat under one of two cups, the first question people always ask is, "Can't my dog just smell the food under the cup?" It was certainly our first question, but extensive research by half a dozen independent research groups has concluded that dogs do not rely on their sense of smell to find the food in these games.

If dogs were using smell, they would go directly to the cup with the hidden food. In fact, these studies found that dogs only choose the correct cup around half the time - which means they are guessing. Dogs do have an excellent sense of smell and can probably detect food if allowed to sniff both cups before choosing. But when you study their first choice, they cannot localize the food to a specific cup from a distance of six feet away.

One study found that to successfully track a person's direction of travel, tracking dogs need at least five sequential footsteps.

DELAYED CUP GAME

This game was a perfect demonstration of Mo's excellent working memory. After you hid the treat Mo had to retain the information for up to two and a half minutes before making a choice.

This skill comes in handy in the wild. Feral dogs tend to be endurance hunters, slowly wearing down their prey. During the chase, the prey may not always be in direct sight, and feral dogs have to remember where their prey was last seen and predict where they might reappear.

In these kinds of memory games, most cats quickly start to forget where an object is after only 10 seconds, while most dogs are still able to show success for up to 4 minutes.

REASONING

Mo is the kind of dog that likes to see all the pieces before he solves the puzzle. Reasoning is the ability to solve a problem when you can't see the answer and have to imagine the solution.

Mo scored more towards the impulsive end, which means he doesn't get caught up in the details - especially details that aren't right in front of him. There is no shame in this. The reasoning games are the most difficult in the Assessment and most dogs find them extremely challenging.

From Mo's performance in the Communication dimension, he relies on you for help when making decisions. He obviously sees you as his best bet when solving a problem.

FIG.5

Some studies show dogs are better at solving complex puzzles when humans are not around. When humans are around, dogs look to us for help rather than solving it themselves.

INFERENTIAL REASONING GAME

This was probably the most difficult game, and Mo's performance was excellent. In this game, we presented Mo with a problem and you provided some, but not all, of the information needed to solve it. When you showed Mo the empty cup, you were providing indirect information on where the treat was - he had to make an inference that because that cup was empty, the treat must be in the other cup.

Just because Mo did not choose the cup with the reward, it doesn't mean that he failed. In fact, this shows a strongly cooperative nature. By lifting up the empty cup, you were actually drawing attention to it, and Mo preferred to choose this cup over the other. Mo views you as a cooperative partner and assumed that you were trying to help him by showing him the correct cup.

In the Communication dimension, Mo was highly responsive to your social cues. To Mo, you are the perfect partner in crime and he will turn to you any time he needs help.

Ravens and crows have been shown to have incredible reasoning abilities that surpass dogs, and even rival some human children. But when it comes to being our best friends, dogs still take the cup.

PHYSICAL REASONING GAME

In this game, Mo demonstrated an excellent understanding of a fundamental property of the physical world - that one solid object cannot pass through another solid object.

Mo had to infer that a piece of paper on an angle meant that a treat was hidden behind it. This talent would come in handy in the wild, since animals often have to keep track of objects that become hidden. To find these objects, animals have to maintain a representation of the object and predict where it might appear.

Humans intuitively understand basic physical phenomena like the solidity principle - it looks like Mo does too.

Even though many dogs may struggle with physical properties like gravity, this doesn't stop them from thoroughly enjoying a game of fetch.

NEXT STEPS

We hope you've enjoyed reading Mo's Dognition Profile and gaining fresh perspective on how he sees the world!

You can fill your friends in on what you've discovered about Mo very easily. Download and email or print Mo's profile report any time from your portal.

Of course, these five cognitive dimensions are only part of the picture; the magic of your relationship with Mo is how you spend your time together. To that end, a Dognition membership gives you on-going games and tips that will help provide even more insight into what makes Mo tick and how to act on that information.

As a member, each month you'll receive:

- A new game that will shed light on another aspect of how Mo thinks and sees the world.

- Tips and activities prepared for Mo from canine training experts based on how Mo sees the world.

- Exclusive offers from Dognition partners, including brands such as Kong and Purina ONE.

- New findings about how all dogs think and how Mo's strategies compare.

At the same time, by contributing to Dognition you and Mo are helping to build the world's knowledge about all dogs. This allows us to tackle fresh questions -- how do certain breeds think compared to others? To what extent do memory skills decline by age? Are female dogs any more empathic than male dogs? And many more!

What questions would you like answered? We'd love any feedback on that or anything else related to Dognition. Contact us any time at hello@dognition.com.

Woof!

The Dognition Team

See the World Through Your Dog's Eyes

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