



LET'S PLAY! HOW DOGS SHOW THEY WANT TO PLAY

Not only the play bow can signal that dogs are playing.

Key message:

Dogs' social communication goes far beyond obvious signals like the play bow—it includes subtle, evolved facial expressions that serve clear social functions. The “Relaxed Open Mouth” (ROM), as identified by scientific research, is a ritualised play signal that helps differentiate playful intent from aggression. Understanding and recognising ROM enables dog owners, trainers, and professionals to support safer social interactions, foster emotional well-being, and promote healthy play behaviour across all dog breeds.

Key findings:

- Relaxed Open Mouth encourages play, often preceding playful offensive behaviours.
- It differs from Play Bite, which leads to biting actions.

- ROM is a ritualised signal, much like social gestures in other species.

Why this matters

Understanding ROM helps owners and trainers distinguish between playful and aggressive interactions, improving dog socialisation and preventing conflicts. While this study focused on Czechoslovakian Wolfdogs, ROM likely occurs across all dog breeds.

Next time you see dogs interacting, look for the Relaxed Open Mouth—a clear sign they're saying, "Let's play!"

Let's break down the science behind the findings

Is this play? Understanding your dog's social signals

Have you ever watched two dogs interact and wondered, "Are they playing, or is this about to turn into a fight?" The best way to ensure safe and positive dog interactions is to know your own dog and understand the behaviours of the other dogs it interacts with. While every dog has its own unique style of communication, there are universal signals that can reveal their intentions.

Dogs have evolved from wolves, which possess a highly complex communication system. Many of these subtle signals have been inherited by domestic dogs. But how can we be sure what they are communicating? The study by Maglieri and colleagues is a fascinating example of how science allows us to "ask" dogs, "What are you really saying?" Using the scientific method, researchers can decode dog language—let's see how they did it.

How they studied play expressions in domestic dogs

This study focused on 24 Czechoslovakian Wolfdogs. But why this breed? While they are domesticated dogs, Czechoslovakian Wolfdogs originated from a hybridisation between German Shepherds and Carpathian Wolves in the 1950s. They retain strong wolf-like facial markings, making it easier to study their expressions. Additionally, they have distinct play behaviours and a high degree of social interaction with their own kind.

Researchers recorded video footage of 24 individuals (12 males and 12 females) between the ages of 3 to 78 months. To ensure natural interactions, the study only included dogs with little to no formal training and allowed only familiar dyads to interact. They collected 15 hours of footage, focusing on spontaneous play behaviours.

The key behaviours analysed were:

- **Relaxed Open Mouth (ROM):** A facial expression where the dog's mouth remains open, revealing both upper and lower teeth, with lip corners pulled

backwards and ears also moving back.

- **Play Bite (PBIT):** An action where a dog opens its mouth and then quickly closes it in the direction of a playmate, mimicking a bite.

To analyse facial expressions, researchers used **DogFACS**, a scientifically validated system that identifies and categorises dog facial movements. By comparing ROM and PBIT expressions with neutral facial expressions, they detailed the specific muscle movements involved.

Additionally, they assessed the nature of play interactions, measuring:

- Familiarity between the play partners
- Asymmetry or symmetry in play behaviours (Did one dog dominate, or was the play balanced?)
- The sequence of behaviours following each ROM and PBIT

A complex sequential analysis was conducted to determine what behaviours tended to follow ROM and PBIT expressions—providing insight into whether ROM truly serves as a play signal.

What researchers discovered about play expressions

Relaxed Open Mouth is a true signal

ROM was consistently associated with distinct facial movements, including nose wrinkling, upper lip raising, lower lip depression, and ears pulled back. Unlike the PBIT, ROM was **stereotyped**, meaning it always appeared in the same recognisable form. This suggests that ROM has evolved as a formalised signal to communicate a specific intent.

ROM means “Let’s Play!”

The study found that when dogs displayed ROM, they were more likely to engage in play behaviours rather than neutral or aggressive actions. The expression often preceded playful offensive behaviours, indicating that ROM functions as a clear “let’s play” signal, rather than an intent to bite.

Evolutionary insights

The findings suggest that ROM has undergone **ritualisation**, meaning it has evolved into a distinct, exaggerated signal separate from its original function (biting). Similar ritualised signals exist in other species, such as:

- Intrasexual ritualised fighting
- Courtship food offering

- Lip-smacking in primates (derived from chewing and grooming behaviours)

Is ROM only found in czechoslovakian wolfdogs?

While the study focused on this breed, the ROM expression is likely present in all domestic dogs. However, more research is needed to confirm its presence across different breeds and social contexts.

Put the science into practice

How to apply these findings in real life

For dog professionals, researchers, and informed dog guardians, recognising the Relaxed Open Mouth (ROM) can enhance your ability to assess and guide canine interactions with greater precision. Here's how you can apply these findings:

Observe facial expressions during play

Watch closely when dogs engage in play — especially before any rough-and-tumble action begins. If you see the Relaxed Open Mouth, note the context:

- Is it followed by playful behaviours such as bouncy movements, play bows, or loose body posture?
- Does the ROM occur without escalation into biting or tension?

Film short play sequences and review them in slow motion. You'll often spot subtle expressions that go unnoticed in real time.

Integrate ROM into behaviour assessments

You can include ROM as a marker when evaluating dog-dog compatibility or social skills. Dogs who consistently use ROM — and respond appropriately to it — may be better suited for group play or social environments like daycare.

Use ROM to:

- Identify socially competent dogs
- Detect early signs of tension (absence of ROM combined with Play Biting may indicate poor play skills or brewing conflict)
- Guide interventions before play turns problematic

Support emotionally balanced play

By understanding that ROM is a ritualised, non-aggressive signal, owners and professionals alike can:

- Avoid misinterpreting open-mouth play as threatening
- Intervene less often when dogs are play-fighting in a healthy, reciprocal manner
- Allow more freedom while still ensuring safety

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