

# Understanding the Allelomimetic Behavior in Horses with its Impact and Management in training

Razia Kausar<sup>1\*</sup>, Muhammad Usman<sup>1</sup>, and Muhammad Umar Sharif<sup>1</sup>, Muhammad Adnan Sabir Mughal<sup>2</sup> and Riffat Maqsood<sup>1</sup>

1. Faculty of Veterinary Science, University of Agriculture, Faisalabad, 38000, Pakistan.
2. Department of Pathobiology and biomedical sciences, MNS University of Agriculture, Multan

\*Corresponding Author: [razia.kausar@uaf.edu.pk](mailto:razia.kausar@uaf.edu.pk)

## ABSTRACT

Allelomimetic behavior is one of the unique behaviors in horses. This behavior plays effective role in regulating social affiliation and group cohesion among equines. This behavior of Equines may prove helpful in preventing them from predators. Among equine population this behavior may lead to competition of resources. This behavior in horses is often prevalent in early childhood and may lead to abnormal behaviors like balking and bucking. Training of young horses usually involves pairing them with experienced, calm horses, while addressing issues such as balking requires understanding their triggers and managing stress efficiently. Horses should be effectively pushed out of their comfort zones by different tasks and to enhance their responsiveness and reduce stress.

### Introduction

Allelomimetic behavior, sometimes referred to as transmissible behavior, is a fascinating phenomenon seen in horses. It occurs when one horse engages in a behavior, increasing the possibility that other horses may follow suit. This mimic-like behavior is a way for equine populations to maintain social affiliation and group cohesion. Allelomimetic behavior includes a variety of behaviors, including synchronized movements like walking and running. As they watch and mimic their broodmares or other horses in the area, young horses develop their own behavioral patterns. Notably, this behavior is important for group decision-making and cooperation. It also helps defend the group from predators, while it may also cause rivalry for resources among group members.

In horses, allelomimetic behavior is highly prevalent. Allomimetic behavior, also known as synchronous behavior, mimetic conduct, or imitative behavior, is a habit that frequently transmits from broodmares to the young. Horses mimic the behaviors and activities of other horses, which is a fascinating trait and like how other horses will want to go with a running horse. Infectious behavior is another name for allelomimetic behavior. Allelomimetic behavior is typical across individuals in the same species. One example of allelomimetic behavior is imitation. Horse social connection and group cohesion depend on allelomimetic behavior. A horse learns to observe its mother or broodmare from the moment of birth. In the absence of a mother, the young horse begins to study the other horses. Sometimes young horses adopt their owners' habits and begin acting out the same way. The reaction of a horse may be heightened by this activity. This behavior can also be used to start a response in a horse, or it can be used more frequently and intensely.

### Behavioral Conditioning in Horses: Techniques and Insights

Although allelomimetic behavior can be adopted at any age, it is most frequently displayed in early childhood. Horses frequently exhibit allelomimetic behavior to maintain group cohesiveness and make decisions as a group. While maintaining group cohesion is crucial for safeguarding against predators and other threats, it can also heighten competition among group members for resources like food, space, and other things. An owner may get upset if their horse will not move. Different animals have different allelomimetic behaviors that cause different responses. Young horses learn from their parents' behaviors and imitate them. The pace and speed of young horses are typically inherited from parents. To train young horses in a manner that makes it easier for them to receive work from more experienced horses, young horses are frequently coupled with more experienced horses that have a calm disposition. When a young horse called a foal mated with an older mare that has a negative temperament, the foal picks up the bad temperament from its parent and develops into an abnormal adult. Balking, bucking, and cribbing are examples of aberrant behaviors that can be treated using allelomimetic behavior.

These abnormalities in behavior can happen when a large number of animals follow the same routine. Horses that are afraid of being attacked or insecure about giving up their personal space frequently balk at people or objects.

In this situation, the owner should typically move freely and fearlessly, looking at the horse and lifting their head to calm themselves. When a horse balks, it means that they are refusing to go forward despite the rider's commands. Horses might balk for a variety of causes. Balking could indicate

happiness, pleasure, anxiety, or rage. Three primary causes could be the cause of balking. First of all, they can be terrified of what is ahead of them. Second, in the event that they refused to depart from a location. Thirdly, throughout time, the horse show has balked due to rider error. The horse may buck if the rider applies additional pressure and stress on it [1,2]. By relieving tension and giving horses comfort zones, bucking can be prevented.

### Effective leadership: Effective stress management and Expansion of Horse comfort zone

Horses, like people, prefer to eat, sleep, and live in their element—that is, in their element of comfort. Horses must be forced outside of their comfort zones in order to yield labor. Divert attention of horses with various chores to help them step outside of their comfort zones. With a lead rein, the owner can conduct groundwork drills in front of horses while they are haltered.

Try to do such actions to release their stress and try to make realize that you are the leader of the horse, intending to get work from it. Horses used to balk at the errors made by riders, preventing them from being allowed to continue riding. Horses that rider-induced stress and strain develop undesirable behaviors such as balking. Therefore, the rider should crop the horse softly and gently for a brief amount of time while applying light leg pressure.

Then gradually up the intensity. If a horse stalled or began to show signs of dread, try to distract it from its anxiety. Typically, the owner will have the horse move in small circles two or three times before forcing it to walk ahead in a straight route. This relieves the tension of the horse and diverts its focus. When a horse bucks, it means that they are in discomfort or are under a lot of stress.

### Ensuring Horse comfort and effective communication

When a horse is angry during a ride or decides not to accept a ride from a specific rider, it can become bucking. Humans have been riding horses for hundreds of years, and as a result, they have evolved equestrian skills. A horsemanship-trained rider knows how to make the ride enjoyable for the animal. The horse did not want to be ridden for four basic reasons. Fear, pain, a lack of respect, or misunderstanding could be the cause. To make a horse dependable, accustomed, and comfortable for the ride, riders should endeavor to provide a safe and enjoyable ride, as horses may experience dread from predators.

A horse may experience pain for a variety of causes when being ridden. The nerves, back muscles, and other components of the spine may experience pressure and tension if the saddle is not correctly fitted on the horse. The horses may experience pain if the bridle is not fitted around their mouth cavities correctly. Before, a veterinarian should thoroughly diagnose horses. This covers their entire body, including their back, legs, and hooves.

To avoid making any dental issues worse when riding, the horse should get a dental examination before being put on the saddle. Horses follow their own will while making judgments. When a group of horses decides, the alpha horse or leader sets the rules for the others. When interacting with horses, try to acknowledge your leadership role and treat your horse with respect. If the owner lets the horse decide what it wants to do, the owner will have to deal with misbehavior from the animal while riding. During the ride, utilize unambiguous cues to lead the horse; if not, it will get confused and upsetting. Never tug the reins to stop a horse from moving, and never squeeze its legs to encourage it to do so. If the equine exhibits signs of confusion and frustration

and declines to be ridden, the owner must establish fresh, consistent signals and attempt to rebuild the relationship with the animal.

#### **Cribbing in horses: Basic Understanding and Management strategies**

A stereotype known as "cribbing" describes a repetitive behavior in which horses use their forelips to grasp solid things and then pull them back [3]. During cribbing, contraction of muscles of neck occurs and produces voice. Cribbing is more prevalent and frequently reported in domesticated animals, while it is less documented in horses that are wild or feral. Stress, anxiety, hormone imbalances, central nervous system dysfunction, feed that contains too much concentrate and not enough forage, gastrointestinal inflammation, and other factors are the causes of cribbing however, elevated cortisol and endorphin levels have been linked to stress.

Horse health may suffer because of cribbing. Low plasma levels of leptin, a hormone that controls appetite, are found in cribbers. Horses may experience bad health conditions as a result. In horses, cribbing can result in stomach ulcers. Weight loss, improper neck muscle development, temporohyoid osteoarthritis, and increased tooth wear are all associated with cribbing. A cribbed horse can severely harm the fences, walls, etc [4]. Drugs, surgery, and physical therapy could all be used to cure cribbing. A behavioral shift can put an end to cribbing physically. Such surfaces, which are uncomfortable for horses to grip, are offered. However, this irritates horses. Horses are fitted with appropriately sized muzzles and collars to prevent rubbing of the head and face. The removal or treatment of cribbing is not a particularly successful surgical procedure. This technique involves the removal of some neck muscles. Steel rings known as "Cribbs rings" are inserted into horses, and it has been shown that the gums between upper teeth might lessen cribbing.

Pharmaceutical drugs have the potential to effectively treat pharmacologically induced cribbing. These medications may have hazardous effects on particular organs in addition to a variety of other negative effects. The majority of horses begin cribbing when they are 20 weeks old, and most horses begin by chewing wood. It is challenging to stop horses from cribbing once they begin. The likelihood of cribbing can be decreased by enabling horses to socialize with other horses and by allowing them to spend more time outside.

#### **Effective Management and Training Strategies for addressing Allelomimetic Behavior in Horses**

For efficient horse management and training, an understanding of allelomimetic behavior is necessary. Horses may pick up specific actions from other horses through observation and imitation, such as bucking and balking. To properly manage these tendencies, which can present difficulties for both owners and riders, careful training and behavioral treatments are required. Different tactics can be used by owners and trainers to reduce unwanted behaviors brought on by allelomimetic behavior. In order to promote desirable behaviors, this may entail offering structured training regimens, making sure that suitable interaction opportunities are there, and setting up conditions that provide positive reinforcement. In addition, fostering a positive relationship between the rider and the horse requires treating underlying issues including pain, discomfort, and fear. Additional investigation into allelomimetic behavior and its consequences for managing and training horses may provide insightful information for the equestrian sector. Empirical research on how individual variances, training methods, and contextual influences shape behavior might improve evidence-based approaches to equine-human interaction optimization.

#### **Conclusion**

In a nutshell, allelomimetic behavior provides important insights on equine behavior and social dynamics. Horse owners and trainers can enhance the welfare of their equine companions and encourage positive behavior by using appropriate management tactics by comprehending the causes and impact of this phenomenon.

#### **References**

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