



REMINGTON VALOR

DOGNITION REPORT - MAY 12, 2021



A CHEEKY WOLFISHNESS AND A STRONG INDEPENDENT STREAK ARE WHAT MAKE A MAVERICK SO SUCCESSFUL.

Everybody loves a Maverick. This is the one who strikes out alone and doesn't conform to anyone's standards. Remington Valor definitely prefers to tackle problems independently. When it comes to understanding the physical world, she can hold her own compared to other dogs. In terms of social skills, Remington Valor puts the "wolf" back in "lone wolf." This specific performance in the range of games testing social skills was definitely more wolf-like than most dogs. But this cheeky wolfishness is part of Remington Valor's appeal.



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:

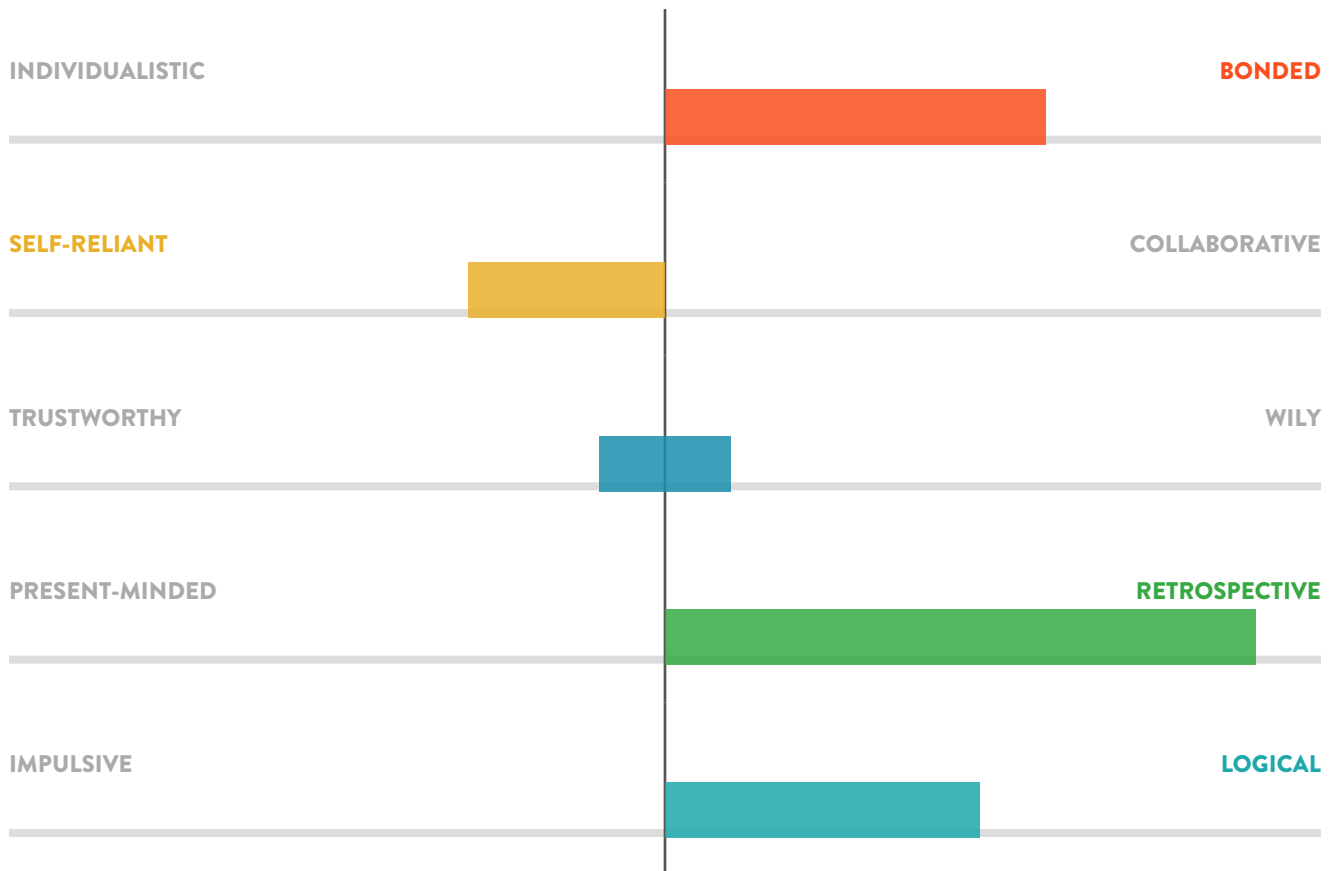
Animals use many types of cognition to survive (learning skills from others, remembering the location of food, inferring the solution to a new problem or deceiving others during competition).

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 she 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 Remington Valor's mind and reveal her 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

Remington Valor'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.

If most dogs are bonded to their owners, Remington Valor 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

In this game, you yawned and recorded whether Remington Valor yawned in response. Yawning in dogs can be an indicator of stress, but we were measuring something different - social yawning. The rationale behind this game is that even as young children, we 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.

Remington Valor did not yawn in response to your yawn, but this is not surprising. Although dogs are one of the few species besides humans that contagiously yawn, there is variation among dogs. Data from several research groups shows differing results, but our preliminary data shows that only 20% of dogs yawn contagiously.

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



EYE CONTACT GAME

In this game, you timed how long Remington Valor 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 Remington Valor spent gazing soulfully into your eyes, you probably often find her staring at you for no reason. You might wonder if Remington Valor is trying to tell you something, like she is hungry, needs to go to the bathroom or has an opinion on what to do over the weekend. But Remington Valor may not want or need anything - she may be just hugging you with her 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

In the Communication dimension Remington Valor was more self-reliant, relying on her own wits rather than your help. Chimpanzees, one of our closest living relatives, also do not typically follow our communicative gestures, at least for cooperative purposes. Chimpanzees prefer a more independent approach, relying on their own formidable problem-solving abilities. Why depend on others when you can solve a problem on your own?

FIG.2



ARM POINTING

Although the pointing game may have seemed simple, the skills it required are quite specialized. Dogs are one of the only animals to rely on human gestures - but even among dogs there is variation. Compared to other dogs, on this scale Remington Valor was more like a chimpanzee. Although chimpanzees are extremely intelligent in other areas, when they play a similar game they do not use a human point to find the food. Instead, they tend to use more self-reliant strategies. This does not mean that Remington Valor is not communicative. She may be more responsive to other signals, such as your voice. Or, because she didn't need your help to find the treats, Remington Valor decided to solve this problem on her own. Remington Valor might depend on you more in situations where the solution is not as obvious.

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



FOOT POINTING

Remington Valor is one self-reliant dog. In both hand pointing and the foot pointing game, she consistently made her own choices without much input from you. Since you probably do not usually point with your foot, this game was simply testing how flexibly Remington Valor uses your communicative gestures.

Since Remington Valor did not follow your gestures in either the hand or the foot pointing game, she may depend on other ways of communicating with you. However, just because Remington Valor did not use your gestures, does not mean she did not understand them as communicative. It could be that because she could see a treat in both places, she didn't feel like she needed to take your advice. This shows quite an independent streak - one that you've probably noticed.

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

In the Cunning games, you placed a treat in front of Remington Valor and let her know not to take the treat. You then showed Remington Valor three different attentional states -- watching, turning your back, and covering your eyes.

In order to be at either end of this cognitive dimension, trustworthy or wily, Remington Valor must show that she can tell when you are looking, and use this information when deciding when to go for the treat. In this case, Remington Valor's decision did not change no matter which attentional state you presented; she waited roughly the same amount of time in each trial.

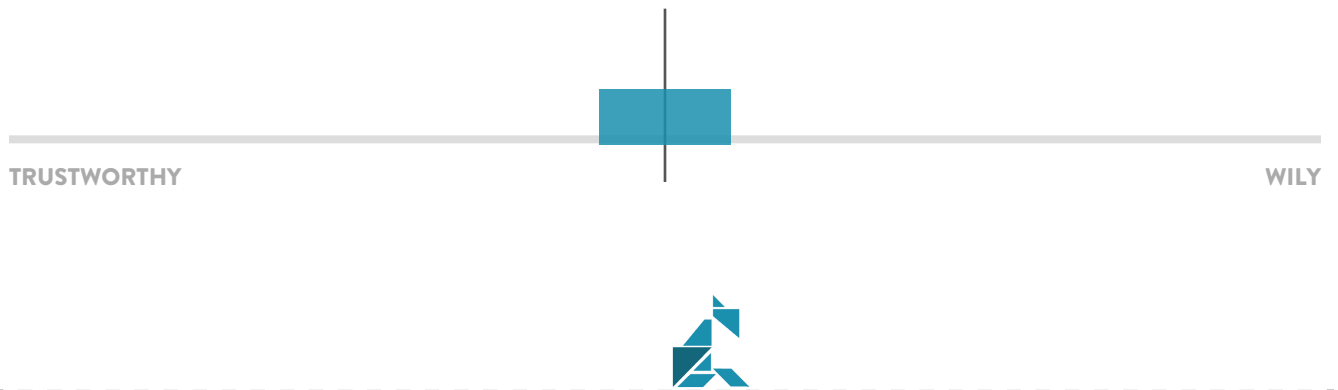
This doesn't mean that Remington Valor can't be trusted, it just shows us that there are other internal factors influencing Remington Valor's decision.

You can be a proud parent here - Remington Valor is an extremely obedient dog. When you put the treat in front of her, it did not matter if you were looking or not; Remington Valor waited patiently until you released her before she took the treat.

You might wonder what effect training has on this dimension. Cognition is not a product of nature or nurture. It is a combination of both. Just because dogs have been trained not to take a treat when their owners tell them not to, does not mean those dogs will never take a treat, especially when they see that the odds are in their favor. In fact, many well-trained dogs are not above sneaking a delicious morsel off the coffee table if they see their owners are not paying attention.

Remington Valor is a rare dog who not only obeys your command, but who also wants to please you so much that she will resist temptation - whether you are paying attention or not.

FIG.3



MEMORY

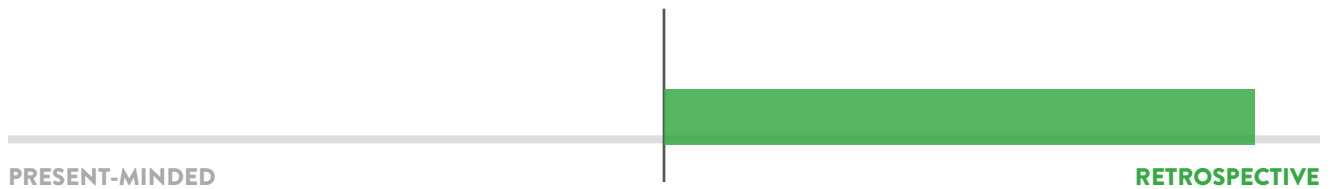
Remington Valor has an amazing working memory, which is a type of memory that allows your dog to keep information in mind for a few minutes and mentally manipulate it. This may sound simple, but working memory is crucial for any kind of problem-solving. In humans, working memory has been found to correlate 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, Remington Valor 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 Remington Valor is an avid fetch player, you've probably noticed that no stick or ball escapes for long. Remington Valor skillfully searching for an object that has briefly disappeared is a perfect example of her using her working memory to solve a problem.

For Remington Valor, 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

Remington Valor was clearly trying hard to figure this one out. When she saw you hide the treat under one cup but point to the other cup, she wanted to use the information you were giving her, but she also knew what she saw. Rather than choose one strategy, she switched back and forth between the two, which shows impressive flexibility.

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, Remington Valor used her memory over her sense of smell. She went to where she 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 Remington Valor's excellent working memory. After you hid the treat Remington Valor 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

You can be very proud. Remington Valor just aced the most difficult games in the Assessment. Reasoning is the ability to solve a problem when you can't see the answer and have to imagine the solution. Unlike learning through trial and error, which doesn't necessarily require much understanding, reasoning requires that you truly understand the problem and the phenomena behind the problem.

A Sherlock Holmes among dogs, Remington Valor was able to solve the mystery by imagining different solutions and choosing the one that made the most sense. This leads to a lot of flexibility. She can solve a new version of a problem she has seen before, and spontaneously solve new problems she has never seen before. This is a sign of true genius.

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.



INFERENCE REASONING GAME

Congratulations - when playing the most difficult game in the most difficult dimension, Remington Valor's performance was masterful. When you showed Remington Valor the empty cup, you were providing indirect information on where the treat was - she had to make an inference that because that cup was empty, the treat must be in the other cup.

This ability to infer by exclusion is problematic for most dogs because they are often confused by conflicting social cues. By lifting up the empty cup, you were actually drawing attention to it, and some dogs prefer to choose this cup even though it was empty. The fact that Remington Valor was able to control this impulse shows an impressive ability to make inferences.

It also sheds some light on why Remington Valor's performance in the Communication dimension was more self-reliant. Because Remington Valor is such an excellent problem solver on her own, she probably doesn't see the need to turn to you for 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

Remington Valor did seem to understand the principle of solidity - that one solid object cannot pass through another - at least some of the time.

Although this might have seemed like a simple game, it was actually quite complicated. First, Remington Valor had to infer that you hid a treat (since Remington Valor didn't actually see you hide it). Then she had to understand enough of the physical world to infer that a piece of paper at an angle indicated that the treat was hidden behind it. It is impressive that Remington Valor figured out the answer as often as she did.

By no means did Remington Valor do badly on this game; in fact, she developed quite a clever strategy. She developed a right or left side bias, meaning when she didn't know which side was correct, she went to one side every time. This is pretty clever, because 50% of the time she was correct.





NEXT STEPS

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

You can fill your friends in on what you've discovered about Remington Valor very easily. Download and email or print Remington Valor'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 Remington Valor 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 Remington Valor 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 Remington Valor thinks and sees the world.
- Tips and activities prepared for Remington Valor from canine training experts based on how Remington Valor 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 Remington Valor's strategies compare.

At the same time, by contributing to Dognition you and Remington Valor 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



Dognition

See the World Through Your Dog's Eyes

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